FOREIGN AID, CORRUPTION AND SOCIO-ECONOMIC DEVELOPMENT IN SUB-SAHARAN AFRICA

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ABSTRACT

This thesis investigates the inter-related effects of foreign aid, control of corruption and governance on the development of Sub-Saharan African countries. The study examines how corruption influences the effect that infrastructural and total foreign aid have on social and economic development in this part of Africa. This study employs the fixed effect regression quantitative model to analyze the impact of foreign aid on corruption and socio-economic development in Sub-Saharan African countries between 2002 and 2014. The results of this study shows that contrary to expectation, infrastructural aid is uncorrelated with corruption except when there is a governance measure such as regulatory quality and democracy. Similarly, the results show that the effect of total foreign aid and infrastructural aid on health expenditure (social development) is reduced as control of corruption increases, but showed no effect on GDP annual growth (an indicator of economic development).

In conclusion, this study shows that foreign aid leads to increased health spending in high corruption countries, thereby making funds more susceptible for embezzlement by officials through corruption.

Keywords: Total foreign aid, infrastructural aid, control of corruption, governance measures, total health expenditure (social development), GDP annual growth (economic development); Sub-Saharan Africa.
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CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Although foreign aid has been linked to social and economic development in countries such as China and India, most African countries have made relatively little progress in reducing poverty despite a substantial amount of aid (Besley & Burgess, 2007). It is estimated that between 1956 and 2006, the total amount of foreign aid disbursed to developing countries, including Sub-Saharan African countries totaled over $2.3 trillion dollars. For the African continent, over $568 billion dollars of the total amount of aid during this fifty years period are recorded to have been distributed to this region (OECD, 2006; Easterly, 2006a; Powell & Ryan, 2006; Easterly, 2007b).

Grounded in the big push theory (Abuzeid, 2009), foreign aid has been promoted as a solution to African poverty and weak socio-economic growth. According to the theory, financial assistance in the form of development aid is necessary to foster economic, social, human resource and technological development and ultimately poverty reduction. This is because foreign aid provides investments in health, education, social services, business development, and infrastructure deemed necessary to create sustainable and growing economies based on stable employment, healthy levels of trade and rule of law (Francois & Sud, 2006). Foreign support is a core explanation behind the disbursement of foreign aid and assistance to African countries. The ‘big push’ model¹ is still widely accepted by foreign donors and other western nations as the key way in which Africa can be raised from its current state of economic and social instability and under-development to the position of a developed region (Easterly, 2005; 2007; Burnside & Dollar, 2000). Bilateral donors² such as France and United States, as well as multilateral donors³ such as the World Bank and IMF, have continued to provide large amounts of official development assistance (ODA) of over $1.53 billion dollars to African nations between 2005 and 2015 (OECD, 2016). Yet, despite the huge amount of foreign aid assistance released to the Sub-Saharan African region, there are no significant levels of development in some parts of the region and poverty levels remain high.

¹ The Big Push Model is the notion that holds that developing countries do need a huge support from external donors to improve development. This is a widely-believed notion by Economists and foreign donors like DAC (Easterly, 2005)
² Bilateral aid donors are any donor agency that provides country-to-country aid. Bilateral donors are members of the Development Assistance Committee (DAC) – World Bank, 2016
³ Multilateral aid donors are organisations that acquire their funding from government of different countries and allocate these funds on projects in different countries based on their needs (OECD, 2016)
throughout most of Africa. Generally, socio-economic development will be referred to as the positive and stabilized increase in each and every social and economic development indicators represented and identified in each country. For the purpose of this study however, socio-economic development is defined as the positive and stabilized increase in the GDP annual growth, health spending and increase in the control of corruption in Sub-Saharan African countries.

Several studies have argued that foreign aid is a major factor in undermining effective governance which in turn limits or undermines the positive effects of foreign aid on socio-economic development (Fritz & Menocal, 2007; Moyo, 2009; Riddell, 2009). In the same vein, past research argues that the slow progress of socio-economic development in Sub-Saharan African countries is the result of weak governance environments which consequently leads to corruption (Englund, 2002; Karklins, 2005; Anten, et al, 2012). More specifically, research identifies corruption\(^4\) by the government and weak governance\(^5\) mechanisms for preventing corruption as among the central impediments to development aid impact on growth and development (Solli, 2011; Kjaer, 2013). However, relatively few researchers have focused on the combined impact of foreign aid and corruption on socio-economic development. Accordingly, this study uses a time-series approach covering 2002 and 2014 to analyse the interacting relationship between foreign support and corruption, effective governance and the socio-economic development in Africa.

The analysis looks first at whether increasing foreign aid contributes to positive socio-economic development in Sub-Saharan African countries within the context of weak or effective governance measures. Second, emphasis is placed on understanding if levels of corruption moderate the effect of foreign aid on socio-economic development. Third, the investigation also examines the extent to which infrastructure aid contributes to corruption, and whether levels of corruption mediate the effect of infrastructure aid on socio-economic development in Sub-Saharan African countries. I argue that an increase in foreign support is not the core reason for the downward progress of Africa’s development, but rather it is corruption and the laxity in the

\(^4\) The United Nations Office on Drugs and Crime defined corruption as the perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as “capture” of the state by elites and private interests (UNODC, 2014). Similarly, Transparency International defines corruption as the abuse of entrusted power for private gain (TI, 2015). Of note is the emphasis on ‘the abuse of entrusted power or public power for private gain’ in both definitions of corruption.

\(^5\) Weak governance for the sake of the current study refers to the lack of control by the government to ensure lawfulness in the nation and in the discharge of assigned national duties.
governance environment and lack of an effective deterrence policy\(^6\) on corruption that is the core reason why foreign support has not yielded the anticipated result on African countries’ development. Past researchers have argued that weak governance environment and lack of deterrence policy create rooms for opportunist behaviours, and abuse of public office for private gain (Brantingham, 2008; Clarke & Felson, 2010; Graycar & Sidebottom, 2012). To better theorize this relationship, the study adopts an opportunity perspective\(^7\) of corruption to explain the laxity in African’s governance environment\(^8\). The opportunity perspective of corruption describes the rent-seeking behaviour that is perpetrated by taking advantage of the opportunities obtainable in weak governance environments.

The initial thesis was that corruption and poor governance would combine to reduce the impact of foreign aid on development. However, the relationship between corruption, governance, and foreign aid impact on socio-economic development is much more complex than a simple corruption reduces the impact of foreign aid. This does not mean that regulatory quality and control of corruption is not important and necessary in the socio-economic development of Sub-Saharan African countries (Birdsall, et al. 2010; MENA Report, 2014).

To contribute to the enhancement of Africa’s development, I seek to better understand the relationship among foreign support, corruption, and development in Africa, as well as the governance environment under which social and economic affairs are controlled and managed.

1.2 Statement of problem

According to the Corruption Perception Index (2016), up to four African countries made it to the list of ten most corrupt countries in the world based on perception indexes with a mid-point of 0, indicating highly corrupt and a score of 100, indicating very clean. Most African countries indexes around the globe average a score of 43 which indicates the presence of endemic corruption (Transparency International, 2016).

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\(^6\) Deterrence policy refers to strategies and laws established that are effective to prevent corrupt and illegal practices. The deterrent effect will be to constrain any act of corruption by adopting punishable measures against those found culpable (Cuervo-Cazurra, 2006)

\(^7\) Opportunity perspective of corruption explains the opportunities available for rent seeking behavior or corrupt acts and whether this behavior is illegal or not punishable within a context. See Graycar & Sidebottom (2012)

\(^8\) Governance environment varies across various national contexts. Legal system and institutional strategies are some of the features of governance environment
Past research has identified corruption as one of the difficulties that has negatively affected socio-economic development in Africa. The literature indicates that regulatory quality, lack of accountability, ineffective rule of law, private controls over foreign aid spending and corruption are the most recurring factors having negative impacts on social and economic development in Africa (Brautigam & Knack, 2004; Nourou, 2014; Lgbaekemen, et al. 2014). Hence, corrupt behaviour is enabled by the weak governance environments in which these government officials operate.

Research also suggests that foreign aid in a well-governed environment with good policies can result in better results from foreign aid. Conversely, there is evidence that recipient countries with poor policies and governance environments inhibit the impact of foreign aid (Burnside & Dollar, 2000; Collier & Dollar, 2001, 2002; Brautigam & Knack, 2004; Lgbaekemen, et al. 2014). For example, Moyo (2009) explains that foreign aid has not only been ineffective in supporting the economic growth in African countries, but that it has exposed Africa’s leadership, the government and the system at large to corruption due to the lack of credibility (see also Dunning, 2004; Nielsen, 2013). Since most official development assistance disbursed to Africa is often released on ineffective terms, it makes it easier for the disbursed funds to be syphoned through corruption and ultimately destroys the power of free enterprise by making African countries aid dependent\(^9\) for a larger percent of their future budget (Moyo, 2009; Weylandt, 2013).

**Foreign Aid**

The Organization for Economic Cooperation and Development (OECD) defines foreign aid\(^10\) as government aid which is designed to promote the economic development and welfare of

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\(^9\) Aid dependence is when aid recipient countries essentially rely on foreign aid allocation as the national revenue and capital to run the state’s social, economic and political activities. Aid dependence is believed to weaken governance and institutional policies (Knack, 2001)

\(^10\) Foreign aid takes on different forms and each of these forms are released based on varying purpose and expected outcome. The different forms of foreign aid include but not limited to bilateral aid, and multilateral aid. Bilateral aid is the form of aid given by one government, usually a government of a developed country to another government (usually of a developing country) to foster sustainable socio-economic development. This form of aid is to support stability and promote democracy in the recipient countries. Multilateral aid on the other hand is aid provided by a group of governments who contributes funds to global organizations like the United Nations and International Monetary Fund (IMF) which is then distributed to governments of developing countries like the Sub-Saharan African countries to reduce poverty. This can take the form of food aid.
developing countries, including financial flows, technical assistance and commodities (OECD, 2017; Radelet, 2006). Foreign aid can be provided bilaterally which is direct disbursement from donor to the recipient countries or can be directed through multilateral development agencies such as the World Bank or United Nations (OECD, 2017). One cannot totally displace the fact that global concerns have been centred on the improvement of human welfare, social and economic development. This is because well-established strategies have been put in place by bilateral and multilateral development aid actors such as the Organisation for Economic Cooperation and Development, World Bank, World Health Organisation, United Nations, world leaders, and governments of developed countries interested in supporting global world development. Nonetheless, the IMF, the World Bank, the OECD DAC and other bilateral aid donor countries do not provide or distribute foreign aid out of an absolute act of benevolence, and, much of the aid in the form of development aid is distributed to create access to foreign natural resources especially from the recipient countries (Mc Lean, 2012). While the development literature points to many problems with development aid and its effects on developing country economies (Brautigam and Knack, 2004; McLean, 2012), this study is concerned with the role that corruption plays in undermining the potentially positive effects of aid.

The importance of a society with fair and firm socio-economic development is evident in the fact that five of the United Nations Sustainable Development Goals (SDGs) are directed at poverty reduction (SDG1), quality education (SDG4), decent work and economic growth (SDG8), industry, innovation and infrastructure (SDG9) and sustainable cities and communities (SDG11) – (United Nations Summit, 2015). Although, the Sustainable Development Goals (SDGs) are intended to be applied universally, it is not surprising that the goals of sustainable development which includes both social and economic development are mostly emphasized towards developing countries and emerging economies like the ones seen in Africa.

**Corruption and the Effects of Foreign Aid**

High dependence on foreign aid has been found to have a negative correlation on social development in Africa (Nourou, 2014). In Nourou’s view, a high aid dependence increases

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11 The Sustainable Development Goals is a set of 17 global goal, having a total of 169 targets between the 17 goals (United Nations Summit, 2015)
12 Sustainable development was first defined in 1987 by the Brundtland Commission as the “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. See Kates, et al. (2005)
inequality by encouraging corruption and the rent seeking behaviour\textsuperscript{13} of some government officials to take advantage of this foreign support (Nourou, 2014). Related to Nourou’s view is Okada & Samreth’s (2012) argument that states that governance and institutional power in aid recipient countries is critical in determining a robust positive relationship between aid and development in recipient countries.

Interestingly, foreign aid allocation to developing countries does to an extent involve a reprocessing procedure in which aid allocation is used to purchase the services and or products such as food from the donor countries. However, some foreign aid does come in the form of political and military support pledged to the aid recipient countries. But, the foreign aid that is most likely to drive corruption is foreign aid disbursed in the form of financial resources, either in direct money given or in the form of loans towards infrastructural development (Colombatto, 2003; Moyo, 2009; Platteau, et al. 2003). One of the obvious problems of foreign aid is known to be the impediments in the arrangement and conditions of foreign aid allocation. Some of these impediments involve diplomacy, foreign services and products from donor countries and their inability to effectively monitor the governance credibility of recipient countries (Dunning, 2004; Nielsen, 2013).

Take for instance the case of Chinese aid and the Sub-Saharan African countries. There is evidence of commercial diplomatic interest on the part of China in its infrastructure aid\textsuperscript{14} to the Sub-Saharan African nations (Zafar, 2007). It is argued that China’s quest for natural resources and industrialization is made known in the allocation of infrastructure aid to African countries and in turn exporting African’s natural resources (e.g., oil, and copper) to expand China’s economy. The above explanation makes it easy to conclude that the provision of foreign aid by developed nations, like China to developing countries is partly to create a vulnerable channel through which natural resources from developing countries can be exported to China. China as a major donor nation to the Sub-Saharan African nations is explicitly concerned with the natural resources exported from these vulnerable poor nations more than providing the support for the accountable use of the allocated infrastructure aid for the development of appropriate sectors (Zafar, 2007; Moyo, 2009; Hilson & Maconachie, 2009). Likewise, China has been identified to have a high aid

\textsuperscript{13} Rent seeking behaviour is characterised by abusing one’s public/political position or power to convert public resources and funds into personal use, mostly at the detriment of the welfare of the state or public (Nourou, 2014)

\textsuperscript{14} Infrastructure aid is a part of foreign aid for investment in infrastructure projects in recipient countries (OECD, 2016)
contribution and investment up to over $ 107 billion dollars in 2008 towards Africa’s infrastructural development. However, it has been argued that China’s dealings with African countries in aid and diplomatic relations are characterized by a less intrusive approach, with ineffective controls for credibility (Yin & Vaschetto, 2011). This suggests that the type of foreign aid does matter, and that part of the problem about foreign aid leading to corruption is because some forms of aid like the infrastructure aid allocated by China offers more opportunity for corrupt practices (Brautigam & Knack, 2004; Radelet, 2006; Moyo, 2009).

Ugur & Dasgupta (2011) argued that corruption is a symptom and a result of institutional weakness, with unfavourable effects on a country’s economic performance. In recent times, scholars and policy makers have expressed concerns that corruption has proceeded together with extensive liberalisation reforms which had led to poorer economic outcomes, including sluggish growth and high levels of growth instability (Ugur & Dasgupta, 2011; Havrylyshyn, 2016). Other researchers (Rajan & Subramanian, 2005) found a negative correlation of foreign aid and socio-economic development. They argued that even when foreign aid is released to countries with sound policies and governance, there is still no evidence that aid positively impacts the development of recipient countries. Simply put, development aid does not positively affect development even in contexts of good governance. Nevertheless, the bulk of the literature points to poor governance and corruption as important factors undermining aid’s impact. Hence, this study focuses on the problem of corruption that have arisen as a major concern to the effective impact of foreign aid on positive development in Sub-Saharan African countries and to report findings on the effects of foreign aid on development in cases where high governance measures are recorded.

Central to the problem of corruption is the opportunity structures that are entrenched in some forms of foreign aid, alongside weak governance that enables corrupt officials to freely exhibit rent-seeking behaviour. This study draws on opportunity theory and the concept of opportunity structures using the work of Clarke & Felson (2010) and Graycar & Sidebottom (2012) in trying to explain the relationship between governance, corruption and aid impact. The problem of this study is thus focused around the opportunity formations of corrupt practices that are made

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15 Corruption can also be a form of white collar crime. White collar crime is the crime motivated by financial personal gains that exists among holders of entrusted public office positions (Simpson, 2013)
possible in the presence of poor regulatory quality, ineffective institutional policies, and overall poor governance environment.

A classical description of the problem of this study is the case of the European Union’s (EU) foreign aid to developing countries from the 1980s until the 2000s. Record shows that the highest fifteen EU aid recipient countries within 1988 and 1989 were African countries and that six of the highest EU aid recipient countries between 2008 and 2009 were Sub-Saharan African countries (Glennie, 2011). With the level of consistent EU aid allocation\textsuperscript{16} to African countries described by Glennie (2011), the question that appears pertinent to the problem of this study is ‘Why do African countries still remain as developing countries despite foreign assistance from the European Union and other aid donors for consistent number of years?’ The probable answer to this question is the evidence found to support the opinion that the impact of foreign aid on development depends largely on the regulatory and institutional qualities of the recipient countries (Burnside & Dollar, 2000). Adopting popular measures of governance and institutional quality, Burnside and Dollar found that effective governance and institutional measures interacted with foreign aid does positively impact on development in recipient countries, thus, making it possible to understand that the problem around foreign aid and development is imbedded in the quality of state’s governance and institutional qualities (Burnside & Dollar, 2000).

Take for instance the case of Nigeria, one of the countries in the Sub-Saharan region of Africa known for its weak governance and institutional policies and vast corrupt practices by government officials. Nigeria’s weak governance and institutional quality makes administrative corruption suitable for individual public office holders who abuse their political office and position to misuse national resources and demand bribes for private gain and interest (Shah & Schacter, 2004; Fagbadebo, 2007). As expected, corruption is predicted to have harmful impacts on a country’s infrastructure and reduces the impact of aid allocation for development and alleviating poverty. Similarly, evidence of another effect of corruption on development is the complicity of foreign industries, private sectors and public office holders for shared benefit that consequently negatively impacts the effectiveness of foreign assistance on the economy (Shah & Schacter, 2004; Fagbadebo, 2007; World Bank, 2004). A specific example is the financial crime and oil scandal involving Shell Oil (Shell Petroleum). The oil scandal involved the release of up to 1.3 billion

\textsuperscript{16} See Foreign aid, p. 5
euros to a convicted money launderer\textsuperscript{17} by Shell Group in a bid to possess more oil fields in Nigeria. It is alleged that some of this money acquired through corrupt means are buried in grave yards and hidden in private apartments of culpable government officials rather than being circulated in the economy to improve the current social and economic state in Nigeria (Akinola, 2008; Ajie & Wokekoro, 2012; Ukanwa, 2015).

1.3 Objectives and Research Questions

Key findings in past research have recognized that forms of foreign aid like infrastructural aid matter in determining the increase in the levels of corrupt opportunity or rent-seeking behaviours in aid recipient countries (Brautigam & Knack, 2004; Radelet 2006; Moyo, 2009). In addition, corruption or rent-seeking behaviour and poor weak governance have been found to influence the effect of any kind of foreign aid on development. Accordingly, the research questions and hypotheses that I address are:

**R1:** Does infrastructure aid increase corruption in African countries?

**Hypothesis 1:** Infrastructural aid will lead to increased corruption in African nations

**R2:** Does corruption affect the impact of infrastructural aid on socio-economic development in African countries?

**Hypothesis 2:** The effect of infrastructural aid on socio-economic development will be reduced in more corrupt governance environment.

**R3:** Does corruption affect the impact of foreign aid on socio-economic development in African nations?

**Hypothesis 3:** The effect of foreign aid on socio-economic development will be reduced in more corrupt governance environment.

1.4 Social Relevance and Practical Importance

The current study will investigate the inter-related effects of foreign support, governance and corruption on Africa’s social and economic development. Using core social and economic indicators like GDP annual growth, health expenditure and control of corruption, the current research seeks to contribute to the limited research that has been undertaken related to this important issue, specifically with emphasis on foreign aid and the recipients’ governance.

\textsuperscript{17} A money launderer is someone who makes large sum of money through illegal means and tries to disguise that the source of the large sum of money is from legal and transparent transactions
environment (one that breeds corrupt practices) and how that has affected the socio-economic development efforts that have been directed to Africa.

The results of the current study should be valuable in three ways. First, this study will contribute to the further understanding of how foreign aid impacts development in Sub-Saharan Africa. This will be of interest to aid agencies and donor nations to learn more about the links between developments and certain levels and types of foreign support.

Second, the results of the current study will create awareness and understanding of the relationships between corruption, governance, foreign aid and development in Sub-Saharan African nations.

Third, the result of the current study will identify whether specific forms of aid foster corruption. If some forms of foreign aid like the infrastructural aid, have been empirically established to be susceptible to rent-seeking behaviour from corrupt officials, donor countries will be able to put control measures around the allocation of such support and evidences of completed infrastructures will be actively monitored and evaluated within pre-specified duration.

Similarly, the result of the current study will add to the reservoir of existing literature by providing empirical findings on foreign aid, and the potential impairment that corruption may have in realizing the actual effect of aid on development in African countries. Results from this study will create awareness on carrying out similar investigations in developing countries of different continents to ascertain whether the results are similar across different geographical areas with similar development state.

1.5 Outline of study

Along with the current introduction, the thesis is organized into five chapters. The next chapter assesses the existing literature and considers the different theoretical perspectives on the impact of foreign aid on corruption and socio-economic development in Africa. This includes discussion of the interacting effects of foreign aid and corruption on Africa’s socio-economic development, while examining the relationship of the governance environment to both corruption and development. Adopting the opportunity theoretical perspective, the second chapter provides in-depth insight on which my research study is drawn.

Chapter three presents the measures and methods of data analysis adopted for this study. Using secondary development data, this study uses fixed-effects panel regression models to
analyze and report the findings on the impact of foreign aid and corruption on socio-economic development in Sub-Saharan African countries.

Chapter four presents the data analysis for this study. The results derived from the data analysis are examined with reference to the hypotheses for this study.

Chapter five discusses my findings in response to my research questions and hypotheses, as well as relating my findings to the significance of my study. Also, chapter five expounds on the conclusion of my research findings, limitations and suggestions for future studies.

1.6 Summary

In Chapter One of this thesis, the background of foreign aid, as well as the restraining impact of corruption and weak governance on development in Sub-Saharan African countries were briefly outlined. Additionally, this chapter points out that; although past research provides insights to some of the core findings on the relationship of foreign aid and socio-economic development, it does not examine whether weak governance in aid recipient countries leads to opportunity behaviours among public officials and politicians to misuse the available foreign resources for personal gain. In providing evidence to support the line of argument, this thesis adopts a quantitative approach to revisit the interacting impact of foreign aid, corruption and governance measures on socio-economic development in Sub-Saharan African countries.

In the next chapter, I examine the literature on the effect of foreign aid on corruption and socio-economic development. This literature review includes the effect of both foreign aid and corruption on socio-economic development in Africa, and the African’s governance environment.
CHAPTER TWO
AID AND CORRUPTION IN AFRICA

2.0 Introduction

This chapter reviews the research evidence on the relationship between foreign aid, development, and corruption in Africa as supported by literature. The chapter also identifies related findings based on the literature and opportunity theory of corruption which explains the relationship between foreign support, governance and corruption in Africa.

2.1.0 Foreign Aid and its History in Africa

The history of foreign aid can be traced back to the 1950s. During this period, foreign aid was largely characterized by military assistance during the first and second world wars (Lumsdaine, 1993; Kai, 2013) as well in the form of food aid because of the need for a world-wide sustenance after the Second World War. Of note in the history of foreign aid was the need for the rebuilding of the Western Europe after the world wars through the Marshall Plan\(^\text{18}\) (De Long & Eichengreen, 1991). The Marshall Plan was put in place to create financial investment strategies and to support the rebuilding of damaged economies and infrastructural facilities during the war. The World Bank, the International Monetary Funds (IMF), and the International Trade Organization (ITO) were core international organizations created to provide and facilitate foreign support after the Second World War. This was largely in the method of granting large amounts of capital in the form of loans and grants to encourage investments for the reconstruction needed after the outcome of the Second World War. This act of financial support for development and reconstruction to promote global development led to the history of foreign support in its different forms and dimensions to countries of the world including Sub-Saharan African nations (De Long & Eichengreen, 1991; Lumsdaine, 1993; Kai, 2013)

In the 1950s, Africa entered a phase of change as western states loosened their colonial holds on the continent. This period witnessed the independence of up to thirty-one African countries, like Ghana, Kenya, Zambia and Malawi. However, their independence in this period depended on the amount of support that they could receive from the western bodies. Hence, foreign aid to Africa began from the inception of independence. Foreign aid from western donors then became a vital tool for national survival for many African nations. This period was also

\(^{18}\) The Marshall Plan was started in 1948 as an initiative by America to rebuild the Western Europe after the second world war (De Long, et al, 1991)
characterized by wars among African nations and the strength of most undefeated nations during the war depended on the benevolence of their western foreign support donors.

In the 1960s, foreign aid to Africa moved away from the support of war to a more developmental focus, which has remained the core motive of foreign aid disbursement to this present day (De Long & Eichengreen, 1991; Hjertholm & White, 2000; Moyo, 2009). Although most African countries had their independence by this time, the continuation of post-colonial assistance and support after the war especially from France and Britain to their previous colonies characterized the role of foreign aid during this period (Hjertholm & White, 2000). The initial premise on which foreign aid was initiated was that Africa and other developing countries needed a ‘big push’ to support their development and to reduce poverty.

2.1.1 The Big Push Theory

The big push theory is one of the early models of analysis used by economists to explain how the national savings of poor countries is less than the demands for their survival. The big push theory is the notion that holds that any developing country needs support from external donors to promote its development (Easterly, 2005). African countries have been regarded as developing countries due to their social and economic status, especially since the average daily living in Africa is between $1.5 and $2 US dollars (World Poverty Statistics, 2016). In this view, poor countries like the African countries are assumed to need a huge foreign support or Official Development Assistance (ODA) as the means to close the poverty gap and to maintain sustainable social and economic systems.

Easterly further explained the notion of the big push theory that the poor countries like many African countries are at the low level of development because of their poverty trap. He explained that the poverty trap is a consequence of the fact that the poor countries started poor and that only a big push in the form of foreign aid support will have a significant impact in promoting the developing countries to the stage of self-sustenance (Easterly, 2007). In other words, the big push theory is the notion that African countries are unable to raise the capital that will propel a significant level of economic development without a big push from developed countries or donor countries who have attained vibrant and functioning social and economic systems.

While the big push theory can be interpreted as propaganda justification for continued foreign control of African countries (Abuzeid, 2009; Ogundipe, et al. 2014), the value of big push theory in explaining how foreign aid leads to development has also been disputed by researchers
who argue that foreign aid big push does not guarantee the assumed growth in development (Alesina & Weder, 2002; Abuzeid, 2009). Some researchers believe that bad governance and corruption in aid recipient countries could be the reason for the lack of effective aid impact on development and that more flow of foreign aid as the big push proponents theorize does not in any way have any significant influence on the development of poorer countries (Alesina & Weder, 2002; Abuzeid, 2009). According to Abuzeid (2009), foreign aid has been dignified as an important method to end poverty in the world but argues that this may not be ostensibly correct. He argued that the invasion of enormous sum of funds given as foreign aid can have a more damaging influence on the recipient countries and their governance environment.

### 2.2.0 Foreign Aid, Opportunity and Corruption in Africa

A large portion of the existing literature tends to look at how foreign aid has functioned in recipient countries with poor corruption control and how that has impacted the effectiveness of foreign support on development (Alesina & Dollar, 2000; Burnside & Dollar, 2000; Brautigam & Knack, 2004; Addison, et al. 2005; Abuzeid, 2009; Ogundipe, et al. 2014). While less attention has been paid to investigate the extent to which foreign support has manipulated weak governance measures and increased corruption in poor countries, past research has investigated the development of African nations across different time frames to determine how foreign support (official development assistance) has contributed to corruption in Africa rather than promoting development. Other previous studies have also investigated the effect of corruption on Africa’s development (Burnside & Dollar, 2000; Ram, 2003; Hanlon, 2004; Werlin, 2005; Okada & Samreth, 2012).

This literature has identified two different likely reinforcing sources of corruption, corruption from the donors based on their characteristics and corruption stemming from the characteristics of the recipient countries (Knack, 2001; Knack & Rahman, 2007; Moyo, 2009; Ahmed, 2014). However, it is important to note that there are variations and degrees of corruption and governance quality within the different countries in the Sub-Saharan African region. Take for instance the codes and rules of conduct in Angola which serve as guidelines for the performance expectations from public officials in the discharge of their political duties. These codes and rules

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19 It will be noteworthy to know that there are other arguments about why big push does not work which has less to do with bad governance and corruption of the recipient countries and more to do with the power and interests of the donor countries and international institutions. Take for instance, export and debt traps (Abuzeid, 2009; Moyo, 2009).
of conduct clearly highlight accountability, transparency and fairness in dealing with the public
and national resources in an attempt to curb corruption among the ruling elites. Despite the
established codes of conduct in Angola, the proposed Anti-Corruption High Commission is yet to
be established, therefore leaving cases of money laundering and corruption in the country
uninvestigated (OSISA, 2017). South Africa is another Sub-Saharan African country with a
different national approach to corruption. In the case of South Africa, there are established state
institutions for the purpose of investigating corruption and ensuring that the rule of law prevails.
In spite of the legislative power given to the anti-corruption state institutions, political officials
found culpable and under investigation illegally attack the investigating institutions in order to
prevent justice and rule of law from taking place (OSISA, 2017).

Drawing on past research to explain the corruption characteristics of recipient countries,
Knack (2001) and Anten, Briscoe & Mezzera (2012) explained that foreign aid dependency
regardless of the type of aid serves to cover the incompetency of the recipient countries. Flaws in
governance and socio-economic development are obscured by the huge amount of aid that is
disbursed into the economic system. Public office holders and political elites are thus left to
struggle over aid funds, leading to political and economic conflict instead of improving the
political and economic state of recipient countries (Knack, 2001; Anten, Briscoe & Mezzera,
2012).

Some analysts argue that foreign aid agencies contribute to corruption, whether
intentionally or not, by reinforcing their unending disbursement of foreign support to aid recipient
countries with weak governance. What this means is that aid agencies contribute to corruption by
reinforcing less transparent and accountable mechanisms for distributing, dealing and regulation
of foreign aid (Hanlon, 2004). Hanlon’s analysis, which uses an opportunity-oriented perspective,
shows that corruption is more likely to occur when donor countries do not consider the state of
governance and accountability in their continuity in aid allocation to developing countries. Here,
we see at play foreign funds disbursed by foreign donors into the economy for reasons of
supporting development. But, the absence of accountability, transparency and scrutiny of how
these funds are being executed, diminishes the extent to which foreign aid affects development
(Maipose, 1999; Stiglitz, 2003; Graycar et. al. 2012). What this explanation reveals are first, the
loopholes that are available in the phase of monopolized power in the management of a nation’s
resources and foreign resources. Second, it reveals whether or not public office holders entrusted
with national resources and allocations take on their posts with an intended motive for corrupt practices.

One question this raises is whether foreign aid in any form or capacity (e.g., infrastructural aid) affects corruption in aid recipient countries (Knack & Rahman, 2007; Anten, et al. 2012) or, whether its effectiveness is hindered and becomes uncertain in the presence of lax governing environment or an existing context of corruption which creates the opportunity for corrupt practices.

Similarly, when aid recipient countries receive more than or the equivalence of their annual national gross domestic product as foreign support (especially in monetary form), it hinders the government’s capacity to strengthen its own national source of revenue. In addition, a number of analysts have argued that such consistent and high levels of foreign aid disbursement will yield more opportunities and corruption consequently becomes the rudiments for such nations (Knack, 2001; Knack & Rahman, 2007; Anten, et al. 2012). With the power and control of resources that comes with many government positions, most notably where democratic governance is weak, individuals in these positions are likely to take advantage. This is an opportunity that presents itself in the form of huge amounts of foreign support disbursed into a national system without an effective infrastructure to effectively implement the aim of the foreign support and with a dysfunctional governance environment (Colombatto, 2003).

Abuzeid (2009) argues that foreign aid has the possibility to cause rifts and biases in a nation’s public sector, as well as creating a national atmosphere where there is no stern force for operational reforms. Drawing on the work of Svensson (2000) and Alesina & Weder (2002), Abuzeid further suggests that aid donors, including bilateral and multilateral, often do not require effective governance as a determinant of aid allocation; that is, even when governance conditions are required, the evidence indicates that the required governance conditions are often inadequate and not stringently monitored (Abuzeid, 2009).

Moyo (2009) also supports the argument that foreign aid is given without adequate safeguards or governance performance requirements. In other words, aid is continually disbursed into a non-effective system of government where there have been obvious failures in properly utilizing previously disbursed funds. What this presupposes is that foreign aid can become free money that becomes embezzled through rent-seeking behaviour with the anticipation of even more foreign aid. Developing countries such as the Sub-Saharan African nations becomes increasingly
dependent on foreign donors for most of the revenue needed to run the state, thereby creating continuous opportunity for bureaucratic political structure with less accountability (Goldsmith, 2001; Moss, Pettersson, Van De, 2006; Moyo, 2009).

Similarly, Platteau & Gaspart, (2003) supports the argument that Africa does not have adequate infrastructural facilities to utilize the amount of foreign support that the continent is receiving in foreign aid. Which means that pumping huge amount of foreign aid into a developing country with obvious poor state of infrastructure (e.g., funding for a dam but there are no adequate roads and transporting system to the location of the dam project) is a way of encouraging corruption and leaving the foreign aid funds lying idle in the pockets of the political elites (Moyo, 2009; Platteau, et al. 2003; Johnson & Sharma, 2004; Fagbadebo, 2007). The high level of corruption in the African governance system is a major reason why foreign aid may not be a good reason to improve Africa’s social and economic development. In other words, existing corruption makes it easier for political elites and government officials to syphon the millions of dollars of foreign support allocated to move Africa from its under-developed stage to a developed stage (Goldsmith, 2001; Moss, Pettersson & Van De, 2006; Goldsmith, 2001; Moyo, 2009). Similar to the findings of these researchers, opportunity theory does argue that laxity in the governance sanctions guiding the usage and allocation of foreign aid and support in Africa makes them vulnerable to theft. Simply put, what are the guidelines set by donor nations for aid allocation and its use in the recipient countries? And what happens when these set guidelines (if any) are not adhered to by recipient countries?

Alesina & Weder (2002) investigated the levels of corruption in aid recipient countries and the levels of aid continually disbursed to less and more corrupt countries. They found that aid recipient countries that have exhibited high levels of corruption receive even more foreign support as a continuous support for development. The implication of this study reveals the possibility that foreign aid indirectly serves to reinforce corruption given the absence of consequences for corrupt practices (Alesina & Weder, 2002). In fact, Alesina & Weder (2002) were able to establish that bilateral aid kept on increasing for recipient countries with high levels of corruption. Hence, it can be inferred that foreign aid leads to corruption since the more corrupt countries tended to have received more foreign aid regardless of their increasing corruption. Another interesting finding by these researchers was that where the United States was the aid donor, they found that corruption is positively related to the disbursement of more aid regardless of the observable increase in
corruption by the recipient countries. In addition to these interesting findings is that the United States as foreign aid donor supports countries with a democratic system of government than countries with an autocratic system of government and releases more support even to countries that are evidently increasing in corruption. The implication of this is that the effectiveness of foreign aid on development and whether there are opportunity structures around foreign aid is contingent on the approach of the aid donors and the types of foreign aid. It is therefore imperative to state that this may not be a general tendency across all donor countries although this study focuses on the effect of foreign aid on development with less regard to the different foreign aid donors.

2.2.1 Opportunity Perspective on Corruption in Africa

The value of using an opportunity perspective to understand corrupt political behaviors in Africa can be drawn first from the work of Kinney, Brantingham, Wuschke, Kirk, & Brantingham (2008). These researchers explain what they termed as ‘crime pattern theory’ and argued that an offender can only carry out a criminal act within the context or political environment within which he or she is familiar. This will be familiarity with the opportunities that are available within the confines of the offender and the rational thought of the expected consequence as preconceived by the offender. Kinney, Brantingham, Wuschke, Kirk, & Brantingham’s (2008) argument of the crime pattern theory can be used to understand the corruption issue in Africa. Corrupt public office holders, who most likely are part of the law makers and enforcers, can understand their legal and governance terrain to take advantage of their participation and full awareness about the governance factors that have been put in place. In other words, corrupt officials who are aware of the weak control of corruption that have been put in place within their own sovereign states can decide to take advantage of the opportunity presented in the lax control of corruption that is been implemented. Take, for instance, foreign support that has been entrusted to the government of a nation with the sole aim of improving the infrastructural condition of the country. Corrupt office holders in the infrastructure ministry divert the money for their own personal gain, because of their confidence that there will be minimal or no consequences at all for their behavior as a result of the lack of deterrence measures put in place.

Identifying specific opportunity factors, Graycar and Sidebottom (2012) argued that corrupt leaders are more likely to embezzle under conditions where they hold monopolized power over a project or service and enjoy a discretionary power over how the service is executed or
allocated. These researchers maintain that corrupt behaviours are supported by the governance environment in which they operate. According to Graycar and Sidebottom (2012), this governance environment is characterized by insufficient transparency or accountability, and the absence of effective deterrence approaches to hold corrupt individuals liable (Graycar & Sidebottom, 2012).

Grounded in rational choice theory (Cornish & Clarke, 1986), these researchers argue that corrupt behaviours are a result of a previously preconceived and thoughtful plan that builds on the available opportunities and the lack of effective governance (Graycar & Sidebottom, 2012; Clarke & Felson, 2010).

These arguments find support with Okada & Samreth (2012) who finds that aid recipient countries with current low level of corruption had a decrease in the level of their corruption because of the foreign aid received. What this means is that aid recipient countries with minimal corruption had decreasing level of corruption due to the foreign aid released to them. This finding suggests that it is not the aid that is critical but rather the governance and poor institutional power within the recipient countries that make the difference in whether the aid is used or abused.

Also, Okada and Samreth (2012) found a distinguishing effect between multilateral aid and bilateral aid on corruption. They found that bilateral aid excluding Japan as one of the donor countries has no significant impact on corruption reduction, but found that multilateral aid does have a positive impact in reducing corruption in aid recipient countries with low level of corruption. These results can also be interpreted as fitting within an opportunity perspective in that, bilateral aid allocation may create greater opportunity for rent-seeking behaviour since bilateral aid is sometimes allocated without considering the institutional quality and the governance capacity in recipient countries (Okada & Samreth, 2012; Mohammed, et al. 2014).

However, another study found that foreign aid has a reduction effect on corruption in Africa particularly in more corrupt nations (Mohamed, Kaliappan, Ismail, & Azman-Saini, 2014). These findings are contrary with that of Okada and Samreth (2012) where it is found that the reduction effect of foreign aid on corruption is only in countries with low level of corruption even though both studies record the reduction impacts of foreign aid on corruption.

From these findings, it is possible to argue in line with the problem statement of this study that the possibility of aid allocation in increasing development or corruption is contingent on governance and the opportunities available in a poor institutional and governance environment.
Poor institutional and governance environment alongside aid allocation is what creates the situation and contexts of opportunity for corrupt practices in handling foreign aid.

2.2.2 Rational Choice Theory and Opportunity Perspective

Opportunity theory provides a situational explanation of crime where people decide to commit a criminal act depending on contexts that avail themselves and whether they can measure the consequence(s) of engaging in a crime as opposed to not engaging in the crime. Opportunity theory is also grounded more broadly in Rational Choice theory in that it assumes that crime is based on an individual’s need as well as the environment and the situation in which individuals find themselves to exploit for personal gain (Cornish & Clarke, 1986). In other words, rational choice theory underlies opportunity in that it is assumed in opportunity theory that human beings are self-interested rational thinkers who calculate cost and benefits and act to maximize benefits and minimize costs. Accordingly, they take the opportunities when they are presented. Similarly, deterrence theory is another variation of rational choice theory in as much as it predicts that deviance or crime is a function of the probability of being caught and punished and the severity of the punishment. This analysis supports the view of corrupt behaviour as an abuse of one’s discretionary and monopolized power by taking advantage of presented opportunities to enrich one’s self. Here a corporate or political leader or official thinks and rationalizes the opportunity and benefits that is accruable to him or her through the abuse of his or her political power or office. A conviction follows the rational thought and a choice to either proceed with the preconceived criminogenic or corrupt act or to desist is made and when the former is embraced which is to commit the criminal or corrupt act, then the individual’s behaviour is purposeful having weighed the options of the consequences (Cornish & Clarke, 1986; Clarke & Felson, 2010; Graycar & Sidebottom, 2012).

While the rational choice model is implicit, opportunity theory itself focuses on the contexts or situations and assumes the rational choice as what lies behind the actions taken in those contexts. The social contexts which research suggests are particularly relevant are the mechanisms or relations which give access to rewards and the governance environment, such as regulatory quality, rule of law, transparency and accountability that guides and interprets what behaviour are acceptable or punishable in a society. What we often see in most African countries are ineffective rule of law and lack of law enforcement that affords government officials a positive field within which they can funnel funds from foreign aid for their personal use (Clarke & Felson, 2010;
Graycar & Sidebottom, 2012). In addition, there is a somewhat similarity between opportunity theory and deterrence theory in the sense that opportunity theory is concerned with the positive avenues available to rewards through corruption, while deterrence theory focuses on the fear of being caught as the basis of deterrence (Akers, 1991; Clarke & Cornish, 1986; Garlanad & Sparks, 2000).

**2.3 Foreign aid and socio-economic development in Africa**

Furthermore, donor countries have been found to often support developing countries with which they have cultural and political ties (Ram, 2003). Ram found that donor countries with these strategic ties have more of their benefits at mind than supposed notion of supporting the development of their aid recipient countries. In other words, donor countries or bilateral aid donors unlike the multilateral aid donors disburse more aid support to recipient countries that they anticipate being able to manipulate based on the shared strategic ties. The self-interest motive at the heart of the donor countries comes to play as they are able to covertly or indirectly manipulate the recipient countries as a condition of aid disbursement. The implication of such an approach is breeding corruption in the recipient countries’ system of governance in as much as they consider the self-interest conditions outlined by the bilateral aid donors (Ram, 2003). Recipient countries are thus indirectly conditioned to adjust their governance and institutional policy towards accommodating the pre-determined conditions set out by the donor countries for aid allocation (Dunning, 2004; Zafar, 2007; Nielsen, 2013).

The causal chain between governance and economic outcome has also been well studied. One study found that increase in the flow of foreign support in the form of official development assistance as a percentage of gross domestic product yields a positive improvement on Africa’s development, as well as improve a democratic governance environment (Burnside & Dollar, 2000; Goldsmith, 2001). What this means is that foreign support via ODA disbursement does have a positive effect on Africa’s development and system of government. On the contrary, Ahmed (2014) stated that corruption is a major hindrance to the positive impact that aid is supposed to have on development in Africa This study focused on how total foreign aid, infrastructure aid and governance has significantly impacted corruption and socio-economic development in Africa. Ahmed (2014) using the big push theory as well as the theory of aid and economic growth found that foreign aid does not have any significant effect on economic growth where the governance environment is effective.
Similarly, another study analysed the effect of colossal amount of foreign aid disbursement on development and growth in Africa. This study controlled for governance environment using the International Country Risk Guide’s (1CRG) index to measure institutional quality and its relationship to the effectiveness of high aid financing on the development of Sub-Saharan African countries (Brantingham, 2000). Brantingham argued that continuous or long-term aid financing in huge proportions as the big push theory suggests may have far more detrimental influence on Africa’s development than any benefit. What this presupposes is that continuous and huge aid financing in the manner that the big push approach theorizes may not have any significant positive impact on the economy and development of the recipient countries (like in the case of Sub-Saharan African countries). Apparent in this researcher’s investigation is that high level of aid financing in Sub-Saharan African countries is unlikely to yield any positive impact that was envisaged upon aid disbursement. The researcher’s argument is from the viewpoint that developing countries like the Sub-Saharan African countries lack effective governance and institutional quality that is needed for the operational use of foreign aid support (Brantingham, 2000).

According to Werlin (2005), good governance alongside transparency in the government and mode of political operations have significant roles in ensuring that the impact of foreign aid is noticeable on the socio-economic development of Sub-Saharan African countries.

Some of the studies find that the quality of governance and institutions is paramount in explaining levels of investment, suggesting that one way in which good governance (a state with effective rule of law and law enforcement) can enhance economic performance is by boosting the climate for capital creation (World Bank, 2003; Kirkpatrick, Parker & Zhang, 2004). Furthermore, the World Bank (2002) and Rodrik, Subramanian & Trebbi (2004) suggested that setting the ‘rules of games’ impacts economic development. This is because economic development is seen not just as a matter of assembling economic resources in the form of human and physical capital but a matter of “institutional building”. Kirkpatrick and Parker (2004) further explains that “institution building” that involves the fabrication of a good regulatory regime is one of the most strenuous issues facing developing countries.

Using regression on a cross-section of countries, Robert and Jones (1999) as well as Kauffman and Kray (2005) identified the contributing effects of effective and sound governance on high per capita income in the long run. Again, Kauffman and Kray (2005) applied experiential procedure in testing for a causal effect which leads to the recognition of strong positive causal
effects ranging from better governance to higher per capita income and predicted that a one standard deviation increment in governance leads to a two to three-fold difference in income levels on the long run. Kauffman findings are consistent with Ram’s (2003) conclusion that foreign aid donors indirectly support corruption by adopting elusive and care-free approaches in aid allocation and disbursement.

2.4 Summary

In this chapter, I explained the history of foreign aid and presented empirical literature arguing against the approach of the big push perspective that is generally believed especially by foreign aid donors that foreign aid allocation is to improve development. Adopting the opportunity theory of situational factors, I explained that foreign aid does increases corrupt practices in developing countries. Literature presented in this chapter points to the fact that developing countries such as the Sub-Saharan aid dependent African countries have weak governance and poor institutional power undermining the possibility for any rigid approach towards reducing corruption for development to take place. Thus, I present an argument that the relationship between foreign aid and socio-economic development in Africa is negative.

Evidence supporting that infrastructural aid may provide more opportunity for syphoning the funds more than the other forms of foreign aid was also presented in this chapter. I used the opportunity theory to argue that aid allocation is usually released to developing countries because of the benefits that may be accruable to donor countries from aid recipient countries and thus leading to corruption and the atmosphere of lax governance and institutional quality for aid recipient countries. Hence, I proposed that the effect of foreign aid will be reduced in more corrupt governance environment. This chapter provides insight to the rational choice behavior that underlies the opportunity seeking behaviour of government officials and public office holders and explained that taking advantage of the opportunity factors to engage in corruption is higher in countries with less accountability and effective governance control.

In the next chapter, I provide details on the regression analysis as well as data and the unit of analysis adopted for data collection in this study.
CHAPTER THREE
Research Data and Measures

3.0 Introduction

The main objective of this study is to report findings on how forms of foreign aid to African countries increase corruption within the government system and how corruption inhibits the impact of foreign aid on socio-economic development. To reiterate, the research questions guiding this study are: Does infrastructure aid increases corruption in African countries? To what extent does corruption affect the effect of infrastructural aid on socio-economic development in African countries? Does corruption affect the impact of foreign aid on socio-economic development in Sub-Saharan African nations?

Consistent with past research findings that corruption is a result of weak governance and institutional power, this study provides evidence that the impact of aid on social and economic development is related to the level of corruption among public office holders which in turn is linked to a weak governance environment (Dunning, 2004; Shah & Schacter, 2004; Fagbadebo, 2007; Ugur & Dasgupta, 2011; Nielsen, 2013; Havrylyshyn, 2016). This study also recognizes that the type of aid matters in providing added opportunity for corruption (Brautigam & Knack, 2004; Radelet, 2006; Moyo, 2009; Yin & Vaschetto, 2011).

3.1 Research Design and Rationale

This study employs a quantitative approach to examine the impact of foreign aid on the social and economic development of Sub-Saharan African countries. Quantitative research enables researchers to objectively examine the relationship between the research variables of interest and can report hypothetical findings based on specific research questions (Creswell, 2013). Quantitative analysis also allows for operationalised definitions of variables which can be used to create causal linkages (Bryman, 1984). Quantitative research methods also provide opportunities for social research to be replicable in different settings which increases reliability and validity – key challenges in social research (Bryman, 1984; Matveev, 2002; Creswell, 2013). This study uses established quantified measures20 to investigate relationships between foreign aid and development in Sub-Saharan African countries. The quantified measures enabled me to investigate

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20 The quantified measures adopted in this study are; total foreign aid (2011 constant USD), total infrastructure aid (2011 constant USD), control of corruption, GDP growth (annual percentage), health expenditure (percent of GDP) democracy and regulatory quality.
the salient element of corruption that hinders the impact of foreign aid on socio-economic development in the Sub-Saharan African region. For this reason, this research adopts quantified measures of governance and institutional quality to explain how weak governance environment provides opportunity. The opportunity which then permits corrupt practices among public and political office holders in abusing foreign support, thereby hindering the impact of foreign support on development for their personal gains.

3.2 Population

The population for this study is the Sub-Saharan African countries. Sub-Saharan African countries are located south of the Saharan desert (UN, 2010). The Sub-Saharan African region consists of about 52 countries (LOC, 2010). According to the World Bank, the population of Sub-Saharan Africa increased from over 185 million to almost 900 million people between 1950 and 2010. In the nearest future, the population of Nigeria, one of the countries in the Sub-Saharan region is estimated to overtake the population of the United States of America by about 30 million people (WB, 2014). In 2010, over 400 million people were recorded to be living in extreme poverty\(^\text{21}\) across Sub-Saharan Africa. The World Bank reports that the percentage of people living on or below $1.25 per day as 48.5 percent of the total population of the Sub-Saharan African region as of 2010 (WB, 2014). According to the United Nations, 37 percent of the Sub-Saharan African population are living without access to clean water, causing more than 50 percent of the population of Africans to have water-borne diseases (UN, 2010). According to the UN’s index, the average life expectancy in about 28 Sub-Saharan African countries is 32 years, less than the average life expectancy in countries with progressive human growth (UN, 2006).

3.3.0 Data and Sample

The study sample consists of 49 Sub-Saharan African countries as represented in Table 1 below. The selected countries for this study have variations in their system of government, rule of law, governance quality and approaches towards corruption.

<table>
<thead>
<tr>
<th>Angola</th>
<th>The Gambia</th>
<th>Rwanda</th>
</tr>
</thead>
</table>

\(^{21}\) Extreme poverty is defined as daily living on $2 US dollars or less (WB, 2014)
<table>
<thead>
<tr>
<th>Benin</th>
<th>Ghana</th>
<th>São Tomé and Principe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Botswana</td>
<td>Guinea</td>
<td>Senegal</td>
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<tr>
<td>Burkina Faso</td>
<td>Guinea-Bissau</td>
<td>Seychelles</td>
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<tr>
<td>Burundi</td>
<td>Kenya</td>
<td>Sierra Leone</td>
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<tr>
<td>Cameroon</td>
<td>Lesotho</td>
<td>Somalia</td>
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<tr>
<td>Cape Verde</td>
<td>Liberia</td>
<td>South Africa</td>
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<tr>
<td>Central African Republic</td>
<td>Madagascar</td>
<td>Sudan</td>
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<tr>
<td>Chad</td>
<td>Malawi</td>
<td>Swaziland</td>
</tr>
<tr>
<td>Comoros</td>
<td>Mali</td>
<td>Tanzania</td>
</tr>
<tr>
<td>Congo</td>
<td>Mauritania</td>
<td>Togo</td>
</tr>
<tr>
<td>Côte d’Ivoire</td>
<td>Mauritius</td>
<td>Uganda</td>
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<tr>
<td>Djibouti</td>
<td>Mozambique</td>
<td>Western Sahara</td>
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<tr>
<td>Equatorial Guinea</td>
<td>Namibia</td>
<td>Zambia</td>
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<tr>
<td>Eritrea</td>
<td>Niger</td>
<td>Zimbabwe</td>
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<tr>
<td>Ethiopia</td>
<td>Nigeria</td>
<td></td>
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<tr>
<td>Gabon</td>
<td>Reunion</td>
<td></td>
</tr>
</tbody>
</table>
**Source:** World Bank’s list of sub-Saharan African countries.

As shown on the sample descriptive statistics table below, the sample consists of 327 country year observation where data is available over the space of 12 years between 2002 and 2014.

<table>
<thead>
<tr>
<th>Variable</th>
<th>N (Country years)</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total aid (2011 constant USD)</td>
<td>327</td>
<td>6.15</td>
<td>1.30</td>
<td>3.30</td>
<td>9.54</td>
</tr>
<tr>
<td>Total infrastructure aid (2011 constant USD)</td>
<td>327</td>
<td>3.44</td>
<td>1.57</td>
<td>0</td>
<td>6.43</td>
</tr>
<tr>
<td>Democracy</td>
<td>327</td>
<td>2.03</td>
<td>5.28</td>
<td>-9</td>
<td>10</td>
</tr>
<tr>
<td>Regulatory quality</td>
<td>327</td>
<td>-0.67</td>
<td>0.59</td>
<td>-2.26</td>
<td>0.86</td>
</tr>
<tr>
<td>Control of Corruption</td>
<td>327</td>
<td>-0.62</td>
<td>0.57</td>
<td>-1.71</td>
<td>1.14</td>
</tr>
<tr>
<td>GDP growth (annual percentage)</td>
<td>327</td>
<td>5.98</td>
<td>4.48</td>
<td>0.08</td>
<td>38.0</td>
</tr>
<tr>
<td>Health expenditure, total (% of GDP)</td>
<td>327</td>
<td>5.77</td>
<td>2.30</td>
<td>1.63</td>
<td>14.40</td>
</tr>
</tbody>
</table>

Data for this study is all derived from the World Development Indicators (WDIs) of the World Bank, the Organisation for Economic Co-operation and Development (OECD) – Creditor Reporting System dataset, the United Nations Office on Drugs and Crime (UNODC) and the Polity IV dataset. The source from the WDI is the estimates developed by the UN Inter-Agency Groups (UNICEF, WHO, World Bank, UN DESA Population Division – World Population Prospects), World Bank’s National Accounts data, Organisation, Organisation for Economic Cooperation and

This study uses foreign aid in its total flow, infrastructural aid and control of corruption in examining socio-economic development in Sub-Saharan African nations, as well as examine foreign aid in the disbursement of total infrastructural aid and its impact on control of corruption and development in Sub-Saharan Africa.

In addition, this study further includes other forms of governance measures (such as democracy, control of corruption, and regulatory quality) as control variables to investigate their effects and interacting effect alongside aid allocation on socio-economic development in Sub-Saharan African countries. Each of this identified research variable is further discussed below with reference to the sample descriptive statistics.

The dataset for this research is a ‘long’ format longitudinal panel dataset where each country has one observation per given year and the variables measure that indicator for a country in each year. Thus, it means there is no observed change in the level of a variable in a year if the indicators of the same variable remain the same in the next year.

3.3.1 Independent Variables

In the first analysis, the focal independent variable is infrastructural aid. For this study, infrastructural aid refers to foreign aid or support for investment in infrastructure projects in recipient countries (OECD, 2016). It is the distribution of bilateral ODA commitments by economic sector and does not denote the type of goods and services provided. These data are sums of individual projects notified under the OECD’s Creditor Reporting System. It is measured in million USD constant prices, using 2014 as the base year (OECD, 2016). Infrastructural aid as represented in this study’s sample has a mean of 3.44, standard deviation of 1.57, minimum of 0 and maximum of 6.43 (all values reported in logged US dollars).

In my second analysis, the focal independent variable remains as infrastructural aid (defined above). In the third analysis, the focal independent variable is total foreign aid. Foreign aid in this respect refers to total Official Development Assistance (ODA). The Organisation for Economic Co-operation and Development (OECD) defines ODA as government-sponsored aid designed to promote economic development and welfare of developing counties (OECD, 2016). According to the OECD (2016), ODA does not include loans and credits for military purposes. ODA can be provided bilaterally to developing counties by donor countries or multilaterally by a
group of development agency such as the United Nations (UN). ODA includes grants, and concessional “soft” loans where the grant element is at least 25 percent of the total and the provision of technical assistance (OECD, 2016). Total foreign aid in my sample has a mean of 6.15 US dollars, standard deviation of 1.30 US dollars, minimum of 3.30 US dollars and maximum of 9.54 US dollars (all values reported in logged US dollars).

### 3.3.2 Dependent Variables

The dependent variables in this study are corruption and indicators of socio-economic development. Corruption is defined based on the World Bank’s definition of control of corruption as the perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as “capture” of the state by elites and private interests. It is measured based on estimates of control of corruption from weak (-2.5) to strong (2.5) performance (World Bank, 2015). The descriptive statistics (see Table 2) of the control of corruption shows a mean of -0.62, standard deviation of 0.57, minimum of -1.71, and maximum of 1.14. It is measured in million USD constant prices, using 2014 as the base year (OECD, 2016).

Socio-economic development is the process of social and economic development in the society, usually measured with indicators such as GDP, life expectancy, literacy and levels of employment (World Bank, 2015). This study measures socio-economic development using total health expenditure (as percent of GDP), and gross domestic product (GDP) annual percent growth. The total health expenditure (as percent of GDP) is the sum of public and private health expenditure. It covers the provision of health services (preventive and curative), family planning activities, nutrition activities, and emergency aid designated for health but does not include provision of water and sanitation. As shown in Table 2, health expenditure has a mean of 5.77, standard deviation of 2.30, minimum of 1.63 and maximum of 14.40. It is measured in million USD constant prices (all values reported in logged US dollars), using 2014 as the base year (OECD, 2016).

GDP growth (annual percent) is defined as the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources (World Bank, 2015). Aggregates are based on constant 2010 US dollars. GDP annual growth shows a mean of 5.98, standard deviation of 4.48,
minimum of 0.08 and maximum of 38.0\(^{22}\). Although the GDP growth (annual percent) and health expenditure have their limitations as do all measures of economic and social development seeks to be accurate representation of African nations’ social and economic status to the grass root level (which includes the high income, middle income, low income and the poor individuals represented in this study). The GDP growth is adopted as a measure of economic development as data available for this indicator is consistent across the countries of interest.

3.3.3 Controls

However, it is important to control for other variables that have impact on socio-economic development. Past research argues that poor governance environment inhibits development and the influence of foreign aid. Sound policies as identified by past researchers includes regulatory quality and democratic system of government for true representation (Burnside & Dollar, 2000; Collier & Dollar, 2001, 2002; Brautigam & Knack, 2004; Lgbarkmen, et al. 2014). Hence, included in the analysis as control variables for governance measures are regulatory quality and democracy (each from the World Bank and Crime and Polity IV datasets). The control independent variables are explained below:

**Regulatory Quality:** According to the UNODC, regulatory quality refers to the perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development (WGI, 2015). The regulatory quality indicators combine available surveys and assessments of about fifteen countries. This indicator draws on applicable data from the World Banks’s Country Policy and Institutional Assessments, the Asian Development Bank, and the African Development Bank, Bertelsmann Foundation’s Bertelsmann Transformation Index, the World Bank’s Environment and Enterprise Performance Survey, Global Insight’s Business Conditions and Risk Indicators, the World Justice Project’s Rule of Law Index, the Institute for Management and Development’s World Competitiveness Yearbook, Political Risk Service’s International Country Risk Guide, the French Government’s Institutional Profiles Database, the International Fund for Agricultural Development’s Rural Sector Performance Assessments, the Heritage Foundation’s Index of Economic Freedom, the European Bank for Reconstruction and Development’s Transition Report, the World Economic Forum’s Global Competitiveness Report, and the Economist Intelligence Unit’s Country Risk Service (WGI, 2015)

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\(^{22}\) The research data shows a few countries like Equatorial Guinea records a high increase of GDP annual growth.
**Democracy**: is defined as the freedom at which a country’s citizens has the freedom to elect their government representatives and officials through a free and fair election. This democracy data is derived from Polity IV dataset that uses a 21-point scale ranging from negative 10 (hereditary monarchy) to plus 10 (consolidated democracy) to determine a country’s level of democracy (Polity IV, 2016). This data contains yearly evidence on democracy level for independent states that has a population of over 500,000 and covers from 1800 to 2016. Polity IV’s inferences about a country’s democracy level are determined by the evaluation of that country’s elections for openness and competitiveness, the extent of checks on executive authority, and the nature of political participation (Polity IV, 2016).

### 3.4 Approach to Analysis

The current study uses a fixed effect regression model to analyze the impact of foreign aid on corruption and socio-economic development in Sub-Saharan African countries. This study is a panel study as it measures data on the sample of 49 countries over twelve years from 2002 – 2014. Foreign aid (total) and infrastructural aid levels were highly skewed, and therefore were log-transformed before including in the analysis. The focal independent variables (total foreign aid and infrastructural aid), alongside the control variables, regulatory quality and democracy were lagged two years behind the dependent variables to allow for a time gap in which the effects of the kinds of aid and governance measures might take hold through the twelve years. For example, my analysis predicts the effects of all independent variables in 2002 on social development in 2004, or the effects of independent variables in 2010 on economic development in 2012. A Haussmann test specified that fixed effects regression model was preferred for the analysis. Also, the fixed effect regression model allows the isolation of the independent variable in this analysis to account for the changes in the dependent variables within countries overtime.
CHAPTER FOUR
RESULTS OF STUDY

4.0 Introduction

To test hypothesis 1 (Table 3), the first regression analysis regresses control of corruption on the total infrastructural aid measure. This first regression model adopted measures of regulatory quality and democracy as control variables for state’s governance to arrive at a more accurate model of the effects of infrastructural aid on control of corruption.

To test hypothesis 2 (Table 4 and 5), the socio-economic development variables, health expenditure (percent of GDP), and annual growth in GDP (percent) are first regressed on infrastructural aid. Next, the socio-economic development variables are regressed on infrastructural aid and control of corruption. Finally, socio-economic measures of development are regressed on infrastructural aid interacted with control of corruption. Governance measures consistent with those in Table 3 were added in the analysis as control variables to arrive at a more precise model of foreign aid on socio-economic development within the governance environment.

To test hypothesis 3 (Table 6 and 7), the focal independent variable shifts from total infrastructural aid to total foreign aid. The socio-economic development variables, which is health expenditure (percent of GDP) and annual GDP growth (percent) are regressed on total foreign aid; total foreign aid and control of corruption; and total foreign aid interacted with control of corruption. Governance measures consistent with the first two analyses were added as control variables to arrive at a more precise model of the effects of foreign aid on socio-economic development within the governance environment. All the independent measures were lagged two years behind the dependent measures to allow for a progressive gap in which the effects of total foreign aid and infrastructural aid hold.

4.1.0 The Effect of Infrastructural Aid on Control of Corruption in Sub-Saharan African Countries

Table 3 presents the results examining the effects of infrastructural aid on corruption in weak governance environment. The results from Table 3 show that there is no significant statistical effect of infrastructural aid on control of corruption. In the first model, the results indicate that infrastructural aid does not seem to have any significant impact on control of corruption when other factors such as the governance environment are not considered. In model 2 when the level of regulatory quality in Sub-Saharan African countries is added, the results show that a 1-point
increase in regulatory quality predicts a 0.27-point increase in control of corruption in Sub-Saharan African countries while the effect of infrastructural aid is still insignificant. While there is also reduction in the coefficients of infrastructural aid when regulatory quality is added, this is at insignificant levels. When lagged democracy was controlled for in model 3, the effect of regulatory quality is similar to model 2 but democracy itself does not have any significant effect on corruption. These results again show that the coefficient of the focal independent variable (infrastructural aid) is decreased compared to model 2 but at insignificant levels. These findings do not support the proposed research hypothesis that predicts that infrastructural aid will lead to increase in corruption in Sub-Saharan African countries with weak governance.

Table 3: The Effect of Infrastructural Aid on Corruption in Sub-Saharan African Countries

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lagged Infrastructural Aid, all donors (Constant 2011 USD)</td>
<td>0.011</td>
<td>-0.001</td>
<td>-0.005</td>
</tr>
<tr>
<td>Lagged Regulatory Quality (Estimate)</td>
<td>0.267***</td>
<td>0.271***</td>
<td></td>
</tr>
<tr>
<td>Lagged Democracy (Polity IV Score)</td>
<td></td>
<td>0.011</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-0.654***</td>
<td>-0.433***</td>
<td>-0.441***</td>
</tr>
<tr>
<td>Observation</td>
<td>327</td>
<td>327</td>
<td>327</td>
</tr>
<tr>
<td>R-Squared</td>
<td>0.0027</td>
<td>0.0677</td>
<td>0.0765</td>
</tr>
</tbody>
</table>

* p < 0.05, ** p < 0.01, *** p < 0.001
4.2.0 Infrastructural Aid, Corruption, and Socio-Economic Development in Sub-Saharan African Countries

The results of hypothesis two are presented in two tables, one for each kind of development. Table 4 and Table 5 presents the results examining the effects of infrastructural aid and control of corruption on socio-economic development.

4.2.1 The Effect of Infrastructural Aid and Corruption on Health Expenditure in Sub-Saharan African Countries

Table 4 presents the results examining the effects of infrastructural aid and control of corruption on social development (total health expenditure). In each model, infrastructural aid is seen to have different effects on total health expenditure with significant and insignificant coefficients across the three models of analysis. The results of Table 4 in the first model demonstrate that infrastructural aid has a significant positive effect on social development without controlling for governance measures. The results of the first model show that with any 10 percent increase in infrastructural aid, there will be an increase of 0.23 in total health expenditure at a significant level of p<0.01. In model 2, when the control of corruption estimate in Sub-Saharan African countries is controlled, the results show that a 10 percent increase in infrastructural aid will yield a 0.22 increase in total health expenditure. An important observation in this model is that a 1 percent increase in control of corruption will yield a 1.2 increase in total health expenditure as a percent of GDP.

Table 4: The Effect of Infrastructural Aid and Corruption on Social Development (Health Expenditure) in Sub-Saharan African Countries, 2002-2014

<table>
<thead>
<tr>
<th>Model</th>
<th>Lagged Infrastructural Aid, all donors (Constant 2011 USD)</th>
<th>Control of Corruption (Estimate)</th>
<th>Interaction Term: Lagged Infrastructural Aid X Control of Corruption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>0.229**</td>
<td>1.160***</td>
<td>-0.236*</td>
</tr>
<tr>
<td>Model 2</td>
<td>0.216**</td>
<td>1.947***</td>
<td></td>
</tr>
<tr>
<td>Model 3</td>
<td>0.024</td>
<td></td>
<td>-0.110</td>
</tr>
</tbody>
</table>
### Table 4: Regression Results for Lagged Regulatory Quality and Lagged Democracy

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lagged Regulatory Quality (Estimate)</td>
<td>0.088*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lagged Democracy (Polity IV Score)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>4.983***</td>
<td>5.741***</td>
<td>6.141***</td>
</tr>
<tr>
<td>Observation</td>
<td>327</td>
<td>327</td>
<td>327</td>
</tr>
<tr>
<td>R-Squared</td>
<td>0.0353</td>
<td>0.0732</td>
<td>0.109</td>
</tr>
</tbody>
</table>

* p < 0.05, ** p < 0.01, *** p < 0.001

In model 3, as shown in Table 4 the interaction of infrastructural aid and control of corruption is statistically significant at p<0.001 with an interaction coefficient of -0.236. This result is the reverse of what was hypothesized, since it indicates that as the control of corruption increases, the positive effect of infrastructural aid on health expenditure is decreased. As shown in Figure 1, the effect of infrastructural aid on health expenditure is positive but decreasing when reaching about -0.6 on the control of corruption scale, at which point the effect of infrastructural aid is no longer statistically different than zero. This is indicated because the 95% confidence interval spikes cross zero in all estimates after that point. This means that aid is associated with increased health spending in the most corrupt countries, but once corruption is controlled, aid has little or no influence on health spending. The results of this model also show that while lagged regulatory quality was insignificant, there was a weak but statistically significant 0.1 percentage point increase in total health expenditure when democracy increases by one point.

[FIGURE 1 ABOUT HERE]

### 4.2.2 The Effect of Infrastructural Aid and Corruption on GDP annual growth in Sub-Saharan African Countries

Table 5 shows the results examining the effects of infrastructural aid and control of corruption on economic development (GDP growth, annual percentage). In this instance, there are no significant effects evident in any of the models suggesting that infrastructural aid, corruption and governance measures have limited effects on GDP whether independently or in interaction.

### Table 5: The Effect of Infrastructural Aid and Corruption on Economic Development (GDP Annual Growth) in Sub-Saharan African Countries, 2002-2014

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lagged Regulatory Quality (Estimate)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lagged Democracy (Polity IV Score)</td>
<td>0.0353</td>
<td>0.0732</td>
<td>0.109</td>
</tr>
</tbody>
</table>
### Table 6

<table>
<thead>
<tr>
<th></th>
<th>0.027</th>
<th>-0.030</th>
<th>-0.043</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lagged Infrastructural Aid, all donors (Constant 2011 USD)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control of Corruption (Estimate)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Interaction Term:</strong></td>
<td>-0.006</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lagged Infrastructural Aid X Control of Corruption</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lagged Regulatory Quality (Estimate)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lagged Democracy (Polity IV Score)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>1.625***</td>
<td>1.865***</td>
<td>1.694***</td>
</tr>
<tr>
<td>Observation</td>
<td>327</td>
<td>327</td>
<td>327</td>
</tr>
<tr>
<td>R-Squared</td>
<td>0.0008</td>
<td>0.0070</td>
<td>0.0168</td>
</tr>
</tbody>
</table>

*p < 0.05, **p < 0.01, ***p < 0.001

### 4.3.0 Foreign Aid, Corruption, and Socio-Economic Development in Sub-Saharan Africa

The results of hypothesis three are presented in two tables, one for each kind of development. Table 6 and Table 7 presents the results examining the effects of total foreign aid and control of corruption on socio-economic development.

### 4.3.1 The Effect of Foreign Aid and Corruption on Social Development in Sub-Saharan African Countries

Table 6 examines the effect of total foreign aid and corruption on social development (total health expenditure as a percentage of GDP). In the first model, it is seen that total aid has a significant relationship with total health expenditure, with a 10 percent increase in total aid predicting a 0.31 percentage point increase in total health expenditure. The results of the second model show that infrastructural aid maintains a significant effect on total health expenditure. The results show that a 10 percent point increase in infrastructural aid will lead to a 0.26 percentage point decrease in total health expenditure when control of corruption is controlled for. The results of the first and second models on the effect of total aid on total health expenditure displays a possible sign of collinearity being that the result shows a slight decrease from 0.31 percentage
point to -0.26 percentage point with both coefficients reported at significant levels. Similarly, the results show a significant increase in total health expenditure with one-point increase in control of corruption predicting a 1 percent increase in total health expenditure.

The interaction of total aid and control of corruption shown in model 3 indicates that as control of corruption increases by one point, the effect of total aid decreases by 0.2 percentage point. Interestingly, these interaction results also indicate the main effect of control of corruption on total health expenditure when no foreign aid is received, it predicts a 2.1 percentage point increase in total health expenditure.

The results of this interaction model are shown in Figure 2. Essentially, this result again shows that the effect of total foreign aid on health expenditure is strongest when corruption is highest, the reverse of what I hypothesized. Furthermore, as corruption decreases, the effect of total aid on health expenditure decreases and is no longer statistically different from zero once the

### Table 6: The Effect of Foreign Aid and Corruption on Social Development (Health Expenditure) in Sub-Saharan African Countries, 2002-2014

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lagged Total Aid, all donors (Constant 2011 USD)</td>
<td>0.311***</td>
<td>-0.255**</td>
<td>0.104</td>
</tr>
<tr>
<td>Control of Corruption (Estimate)</td>
<td></td>
<td>1.010**</td>
<td>2.139*</td>
</tr>
<tr>
<td>Interaction Term: Lagged Total Aid X Control of Corruption</td>
<td></td>
<td>-0.194</td>
<td></td>
</tr>
<tr>
<td>Lagged Regulatory Quality (Estimate)</td>
<td></td>
<td>-0.071</td>
<td></td>
</tr>
<tr>
<td>Lagged Democracy (Polity IV Score)</td>
<td></td>
<td>0.104**</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>3.856***</td>
<td>4.823***</td>
<td>5.437***</td>
</tr>
<tr>
<td>Observation</td>
<td>327</td>
<td>327</td>
<td>327</td>
</tr>
<tr>
<td>R-Squared</td>
<td>0.0395</td>
<td>0.0671</td>
<td>0.0960</td>
</tr>
</tbody>
</table>

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
control of corruption scale exceeds about -0.4. This means that total foreign aid has the greatest effect in the most corrupt countries but the effect becomes negligible once the control of corruption is improved. Also, this result reveals that while regulatory quality shows an insignificant reduction effect on total health expenditure, democracy indicates a slight effect of 0.1-point increase in total health expenditure at the p<0.01 level.

Since the results show the same pattern for infrastructure aid and total aid, one question that comes to mind is what percentage of total aid is taken by infrastructural aid? If the percentage taken by infrastructural aid is high, this result may still signal the main effect of total aid, and if not, it implies that the effect holds on all kinds of aid.

[FIGURE 2 ABOUT HERE]

4.3.2 The Effect of Foreign Aid and Corruption on Economic Development in Sub-Saharan African Countries

Finally, in Table 7, the results show the absence of a statistically significant effect of total foreign aid and corruption on GDP growth in Sub-Saharan African countries. These findings are unexpected as one would anticipate that total foreign aid, control of corruption, regulatory quality and democracy will at some point demonstrate significant influence on GDP annual growth.

Table 7: The Effect of Foreign Aid and Corruption on Economic Development (GDP Annual Growth) in Sub-Saharan African Countries, 2002-2014

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lagged Total Aid, all donors (Constant 2011 USD)</td>
<td>0.062</td>
<td>0.044</td>
<td>0.083</td>
</tr>
<tr>
<td>Control of Corruption (Estimate)</td>
<td>0.324</td>
<td>-0.062</td>
<td></td>
</tr>
<tr>
<td><strong>Interaction Term:</strong></td>
<td></td>
<td></td>
<td>0.069</td>
</tr>
<tr>
<td>Lagged Total Aid X Control of Corruption</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lagged Regulatory Quality (Estimate)</td>
<td></td>
<td></td>
<td>-0.235</td>
</tr>
<tr>
<td>Lagged Democracy (Polity IV Score)</td>
<td></td>
<td></td>
<td>0.042</td>
</tr>
</tbody>
</table>
### 4.4. Summary

The results of this study show that foreign aid is associated with increased health expenditure, but the effect of foreign aid on health expenditure matters most when the aid recipient countries are more corrupt. Once corruption begins to improve, the effect of foreign aid on health expenditure diminishes. This signals that perhaps there is less need for foreign aid once the control of corruption is effectively put in place, thus making health-related aid less vulnerable to corruption.

This Chapter outlined the findings of the research hypotheses based on secondary data adapted to represent 49 Sub-Saharan African countries through quantitative analysis. The results were presented within five analyses of three models that are strictly in line with the research hypotheses.

Chapter Five discusses the results of these findings and situates the result findings within the larger body of existing literature on foreign aid, corruption and development in Sub-Saharan African countries and developing countries. This chapter also elucidates on the conclusion of my findings as well as recommendations, limitations and suggestions for future research in this topic.
CHAPTER FIVE  
DISCUSSION AND CONCLUSION

5.0 Introduction
Recent and existing literature shows that foreign aid and governance are crucial to any nation’s social and economic development. Some studies suggest that since foreign aid increases corruption in recipient countries, it can be utilized positively in nations with effective governance measures (Brautigam, 2000; 2004). This study shows that aid leads to increased health spending in highly corrupt countries, which then makes funds more available to officials via corruption. The availability of funds through corruption is what past literature describes as ‘crime pattern theory’ in explaining an opportunist perspective of corruption (Kinney, Brantingham, Wuschke, Kirk, & Brantingham, 2008).

Both corruption and ineffective governance environment are also often linked to poor productivity in all sectors of a nation’s economy. This study was aimed at examining whether corruption undermined the intended development benefits of foreign aid and turned foreign aid into fuel for corruption. While the results in this study clearly show that foreign aid on its own has significant positive effects on social development or more specifically health expenditures, the findings do not demonstrate any effect on general economic development in Sub-Saharan African countries as measured by GDP annual growth. Also, the results clearly show that all forms of foreign aid do not have the same effects on socio-economic development and that the effects of foreign aid can be influenced by existing governance measures. Importantly, this research findings show that aid appears to have a positive influence in more corrupt contexts, and the effect diminishes as corruption is brought under control

5.1 Infrastructural Aid and Corruption in Sub-Saharan African Countries
This study provides unexpected findings in that it shows that infrastructural aid does not affect corruption and the effect of corruption on the effects of infrastructural aid on development is the opposite of expected. The evidence suggests that infrastructural aid contributes to social development in more corrupt contexts, but that once corruption reduces, infrastructural aid is less effective. Based on these findings, it can be argued that the effect of infrastructural aid may not be as important as governance questions related to corruption. What this presupposes is that as long as there is infrastructural aid and poor governance measures, corruption is still possible. However, the effect of infrastructural aid on health expenditure is higher in more corrupt recipient countries.
perhaps because infrastructural aid is supporting the whole area of health expenditures, yet there are more health problems due to poor governance and the fact that health funds may be going into personal pockets (Gupta, Davoodi, Tiongson, 2002; Azfar, 2005; Lewis, 2006; Rose, 2006). On the other hand, there is less demand for health expenditures in better governed and less corrupt recipient countries (Lewis, 2006)

Also consistent with the expectations from the literature (Robert & Jones, 1999; Kauffman & Kray 2005; Werlin, 2005), one of the findings of this study is that regulatory quality reduces corruption, which in turn inhibits any opportunity for corrupt practices or mismanagement of infrastructural aid for personal gain. When the government’s ability is demonstrated in the formulation and efficient implementation of sound policies and governance measures across all social and economic sectors in the country, there will be an increase in the control of corruption.

Studies also show that corruption affects most development indicators such as infrastructure, health spending, and GDP annual growth when there are no proper governance measures put in place to monitor allocated foreign aid, thus creating opportunity for corruption and misappropriation of funds. (Platteau & Gaspart, 2003; Moyo, 2009; Ahmed, 2014).

Consistent with my findings from literature is the positive influence that democracy demonstrates alongside other governance measures (Lederman, Loayza, & Soares, 2001). Democracy as a system of government in aid recipient countries will help to curb the monopoly power that government officials may have across all sectors. This is because there will be fair representation of officials from different political parties and interests in charge of different sectors or government ministries, hence reducing the autonomous authority for discretionary decision making by a single political party. Once there is fair representation of political power among rival parties, it will in itself serve as a deterrence approach to hold corrupt officials liable (Graycar & Sidebottom, 2012). This implies that when there are controls for more than one governance measures, it leads to a consistent level of governance effectiveness on the overall control of corruption (Shah & Schacter, 2004; Easterly, 2005; Simpson, 2013).

5.2 Infrastructural Aid and Corruption on Social Development in Sub-Saharan African Countries

Effective formulation and implementation of sound policies across different sectors such as the health care creates the possibility for substantial growth in total health expenditure, which in turn increases the quality of lives in Sub-Saharan Africa.
As resources are depleted by corrupt officials, fewer resources are made available for the delivery of quality health services. This has been corroborated by several studies that show that corruption affects most health indicators such as infant, child and maternal mortality and increasing the control of corruption will improve health outcomes as well as improve health spending on the most appropriate services (Gupta, et al. 1999; 2001). Contrary to the findings of previous research, the results of my study show that the effect of infrastructural aid on health spending is reduced as control of corruption increases. This contrasts with my research hypothesis that proposes that the effect of infrastructural aid on social development will be reduced in more corrupt governance environment. Again, it can be argued that health spending or expenditure is increased only in the less well-governed environments where there no records of health improvements possibly because the money is going into personal pockets and not to improve health standards.

As suggested by literature, corrupt government officials abuse the discreptional power of their political position to approve the purchase of unnecessary medical equipment and wasteful pharmaceutical products in exchange for bribes (Lantham, 2001; Kassirer, 2006). This concept explains the opportunities that the offending officials within the context of health institutions are familiar with and take advantage of these presenting opportunities to enrich their personal pockets. Thus, when governance measures such as control of corruption are put in place, it automatically rules out the effect that infrastructural aid has on health expenditure because perhaps health spending is now being stringently scrutinized and accounted for.

With more of these governance measures in the health sector, the opportunity for increased corruption that increased health expenditure will be mostly eliminated (Gray-Molina, Perez de Rada, & Yanez, 2001). Moreover, by ensuring that health care institutions and the rest of the social institutions are accredited by following the appropriate procedures, through continuous monitoring of these institutions, the social and health services rendered will meet the populations’ expectations.

5.3 Infrastructural Aid and Corruption on Economic Development in Sub-Saharan African Countries
As the results on Table 5 indicates, infrastructural aid and control of corruption does not have any significant relationship with GDP annual growth\(^2\) which runs contrary to the hypothesis predicted in this research. These results also run contrary to the effects that infrastructural aid and control of corruption have on health expenditure, an indicator of social development. Even though these findings are unexpected, there is some support in previous research that foreign aid does not significantly improve economic development as measured by GDP (Moyo, 2009; Moss et al., 2006; Goldsmith, 2001).

### 5.4 Total Aid and Corruption on Social Development in Sub-Saharan African Countries

While corruption has been a bane to productivity in all sectors of the economy, the health sector is not an exception. Past studies show that in low and middle-income countries, corruption has stifled the growth and prevented the most effective and efficient health services to be delivered (Burnside & Dollar, 2000; Lewis, 2006; Ajie & Wokekoro, 2012; Ahmed, 2014). Interestingly, the current research also finds that total health expenditure is increased in more corrupt countries. Although increase in health expenditure does not translate into an actual positive impact on quality health services as this could mean that increased health expenditure makes more funds available to corrupt officials for personal gain. This implies that when corruption is prevalent, foreign aid can serve as the funds covering the stolen health money disguised as health spending by corrupt officials taking advantage of opportunities presented in a weak governance environment. But when control of corruption increases, health spending increases with it and aid is not needed to fill the gap. Grigoli and Kapsoli (2018) suggests that the efficiency of health expenditures are very low in Africa. This may be because health expenditures in more corrupt countries are simply meeting needs and are easy targets for corruption, especially when it is infrastructural aid.

While this analysis provides interesting results, it is important to emphasize good governance such as democratic rule of law in low and middle-income countries as this is key to increasing control of corruption as indicated in model 3 of Table 6. This will in turn increase total health expenditure and eventually leads to quality health services. Thus, to enable the health sector to function effectively, and thereby contribute to improved socio-economic development, it is

\(^2\) To further confirm these findings, the research explored corruption perception index as a measure of corruption and adopted GDP per capita in the place of GDP annual growth. Surprisingly, the results of the later analysis were insignificant and like the previous findings that adopted control of corruption and GDP annual growth, which further confirms the unexpected results.
necessary to promote good governance to ensure the desired health services are attained and delivered (Youde, 2010).

In this thesis, Table 4 and Table 6 presents similar results and effects on social development, specifically health expenditure in Sub-Saharan African countries. Although, Table 4 presented findings of infrastructural aid which is still a portion of the total foreign aid represented in Table 6, the results of both analysis were similar and in support of health expenditure. What these results show is that as control of corruption increases, the effect of total foreign aid and/or infrastructural aid on health expenditure decreases. Again, this could be because the excess funds from increased health expenditure that is made available to officials via corruption is no longer available once accountability, transparency and other governance are effectively put in place. Past research also shows that opportunities for corruption is created by lack of accountability, where government officials act in their personal interest with no fear of being apprehended (Segal & Summers, 2002; Brinkerhoff, 2004; Lewis, 2006; Milewa, 2006; Lewis, 2007) These findings are not consistent with the research’s prediction that total foreign aid will have a progressive effect on social development in less corrupt countries. Instead, the findings unexpectedly show that social development benefit more from total foreign aid in more corrupt countries.

5.5 Total Foreign Aid and Corruption on Economic Development in Sub-Saharan African Countries

Similar to infrastructural aid, total foreign aid, corruption and GDP annual growth provides no relationship between these variables unlike the positive increase recorded in the case of the health expenditure. This implies that although there is a possibility as predicted by one of the research hypotheses that foreign aid and control of corruption may increase GDP annual growth, this may not always be the case based on the findings of this analysis. These findings are surprising and does not support the hypothetical prediction of the current study that total foreign aid and control of corruption will significantly lead to economic development.

In total, the findings of this current study statistically show that total foreign aid does not have any effect on the economic development of African countries. A finding that negates many

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24 Further investigations were carried out by the researcher to explain the relationship between total foreign aid, control of corruption and economic development. The researcher adopted corruption perception index as a measure of corruption, and GDP per capital instead of GDP annual growth as a measure of economic growth, however, the findings after the change in variables show no significant relationship between foreign aid, control of corruption, and economic development.
previous research findings that argues that corruption in African nations is increased to endemic levels because of the flow of infrastructural aid that has been suggested by past research to create opportunity for corruption in Africa (Mavrotas & McGillivary, 2005; Abuzeid, 2009; Moyo, 2009).

Also, my findings reveal that when there is democracy and sound regulatory quality, it is more likely to bring about an increase in the level of control of corruption. This finding on democracy and regulatory quality as a measure of governance touches on one of the significance that this study seeks to achieve. The significant findings on the impact of regulatory quality on control of corruption supports the need for firm accountability measures which will decrease the opportunity that may present itself in available foreign aid funds.

Furthermore, my findings establish an unexpected view on the relationship of foreign aid and control of corruption, and the effect that this relationship may have on social and economic development. Economic development in African countries is neither increased nor influenced by foreign aid or control of corruption. To an extent, these findings are consistent with past research that argues that foreign aid has failed in contributing and giving the ‘big push’ to Africa’s economic development, (Tavares, 2003; Moyo, 2009; Okada & Samreth, 2012), thus addressing another significance that this study seeks to contribute in establishing how foreign aid impacts on Africa’s development.

Contrary to past research findings stating that the effectiveness of foreign aid on health expenditure and other social development indicators will benefit from less corrupt governance environments (Brautigam & Knack, 2004; Werlin, 2005; Ajie & Wokekoro, 2012; Graycar & Sidebottom, 2012), the findings of the current study shows otherwise. This in other words means that aid will do better on social development in more corrupt African countries. In regard to the opportunity perspective adopted for this study, increases in health spending in more corrupt countries stemming from foreign aid may actually mean more opportunities for corruption to officials. This is because of their understanding of the weak governance environment within which they function and the rationalization of their corrupt practices without any scrutiny or accountability. My explanation finds support from Kinney, Brantingham, Wuschke, Kirk, and Brantingham (2008) who argue that an offending official or person can only execute a criminal act within the political structure within which he or she exercises monopolized power. The
researchers’ description of the ‘crime pattern theory’ further explains on the opportunities that is inherent in increased health expenditure only when corruption is increased.

Lastly, it is not unfamiliar that each Sub-Saharan African country strives to democratize governance and fight corruption within its political and national capability, and the development of each of these countries in fighting corruption and improving governance varies from one another. The variations between these countries in fighting corruption and to democratize governance further proves that each of these countries will grow at varying pace to reach the state of desired development and consequently becoming a free and fair sovereign nation with less corruption.

5.6 Conclusion

At the beginning of this study, I stated that the research would focus on foreign aid and corruption: its impact on socio-economic development in Sub Saharan Africa. In laying the foundation, I stated based on previous researches, that foreign aid to sub-Saharan Africa had been given for decades for different purposes among which are economic development, social development, infrastructural development and general growth. This further led to my research statement of hypotheses for ascertaining the impacts that total foreign aid and different forms of aid will have in sub-Saharan Africa vis-à-vis the identified indicators (social, economic and infrastructural development) within the period being considered under my study (2002-2014). 

Adopted in my data analysis and findings is the control of corruption measure as a determining factor on the extent to which total foreign aid or infrastructural aid will affect socio-economic development in Sub-Saharan African countries.

In carrying out the study, I tested for the relationship between infrastructural aid, total foreign aid, control of corruption and their impacts on socio-economic development in Sub-Saharan Africa while also testing for selected governance measures as the control variables for my study.

Using data across the twelve years in which observations were available, I adopted a fixed-effects panel regression model in analysing the variables in my study.

To test if infrastructural aid will lead to corruption increase in African nations, I formulated 3 models of analysis. In formulating these models, I considered infrastructural aid, control of corruption & governance measures. The results of this analysis indicate that infrastructural aid does not lead to corruption as the results point to the fact that infrastructural aid is uncorrelated
with corruption. However, it is clear from the results that infrastructural aid leads to reduction in corruption when there is an increase in regulatory quality. Thus, these findings negate my first hypothetical statement that infrastructural aid will lead to increase in corruption and negates theoretical perspective of my study as the findings does not show that infrastructural aid provides opportunity for corruption in Sub-Saharan African countries.

In a bid to also test if the effect of infrastructural aid on socio-economic development will be reduced in more corrupt governance environment as stated in hypothesis 2, two tables were presented to independently test for the impact of infrastructural aid on each of the development indicators (social and economic development indicators) the different types of developments. Using three models of analysis, I tested the effect of infrastructural aid and corruption on total health expenditure in Sub-Saharan African Countries. In these three models, I examined infrastructural aid, control of corruption and social development (total health expenditure, percent of GDP). The interactions of these indicators show that as control of corruption increases, the effect of infrastructural aid on health expenditure in Sub-Saharan African countries decreases, thus answering the second research question asked in this study. Though the findings are unexpected, they offer support for previous research findings that the foreign aid big push does not guarantee the assumed or expected growth in development (Alesisna & Weder, 2002; Abuzeid, 2009). These unexpected findings make it possible to argue that foreign aid may not be sufficient to achieve the desired growth in Sub-Saharan African nations as it is clear from the findings that effective governance measures is what is needed in these African nations. In other words, I argue that although increase in the control of corruption decreases the effect of foreign aid on health expenditure, it also decreases unnecessary health spending and expenditure that may be easily channeled towards personal gain and not utilized on health services. What this means is that the previous opportunity to embezzle money when health expenditure increases is no longer available once there is increase in the control of corruption to regulate public funds. Further research and scrutiny on why the effect of infrastructural aid decreases as control of corruption increases in future researches may be able to provide explanations to this relationship.

The second table tested the effect of infrastructural aid and corruption on economic development in Sub-Saharan African Countries. Three models were also considered. In the models, we interacted infrastructural aid and control of corruption to assess their impact on GDP annual growth and realized that they all have no significant impact on GDP annual growth. This
means that regulations have no effect on GDP annual growth and less attention should be given to them if economic development is the focus of the government. Again, these findings though odd, find support with past literature that argues that foreign aid was wasted and not what Africa needed to attain the level of desired development (Alesina & Weder, 2002; Abuzeid, 2009; Moyo, 2009)

Lastly, I examined whether the effect of total foreign aid on socio-economic development will be reduced in more corrupt governance environment as seen in the third hypothesis. Like in the previous results, two tables were presented, one for each of the development indicators. The first one tested the effect of foreign aid and corruption on social development in Sub-Saharan African countries. Consistent with the impact of infrastructural aid and control of corruption on health expenditure, the results of this analysis show that as control of corruption increases, the impact of total foreign aid on health expenditure is diminished. This could also be consonant with the research by Platteau, et al. (2003) and Moyo (2009), who theorizes that Africa does not have adequate infrastructural facilities to utilize the amount of foreign support that is continuously given to them, thereby feeding corruption endlessly. The implication could be that any attempt to control corruption in those instances would negatively affect other aspects of developments (in this case social development).

The second analysis tested the effect of foreign aid and corruption on economic development in Sub-Saharan African countries. Foreign aid, total GDP annual growth, and control of corruption were employed here with 3 models also formulated. The results show that the independent variables (foreign aid and control of corruption) do not have any significant impact on GDP annual growth across the 3 models.

These findings contradict the hypothetical assumption of the researcher which may be partly due to the limitation of available data.

Given the results of this study, the applicability of opportunity theory towards explaining foreign aid and corruption cannot be over-emphasized. This is because opportunity theory takes on the situational contexts in explaining corrupt and illegal behaviors of a rational thinker who seeks to take advantage of the opportunity presented in available funds with ineffective regulation and accountability. Nonetheless, increased control of corruption in both cases of foreign aid shows that the opportunity for continuous corruption cannot be reduced if not completely eliminated until an effective governance environment is achieved. Also, if further research studies extensively
explore all the indicators of foreign aid, and its management or mismanagement in the custody of aid recipients, opportunity theory will help create awareness on the importance of the social context which is the governance environment where foreign aid will be allocated.

5.7 Limitations and Suggestions for Further Studies

Based on the limitation of adopting only the fixed effect regression analysis, future studies could utilize more than one statistical model to compare the results for validity and reliability especially to be able to provide more information as to the results that do not conform to the researcher’s expectations. Undoubtedly, available data for this study may have also limited the chances for more findings as foreign aid can be measured while also examining the kind of foreign aid donors and to see whether these findings will be same or different from the various foreign aid donors, be it bilateral or multilateral donors. It may appear that using GDP annual growth and health spending is not enough measures for development but these measures were selected based on availability of data across all countries of interest for this research. Most other development indicators for Sub-Saharan African countries from the data source have too many missing data and will end up not being a true representation for the Sub-Saharan African region.

Also, to be able to fully ascertain if certain forms of foreign aid will lead to corruption, future research should explore testing various forms of foreign aid and not just one form of aid (infrastructural aid) as is the case of this study. Testing more than one form of foreign aid will provide a wide scope to investigate if certain forms of aid increases corruption and will allow for comparison between these forms of foreign aid.

In addition, future studies should explore the entire Africa and Asia instead of only the Sub-Saharan African countries. This will also help do a valuable comparison of its impacts on the different regions of the world and help to ascertain the possible reasons for or causes of those impacts and open rooms for more realistic policy discourse and recommendations.

Lastly, future research should incorporate qualitative and demographic features like cultural orientation, value systems, worldviews25 etc. vis-à-vis foreign aid. This could be done with the use of primary data. It will help give a holistic perspective to the research- quantitative and qualitative. The research data and analysis adopted for this study does not in any way disprove other opinions about the role of foreign donors in the failure of recipient countries and underdevelopment. I intend to put into consideration the limitations of this study while also

25 There is also a growing body of work that examines this and can continue to be incorporated for future research.
incorporating the suggestions for future research at my doctoral level so as to account for more explanations of the interactions of foreign aid in its entirety, control of corruption, opportunity and development in Sub Saharan African nations.
References
EFCC Uncovers 43.4 Million Dollars, 23.2 Million Naira, 27, 800 Euros in Ikoyi Apartment. Retrieved From http://saharareporters.com/2017/04/12/efcc-uncovers-434m-n232m-%E2%82%AC27800-ikoyi-apartment


IMF. (2017). Data from International Monetary Fund. Published by Global Finance Magazine, February 2017


Stiglitz, J.E. (2003). Democratizing the International Monetary Fund And The World Bank: Governance And Accountability. Governance, 16(1.), 111-139


58


World Bank. (2014). World Development Indicators

World Bank. (2015). World Development Indicators

World Bank. (2016). World Development Indicators

World Poverty Statistics (2016)
APPENDIXES

Figure One: Showing the Interacting Effect of Infrastructural Aid and Control of Corruption on Health Expenditure:
Figure Two: Showing the Interacting Effect of Total Aid and Control of Corruption on Health Expenditure: