UNIVERSITI PUTRA MALAYSIA

IMPACT OF PUBLIC DEBT ON ECONOMIC GROWTH, HEALTH EXPENDITURE AND POVERTY IN SUB-SAHARAN AFRICA COUNTRIES

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By

ABDULLAHI SANI

Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in Fulfilment of the Requirements for the Degree of Doctor of Philosophy

October 2018

DEDICATION

I dedicate this thesis to God Almighty (Allah) the only source of knowledge, wisdom, inspiration, and understanding. He has been the power and the wings I soared. He controls everything that would have clogged me in my tracks and strengthened me in the most difficult times.

Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment of the requirement for the degree of Doctor of Philosophy

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October 2018

Chairman : Associate Professor Rusmawati Said, PhD
Faculty : Economics and Management

This thesis presents the empirical studies on three important issues in sub-Saharan African countries. Firstly, while other regions with good institutional quality have benefitted considerably from borrowing, sub-Saharan Africa (SSA) continue to accumulate public debt with a long history of dismal economic performance. The first part of this study examines the relationship between public debt and economic growth highlighting the role of institutional quality in SSA. Using the Generalized Method of Moments (GMM) approach, a sample of 46 sub-Saharan African countries were examined over the period 2000–2014. The empirical result confirmed that institutional quality has both a direct and an indirect impact on economic growth and also institutional quality has a statistically significant impact on the debt-growth relationship in sub-Saharan Africa. This confirms the hypothesis that the impact of public debt on economic growth is a function of institutional quality. Therefore, comprehensive improvement of the institutional quality is necessary not only in minimizing the negative impact of public debt but also in delivering the unwavering benefits of government borrowing.

Secondly, for the countries in SSA characterized by unfavourable balance-of-payment and a whopping budgetary gap to bridge, continuous accumulation of debt can never be free of cost. These countries have to earmark a sizable proportion of their limited resources to debt servicing, which is expected to reduce their overall government spending and health expenditure in particular. The second part of this study examines the impact of public debt burden on health expenditure in SSA highlighting the role of institutional quality. Using the Generalized Method of Moments (GMM) approach, a sample of 43 SSA countries were examined over the period 2000 –2014. The empirical result confirms that the public debt burden has a negative impact on public health expenditure in sub-Saharan Africa. However, with the inclusion of the

interaction term of institutional quality and public debt burden the negative impact turns out to be positive. This suggests that the impact of public debt burden on health expenditure in sub-Saharan Africa is a function of institutional quality. Therefore, to improve the level of public health expenditure in SSA governments need to take a determined stand to mobilize the domestic resources, minimize public debt accumulation and improve institutional quality.

Thirdly, the high level of indebtedness has been frequently mentioned as an impediment to the successful alleviation of poverty in developing countries. The third objective examines the relationship between public indebtedness and the incidence of poverty in sub-Saharan Africa. Using the Generalized Method of Moment approach, a sample of 42 SSA countries was examined over the period 2000-2014. The empirical results confirmed that public indebtedness has a statistically significant positive impact on poverty in sub-Saharan Africa. This suggests that public indebtedness is one of the leading cause of the lingering mysteries of the dogged poverty in SSA. Therefore, to alleviate poverty, proper utilization of the domestic resources and reduction in public debt accumulation is necessary.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

IMPAK HUTANG UMUM TERTUMBUHAN EKONOMI, PERBELANJAANAN KESIHATAN DAN KEMISKINAN DI NEGARA SUB-SAHARAN AFRIKA

Oleh

ABDULLAHI SANI

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Tesis ini membentangkan kajian empirikal mengenai tiga isu penting di negara-negara sub-Sahara Afrika. Pertama, sementara rantau lain yang mempunyai kualiti institusi yang baik telah mendapat banyak manfaat daripada peminjaman, sub-Sahara Afrika (SSA) terus mengumpul hutang awam dengan sejarah panjang prestasi ekonomi yang ketat. Bahagian pertama kajian ini mengkaji hubungan antara hutang awam dan pertumbuhan ekonomi yang menonjolkan peranan kualiti institusi dalam SSA. Dengan menggunakan *Generalized Method of Moments (GMM) approach*, sampel 46 negara sub-Sahara Afrika diperiksa sepanjang tempoh 2000-2014. Keputusan empirikal mengesahkan bahawa kualiti institusi mempunyai kesan langsung dan tidak langsung terhadap pertumbuhan ekonomi dan kualiti institusi mempunyai kesan signifikan secara statistik terhadap hubungan hutang pertumbuhan di sub-Sahara Afrika. Ini mengesahkan hipotesis bahawa kesan hutang awam terhadap pertumbuhan ekonomi adalah fungsi kualiti institusi. Oleh itu, penambahbaikan kualiti institusi yang menyeluruh adalah perlu bukan sahaja untuk meminimumkan kesan negatif hutang awam tetapi juga dalam memberikan faedah peminjaman kerajaan yang tidak berbelah bahagi.

Kedua, untuk negara-negara di SSA yang dicirikan oleh imbangan pembayaran yang tidak menguntungkan dan jurang belanjawan yang menjejaskan untuk menjembatani, pengumpulan hutang secara berterusan tidak boleh dibebaskan. Negara-negara ini perlu memperuntukkan sebahagian besar sumber daya terhad mereka kepada perkhidmatan hutang, yang dijangka dapat mengurangkan perbelanjaan kerajaan dan perbelanjaan kesihatan mereka secara khususnya. Bahagian kedua kajian ini mengkaji kesan beban hutang awam terhadap perbelanjaan kesihatan di SSA yang menekankan peranan kualiti institusi. Dengan pendekatan *Generalized Method of Moments (GMM)*

approach, sampel 43 negara SSA telah diperiksa sepanjang tempoh 2000 -2014. Keputusan imperikal mengesahkan bahawa beban hutang awam mempunyai kesan negatif terhadap perbelanjaan kesihatan awam di sub-Sahara Afrika. Walau bagaimanapun, dengan kemasukan istilah interaksi kualiti institusi dan hutang awam beban kesan negatif ternyata positif. Ini menunjukkan bahawa kesan beban hutang awam terhadap perbelanjaan kesihatan di sub-Sahara Afrika adalah fungsi kualiti institusi. Oleh itu, untuk meningkatkan tahap perbelanjaan kesihatan awam di SSA, kerajaan perlu mengambil pendirian yang tegas untuk menggerakkan sumber dalam negeri, meminimumkan pengumpulan hutang awam dan meningkatkan kualiti institusi.

Ketiga, tingkat keberhutangan yang tinggi telah sering disebut sebagai halangan bagi keberhasilan pengentasan kemiskinan di negara-negara berkembang. Objektif ketiga meneliti hubungan antara kebangkrutan awam dan kejadian kemiskinan di sub-Sahara Afrika. Dengan menggunakan *Generalized Method of Moments (GMM) approach*, sampel 42 negara SSA telah diperiksa sepanjang tempoh 2000-2014. Keputusan empirikal mengesahkan bahawa keterhutangan awam mempunyai kesan positif secara statistik terhadap kemiskinan di sub-Sahara Afrika. Ini menunjukkan bahawa keterhutangan awam adalah salah satu penyebab utama misteri yang berlarutan tentang kemiskinan di SSA. Oleh itu, untuk mengurangkan kemiskinan, penggunaan sumber dalam negeri yang tepat dan pengurangan hutang terkumpul awam diperlukan.

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This thesis was submitted to the Senate of Universiti Putra Malaysia and has been accepted as fulfilment of the requirement for the degree of Doctor of Philosophy. The members of the Supervisory Committee were as follows:

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Declaration by Members of Supervisory Committee

This is to confirm that:

- the research conducted and the writing of this thesis was under our supervision;
- supervision responsibilities as stated in the Universiti Putra Malaysia (Graduate Studies) Rules 2003 (Revision 2012-2013) are adhered to.

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LIST OF ABBREVIATIONS

AfDB	African Development Bank
ARDL	Autoregressive Redistributed Lag
DEDH	Direct Effect of Debt Hypothesis
DOH	Debt Overhang Hypothesis
EAS	East Asia
ECA	Europe and Central Asia
ECM	Error Correction Model
FDI	Foreign Direct Investment
FONDAD	Forum on Debt and Development
GDP	Gross Domestic Product
GLS	Generalized Least Squares
GMM	Generalized Method of Moments
GNP	Gross National Product
HIPC	Highly Indebted Poor Country
IMF	International Monetary Fund
LAC	Latin America and Caribbean
LCH	Liquidity Constraint Hypothesis
LDCs	Less Developed Countries
MDGs	Millennium Development Goals
MDRI	Multilateral Debt Relief Initiative
MENA	Middle East and North Africa
NGOs	Non-Governmental Organisations
OECD	Organization for Economic Co-operation and Development
OLS	Ordinary Least Squares
SAP	Structural Adjustment Programme
SSA	Sub-Saharan Africa
WB	World Bank
WDI	World Development Indicator
WEO	World Economic Outlook
WGI	World Governance Indicators

CHAPTER 1

INTRODUCTION

1.1 Introduction

Public debt also called government or sovereign debt is the total debt incurred by the government of a country (Nelson & Ave, 2013), which is divided into internal and external debt. While internal debt is the total debt borrowed within the country, external is the total debt borrowed from other governments, foreign nationals, or international financial institutions. While no country is self-sufficient irrespective of its status, public debt serves as an important source of government revenue to developing countries in time of drought, war or financial crisis (Olumide, 2016).

Conventionally, the use of public debt as a macroeconomic toolkit to regulate the economy has gained momentum after the Classical and Keynesian debate of the 1930s (Majumder, 2007). While the Classical school took a very much conservative stance against government intervention through public debt, the Keynesian school were exceptionally flexible. The Classical economists contended that public debt should be kept to a minimum level because it tends to accumulate more resources to the public sector and this lead to a debt crowding out effect (Brown-Collier & Collier, 2015; Majumder, 2007). On the other hand, the Keynesian school sees no harm for a country to acquire public debt particularly in a time of necessity. Thus, public debt is a national asset rather than a liability as it stimulates aggregate demand and therefore necessary to achieve sustainable economic growth. In support of the Keynesian school, the new breed of development economists opines that adequate domestic saving is necessary to achieve economic growth and thus, the inadequate domestic savings of the developing countries should be augmented with external finance through public debt or foreign aids (Chenery & Strout, 1966; Domar, 1946; Harrod, 1939; Rostow, 1960).

Like many other developing countries, SSA has a number of development aspirations that requires a substantial amount of financial resources. However, notwithstanding the decades of mounting indebtedness, the relevance of the Keynesian proposition has not been felt by this region. Countries in SSA continue to accumulate largely unpayable debt stocks, which many analysts believed to have constituted a daunting challenge to the successful achievement of sustainable growth and development (Fosu, 1999; Milton, 1999; Olumide, 2016; Omotola & Saliu, 2009b). Paradoxically, rather than stimulate economic growth and development, countries in SSA continue to accumulate debt that in the end entrapped them into the club of the heavily indebted poor countries in the world totalling 36 out of which 33 are from this region. Consequently, the debt burden of this region becomes burdensome, economic performance continues to deteriorates, health expenditure becomes critically low, health challenges becomes great, health outcome becomes calamitous and the incidence of poverty becomes increasingly widespread and irreversible.

The empirical studies provide the evidence that quality of the institutions has a profound effect on the economic development of a nation. The pioneering works by North, (1990) and Williamson, (1998) are some of the major breakthrough necessitating the restoration of the institutional quality to economic growth in the country. Aron, (2000); Collier, (2006) & Ndulu, (2006) suggested that to give a big push to the economies of SSA institutional quality should be made robust, sustainable and reliable. Meanwhile, the underdevelopment of SSA has been attributable to the poor institutional quality (Brautigam & Knack, 2004; Kilishi, Mobolaji, Yaru & Yakubu, 2013; Luckham, Ahmeb, Muggah & White, 2001; Siba, 2007). Thus, to have a proper understanding of the impact of public debt on the economy the role of institutional quality needs to be highlighted particularly in SSA where institutional quality is embryonic and confronted with series of development challenges.

Moreover, the impact of public debt on growth was argued to depend on the quality of the institution in the country (Daud & Podivinsky, 2014; Qayyum, Din, & Haider, 2014; Siddique, Selvanathan, & Selvanathan., 2015). Thus, previous studies on the impact of public debt on economic growth seem inconclusive. Most especially that the quality of the institutions in SSA are poorly characterized by feeble rule of law, poor government effectiveness, tight controls over information, lack of transparency and accountability, and high levels of corruption (Brautigam & Knack, 2004). Thus, the impact of public debt on economic growth could be due to economic mismanagement caused by poor institutions in this region. To this end, this thesis is an improvement over the previous work such as Milton, (1999) and Fosu, (1996) on the debt-growth relationship in SSA by looking at the role of institutional. Furthermore, the study goes further to look at the welfare implications of the mounting debt burden of SSA on health expenditure and the incidence of poverty so as to provide a workable solution to the development challenges of SSA as highlighted below.

1.2 Background of the Study

The achievement of sustainable economic growth and development remained the most dominant concern of any nation particularly the developing ones. These countries are usually characterized by a lower level of domestic savings, unfavorable balance of payment, excessive importation of foreign capital and lower level of investment (Adepoju, Salau, & Obayelu, 2007; Todaro & Smith, 2003) Therefore, to bridge the gap between the government revenue and government expenditures and stimulate economic growth they resort to public debt (Aluko & Arowolo, 2010; Safdari & Mehrizi, 2011; Sulaiman, L & Azeez, 2012).

However, while public debt is assumed to be beneficial to economic growth in providing the much-needed capital for the investment purposes, its excessive accumulation could be detrimental to the growth of a nation (Audu, 2004; Mutasa, 2003). The poor economic performance of the indebted country could lead to further accumulation of debt, which has been one of the development challenges of the developing countries (Audu, 2004). Public debt become a burden on the country when it failed to generate the adequate financial resources required to meet up with the debt servicing from the current level of production (Ogunlana, 2005). This is because, a sizable proportion of the domestic resources have to be set aside to debt servicing, which will engulf their foreign exchange earnings and weakens their capacity to finance the various sector in the economy. This renders the financial systems of the country practically hemorrhaged to institutional lenders. This is why the government in SSA is no longer viewed as an instrument of regeneration and social development (Richards & Nwankwo, 2010).

Anecdotal evidence from many notable nongovernmental organizations (NGOs) argued that the deplorable condition of the health care system delivery of the developing countries could be attributable to their high level of indebtedness (Fosu, 2008; Shabbir & Yasin, 2015; Tomori & Adebiyi, 2002). This is because it absorbs a sizable proportion of their domestic resources and consequently impedes their efforts to adequately finance the health sectors. Furthermore, the poor people are said to suffer more the brunt of the socioeconomic hardship caused by the rising indebtedness in the country (Loko, Mlachila, Nallari, Kalonji, et al., 2003; Lumina, 2008). This is because, in addition to the depletion of the domestic resources to the foreign creditors the indebted countries are usually compelled to adopt certain austerity measures. These are the reduction of public expenditure on social welfare, removal of government subsidy, privatization and commercialization of public enterprises, devaluation of the domestic currency and market deregulation (Shah, 2013).

Besides, to honor the debt-servicing the indebted country usually has to levy a heavy tax on the capital and income of the citizens. However, when the tax is levied on the commodities consumed by the poor, their income level would be affected, and when the government expenditures on social programs are reduced the poor would be adversely affected. This would probably contribute to and aggravates the incidence of poverty in the country. This underscores the need to have a good understanding of not only the impact of public debt on economic growth but also its welfare implications on the citizenry for proper policy implications. To this end, this study explores the impact of public debt on economic growth, health expenditure, and poverty, as the lingering issues that exert more cost in SSA than in any other region as highlighted below.

1.2.1 Public debt and economic growth in Sub-Saharan Africa

Public debt has been the most recurring and disturbing issue in the academic discourse of economic growth of sub-Saharan Africa over the years. This is not in any way surprising considering the magnitudes of the mounting debt burden that has been predominantly burdensome on this region (Fosu, 1999; Milton, 1999; Omotola & Saliu, 2009a; Uka, 1993) Undeniably, this mounting indebtedness signifies an outright failure of the macroeconomic policy management adapted to utilize the superabundant human and natural resources of this region (Onyekwelu, Okoye, & Ugwuanyi, 2014). While public debt was not an issue of concern prior to 1970s, the desire to make a steady progress toward a sustainable growth and development after the attainment of the political independence of most countries in the region and the subsequent oil crisis of the early 70s has triggered and marked the beginning of the public debt accumulation in SSA (Boboye & Ojo, 2012). This has been worsened by the subsequent decline in the global demand for the export commodities and the resulting increase in the real interest rate in response to the worldwide inflation that has pushed many industrial economies into the recession in the 1970s (Boboye & Ojo, 2012; Mweni, Njuguna, & Oketch, 2016). Therefore, countries in SSA began to borrow and this deteriorates their balance of payment situation and forced them to borrow heavily. This has led to a sharp increase in the amount of public indebtedness and debt service obligations in the region (Boboye & Ojo, 2012).

Countries in SSA continue to groan under the excruciating public debt burden, which the available statistics shows that from the early 1970s to 2002, this region has collected the sum of $540 billion and paid back $550 billion but yet owed $293 billion by the end of the year. This grim scenario is no doubt expected to have a profound effect not only on the achievement of sustainable growth and development but also the timely debt servicing obligations. As the mounting debt burden of SSA increased to an unsustainable level, a number of conventional approaches to debt management were tested with very little or no success. Debt restructuring through debt refinancing, debt rescheduling, and debt buyback, for instance, has been a traditional approach to debt management in the 1980s. However, this did not yield any meaningful result, since the borrower country has to pay more through recapitalization (Uka, 1993).

The Structural Adjustment Programs (SAPs) was introduced by the International Monetary Fund (IMF) and World Bank to salvage the indebted countries by imposing stringent conditionality. However, this intervention ended of doing more harm than good by squeezing out any potential funds from these ailing economies to repay the debt collected from the bilateral and multilateral institutions. Similarly, a number of initiatives like the Highly Indebted Poor Countries (HIPC) and Multilateral Debt Relief have been granted in 1996 and 2005 to address the debt issues of the developing countries, these seem to have a negligible impact as it failed to extinguish the debt-trap of SSA. Thus, these approaches have failed to provide the much-desired solution to the problem of indebtedness of SSA (Olumide, 2016). This is so glaring as the spectre of public indebtedness continued to raise its ugly head particularly after the financial crisis of the 2008 (IMF, 2016). Subsequently, the aftermath of the global financial crisis of 2008 comes along with a decrease in the global demand for the primary products, which further increased the debt accumulation of SSA from $283 billion to $353 billion and $400.4 billion in 2010, 2012 and 2014 as shown below.

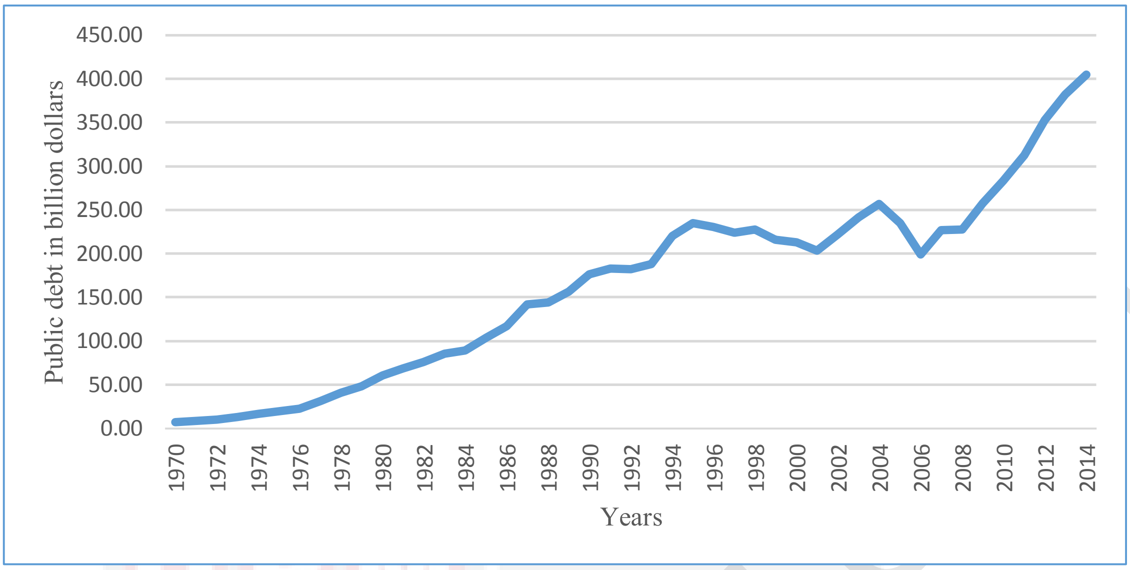

Figure 1.1 : Trend of Public Debt in Sub-Saharan Africa
(Source: World Development Indicators)

Figure 1.1 above shows that public debt has been increasing over the years in SSA countries exhibiting an upward trending with very little fluctuations over the period. It pertinent to note that the little fluctuations signify some reductions in the level of indebtedness of SSA due to the adoption of the Highly Indebted Poor Countries and Multilateral Debt Relief initiative in 1996 and 2005 respectively. This gave them a temporary breathing space but dramatically resume shortly. The problem of public debt in SSA seems to be very difficult to understand, why would a region blessed with superabundant human and natural resources remain constantly locked up in a debt trap for several decades with a historically dismal economic performance as shown below.

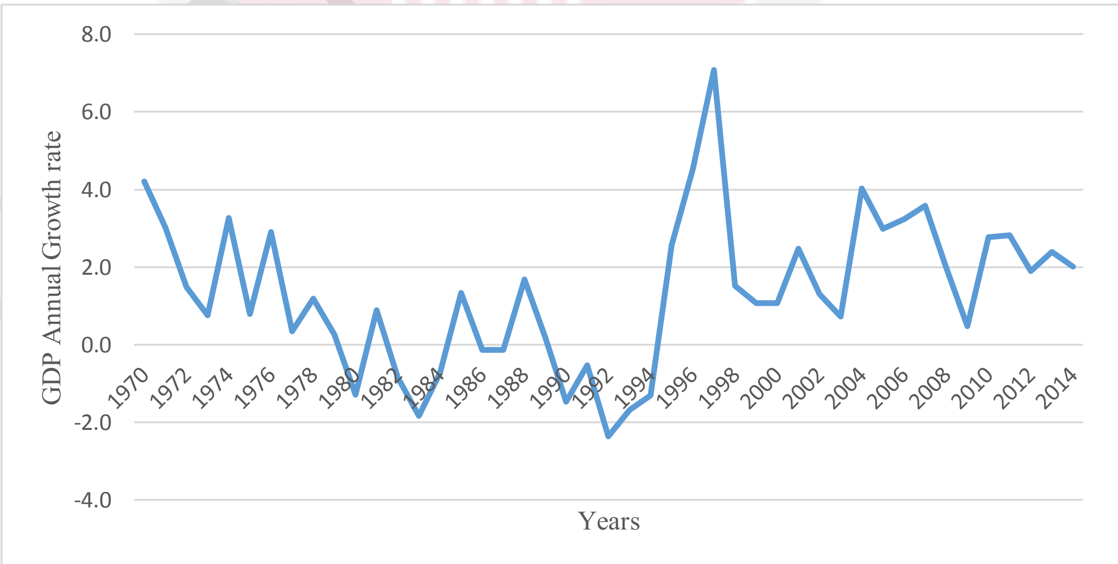

Figure 1.2: Trend of economic growth in Sub-Saharan Africa
(Source: World Development Indicators)

The figure 1.2 above indicates that the trend of economic growth in sub-Saharan Africa is characterized by some series of fluctuations as summarily described in four separate stages. The first period begins from 1960-1980 shortly after many countries in the region attained their political independence. During this period, countries across the region achieved a reasonable economic growth rate of about 4.8% on the average. In this period debt accumulation was not an issue as it was relatively low. This period was viewed as a "golden age" in the economic history of SSA which is characterized by high internally generated growth (Milton, 1999). The second period started from 1980 to 2000; this period was regarded as a "lost decades" (Milton, 1999) in the economic history of SSA. In this period economic growth rate was very low due to the "boom and bust" nature of the economy caused by the global shocks in the oil and nonoil price in the global market. The period was witnessed excessive accumulation of debt and excruciating debt crisis, severe deterioration of term of trade due to the worldwide increase in the rate of interest and drastic fall of the annual growth rate to 2.1%. The third stage begins from 2000 to 2007, during which the rate of growth in the region was somehow reviving and resuscitating from the devastating blow of the previous years due to the grant of debt cancellation of the heavily indebted countries in the region. In this period the prices of primary product increases and the GDP annual growth rate rose to 3.9%.

Lastly, 2008 to present date is the period where very few countries in the region have witnessed a rapid growth, a scenario that is popular call as "Africa rising" triggered by the rising global demand for the export commodities. However, by 2013, such a growth rate increases but at a declining rate afterward. This is perhaps due to the unprecedented increase in public debt accumulation and subsequent fall in the global demand for the oil and non-oil primary product. This sombre economic situation requires an in-depth analytic study to proffer a workable solution to the historically dismal economic performance of SSA and suggest an appropriate policy measure to mitigate its needless implications on various sectors in the economy and health sectors in particular as highlighted below.

1.2.2 Public debt burden and health expenditure in sub-Saharan Africa

Health is generally recognized as one of the most important component of human capital development (Bloom, Canning, & Sevilla, 2004; Gong, Li, & Wang, 2012; Lopreite & Mauro, 2017) that requires adequate financing for its improvement. This gave it a prominent position in both the Millennium Development Goals (MDGs) and Sustainable Development Goals (MDGs), where three of these goals were health-specific and the remaining were indirectly health enhancing. As a fundamental human need, health has not only contributes positively in improving the productive potentials of the labour force but also in minimizing the production losses incurred due to the sickness of employees, ensures effective utilization of natural resources and increases the gross enrolment of healthy pupils to school in a better learning condition (Saha, 2013; Tomori & Adebiyi, 2002).

While public spending on health is not the only source of finance to health service delivery, however, it remained the most important sources of health care financing in SSA where roughly 50% are categorized as poor. As one of the important way through which the health status is improved and economic growth achieved (Amiri & Ventelou, 2012; Makuta & O'Hare, 2015), health care financing will not only ensure a healthy society but also increase the financial and social protection of the populace. To this end, African leaders have shown their political will by declaring a state of emergency on healthcare financing through Abuja Declaration of 2001, where the member nations agreed to improve their pattern of health expenditure by assigning 15% of their annual budgetary allocation to the health sector. Subsequently, the Addis-Ababa declaration that laid emphasis on strengthening community health followed in 2006, Ouagadougou declaration, which aimed at improving the Primary Healthcare and the health systems in the African continent in 2008, and the Tunisia declaration on the value of money, accountability, and sustainability in the health sector in 2012.

These aimed at addressing the lingering issue of inadequate funding to the health sector so as to improve the calamitous health outcome in the region. However, healthcare financing has not meaningfully improved in the region (African Data Report, 2016; Musango, Elovainio, Nabyonga, & Toure, 2013; Temah, 2009). Presently, to access medical services out-of-pocket expenses become the second best option for the people of SSA. Unfortunately, this form of healthcare financing deters many from accessing the healthcare services and eventually exposes them to the danger of poor health and extreme destitution (Nabyonga-Orem, Mugisha, Okui, Musango, & Kirigia, 2013). It similarly deters people from taking medications at the right time until they are critically ill, which further deteriorates the health status of the affected individuals.

Notwithstanding the concerted efforts at both the national and international level to make health care system delivery effective, affordable, and equitable, the health indices in SSA remained stagnated or even deteriorated in some cases. Today, SSA is the only region in the world that has not benefited considerably from contemporary developments in the biomedical sciences that adopted health technologies to arrest myriads health challenges (Habte, Dussault, & Dovlo, 2004). This region continues to face the daunting challenge of how to deal with the prevailing calamitous health outcome and heavy disease burden, which exerts more cost than in any other region. The prevalence of the HIV/AIDS has further confounded the health issue and posed additional challenge particularly that the public health expenditure in SSA has not meaningfully improved over the years as shown below.

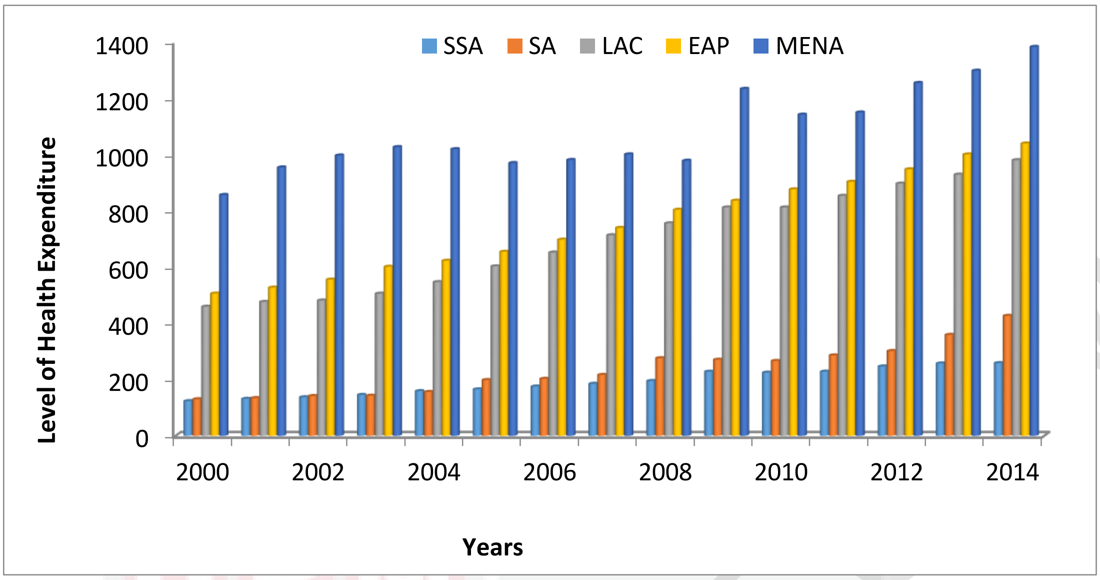

Figure 1.3 : Public health expenditure across the region
(Source: World Development Indicators)
Note: SSA= Sub-Saharan Africa, SA= South Asia, LAC= Latin America and Caribbean, EAP=East Asia and Pacific, MENA= Middle East and North Africa.

Figure 1.3 has shown that public health expenditure in SSA is the lowest compared to the other regions of the world. This is a challenging issue considering the undesirable level of life expectancy of only 57 year that is in sharp contrast to 66 and 74 in Pacific and South Asia respectively (WDI, 2015). The African Data Report, (2016), reported that one in every six children in SSA dies before the attainment of their fifth birthday. This is mainly due to the shamble nature of the healthcare systems that are on the verge of collapsing due to the gross under-investment. While the average health expenditure per capita is more than US$ 2000 in developed countries, it is found to be within the range of US$ 13 to US$ 21 in SSA in 2001. This has made their healthcare systems delivery to be facing huge financing deficits to the extent that the Commission of Macroeconomics and Health, (2002) recommended that health expenditure per capita in SSA should increase to US$ 34 by 2007 and to US$ 38 by 2015, which is approximately 12% of their GNP. This was the least amount required to provide basic healthcare treatment for infectious diseases like HIV/AIDS, TB, and malaria, as well as the infant and maternal illnesses. Also reported are less than two nurses/midwives per 1000, with about 5% of the total population infected with HIV/ AIDS and 280 per 1000 facing the health threat of tuberculosis (WHO, 2015). Likewise, the infant and maternal mortality rate, the percentage of births in the absence of trained health worker, and the proportion of one-year-old babies not been given a DPT immunization increases twice the world average in the region (African Data Report, 2016). This region continues to record the highest neonatal death and maternal mortality rate, in which out of the 20 countries with the highest maternal mortality rate in the world, 19 are in SSA (Musango et al., 2013; WHO, 2014). It is in view of the above that a number of analysts blamed the lower level of health expenditure as the reason for the worst calamitous health outcome in SSA (Fayissa & Gutema, 2005; Jaunky & Khadaroo, 2008; Kaseje, 2006).

Meanwhile, it has been reasoned that the Structural Adjustment Program (SAP) adopted by the indebted country at the instance of Bretton wood institutions could have a profound influence on its public spending (Loko, Mlachila, Nallari, Kalonji, et al., 2003; Lumina, 2008; Temah, 2009). Such budgetary cuts potentially divert government spending on social sectors like education and health, which could eventually be translated into a pervasive health or educational crisis. Likewise, many notable nongovernmental organizations (NGOs) and analysts claimed that public debt burden is an impediment to sustainable investment in health, education and other human development (Fosu, 2007a, 2007b; Mahdavi, 2004; Shabbir & Yasin, 2015). However, considering the myriads health-related challenge and heavy diseases burden (Habte et al., 2004; Kaseje, 2006) deplorable condition of the health care system delivery (Kirigia & Barry, 2008; Nabyonga-Orem et al., 2013), and special recognition accorded to health in both the Millennium and sustainable development goals, the study chose the health sector as a lingering issue that was barely considered. This is particularly relevant as SSA continue to be pull-down by the heavy debt burdens, which drains their foreign exchange to debt servicing as shown below.

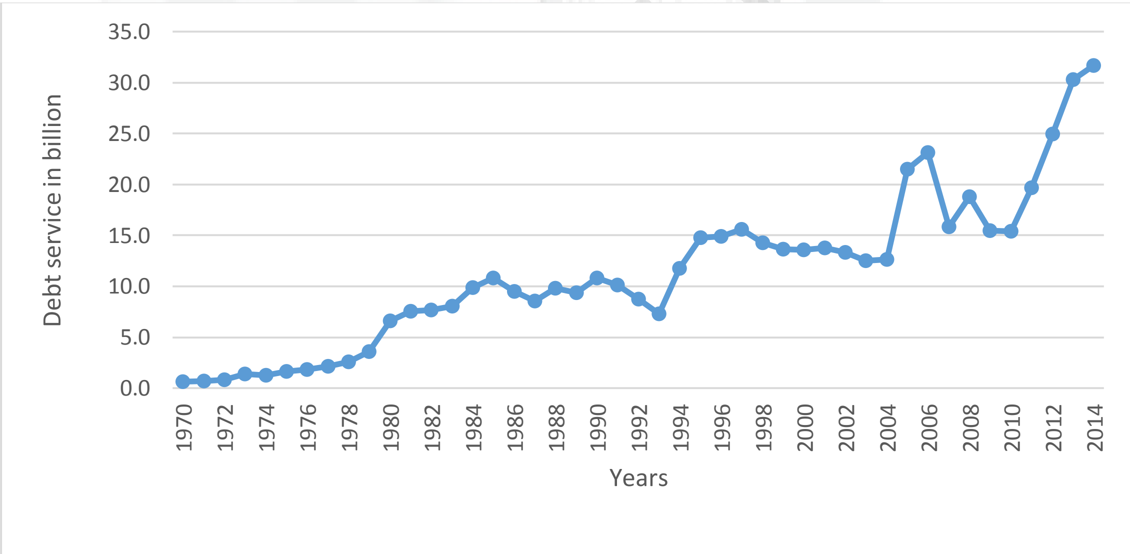

Figure 1.4 : Trend of public debt servicing in Sub-Saharan Africa
(Source: World Development Indicators)

Figure 1.4 above indicates that the trend of debt service payment in SSA exhibits an upward movement, presenting an increase in total debt service payment in the region. This implies that billions of dollars drain to foreign creditors from SSA annually. This could have a profound effect on their capacity to allocate adequate financial resources to the health sector. Particularly, that the indebted country has to decide whether to honour the debt service obligations or allocate adequate financial resources to the various sectors in the economy and alleviate the hardship of the citizens (Lora & Olivera, 2006). This is likely to shift the government budgetary allocation away from the health sector.

A cursory look at the deplorable condition of the health care system delivery in SSA yields a worrying picture exasperated by the inadequate health care financing, which manifested into high levels of migration of health care personnel out of the region, inadequate health care facilities, and hostile working environment. This is quite destabilizing considering the heavy disease burden and worst calamitous outcome prevailing in the region over the years. This grim scenario provides a possible explanation of why the health-related Millennium Development Goals (MDGs) has not been met as scheduled and why the Sustainable Development Goals (SDGs) might not be achieved in SSA. Thus, in a search for a workable solution to the myriads health challenges triggered by inadequate funding this study intends to ascertain whether the extremely lower level of public health expenditure in SSA can be explained by the level of public debt burden in the region.

1.2.3 Public Indebtedness and poverty in sub-Saharan Africa

Poverty is the most recurring and pressing socio-economic issue that has defied all the alleviation strategies adopted in SSA. Despite the immense human and natural resources that SSA is endowed with, it is the only region in the world where the percentage of poor is not significantly reducing (Addae-Korankye, 2014; Francis, 2001; Sembene, 2015; World Bank, 2014a). Notwithstanding, several policy initiatives planned and implemented in SSA but still there is hardly any proof of their success (see, Le Goff & Singh, 2014; Okonjo-Iweala, Soludo & Muhtar, 2003). Indeed, the poor people of SSA were found to be worse off than their counterpart in the other world's regions (Bicaba, Brixiová, Ncube, Kayizzi-mugerwa, & John, 2015; Dulani, Mattes, & Logan, 2013). Many forms of poverty have afflicted this region to the extent that the Human Development Index (HDI) scores are either declining or at best stagnated since 1990. This poses the challenge of answering why this region is the poorest region in the world and what can be done to reverse the worrisome trend.

Table 1.1 : Regional Poverty Trend of People Living below $1.9

Years	1981	1990	1999	2005	2013
EAP	80.5	60.2	37.2	18.4	3.5
ECA	-	4.0	8.1	5.1	2.3
LAC	16.2	18.8	13.9	9.9	5.4
MENA	-	6.0	3.8	3.0	-
SA	54.7	44.6	-	33.6	15.1
SSA	-	54.3	57.1	50.0	41.0

(Source: World Development Indicators)

Note: SSA= Sub-Saharan Africa, SA= South Asia, LAC= Latin America and Caribbean, EAP=East Asia and Pacific, MENA= Middle East and North Africa.

Table 1.1 shows the poverty headcount index across the regions. It reveals that SSA is the only region where the percentage of poor is not significantly reducing and that about 41% of the total population of the region are living on less than $1.90 a day.

Table 1.2 : Number of People living below US $ 1.90/day (million) across the Region

Years	1981	1990	1999	2005	2013
EAP	1273	1097	755	393	80
ECA	-	34	70	45	20
LAC	60	71	72	55	33
MENA	-	15	12	10	-
SA	504	505	-	508	256
SSA	-	276	371	382	389
World	42.2	35.0	28.0	20.4	10.7

(Source: World Development Indicators)

Note: SSA= Sub-Saharan Africa, SA= South Asia, LAC= Latin America and Caribbean, EAP=East Asia and Pacific, MENA= Middle East and North Africa.

Table 1.2 above, shows that the percentage of the people living below US$ 1.90 in SSA is increasing rather than reducing over the years. This indicates that although the number of people living below $1.90 a day has declined in the other regions, SSA is an exception (World Bank, 2014b). Poverty in SSA manifests itself in lack of basic essentials needs of life for a large number of people living in the region.

The United Nation Food and Agriculture Organization FAO, (2015) reported that about 220 million (23.2%) people in SSA were grossly malnourished in 2014. This number is staggering as it is the highest percentage compared to any other region in the world. The U.N. Millennium Project has reported that over 40% of Africans are unable to obtain sufficient food regularly. This has placed the region to have the largest number of hungry people in the world after South Asia having 281.4 million (17.7%) due to their larger population. In fact, this region has recorded the least progress in the reduction of hunger, of which approximately one of each three people living in SSA is malnourished (FAO, 2015). Similarly, the U.N, (2015) has reported that about 589 million peoples in SSA are deprived of electricity, 80% depend on biomass products like charcoal, wood, and animal dung for cooking and that out of the 738 million people that lacked access to good drinking water in the world 37% are in SSA. The U.N. Millennium Project reported that more than 50% of people living in SSA have suffered from water-related diseases like cholera (United Nation, 2015). This region has lagged far behind other regions in terms of the access to the necessities of life with very little progress in term of increasing the per capita consumption expenditure over the years as shown below.

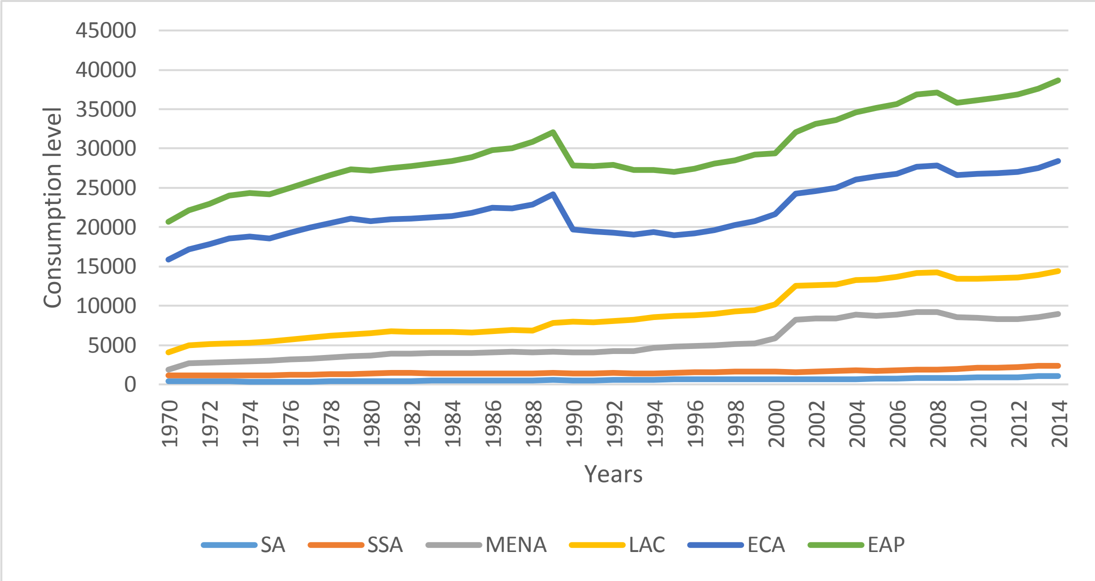

Figure 1.5 : Household Consumption Expenditure per Capita across the Region
(Source: World Development Indicators)
Note: SA= South Asia, SSA= Sub-Saharan Africa, LAC= Latin America and Caribbean, MENA= Middle East and North Africa, ECA = Europe and Central Asia

Figure 1.5 above presents the trend of household final consumption expenditures across the region. It indicates that the household final consumption expenditure per capita in SSA is the lowest in the world after South Asia. While the income level and the social indicators in SSA continue to deteriorate every day, the debt-led growth strategy has been adopted to enhance the socio-economic development of the region and alleviate poverty; however, the fight to end this scourge is far from over. Rather than stimulate economic growth and alleviate poverty, public debt increased monumentally in SSA, a situation that many analysts seem to be a hindrance to poverty alleviation (Lumina, 2008; Saungweme & Mufandaedza, 2013). This region was reported to have paid approximately the sum of $285 billion to enable them to acquire more debt (Friesecke, 2001). The painful truth is that these countries continue to be starving of the much-needed resources required to salvage their people from the trap of a vicious circle of poverty. To sum it up, SSA is in a multifaceted web of a vicious circle that continues to preserves poverty over the years. However, to the best knowledge of this study, hardly any empirical study attempts to examine the relationship between public indebtedness and the incidence of poverty in SSA. This study is an attempt to fill the gap.

1.2.4 Institutional quality and public debt policy in sub-Saharan Africa

Recent literature on the causes of growth differentials among countries has shown that institutional quality plays a pivotal role in explaining the cross-country differences (D Acemoglu, Johnson, & Robinson, 2005; Butkiewicz & Yanikkaya, 2006; Gurvich, 2016; Levins & Easterly, 1997; North, 1990; Siba, 2007). This suggests that an improvement in institutional quality is required to stimulate the economic growth of a nation. An institution is a humanly devised constraint that structures the political, economic and social interaction among people. It comprises of a formal rule like constitutions, private property rights as well as the informal rules like custom, traditions, sanctions, taboos and the codes of conduct (North, 1990). It is devised to create order, reduce uncertainty in business, safeguard the contract enforcement, and protect private property rights, which work hand in hand to support a viable economy. In response to the development challenge of SSA, Aron (2000), Collier (2006) and Ndulu (2006) suggested that to give a big push to these economies, institutional quality improvement is necessary.

Moreover, the new wave of research contends that proper utilization of public debt depends to a great extent on the quality of the institutions in the countries. This is because countries with good institutions were found to manage their debt efficiently (Daud & Podivinsky, 2014; Presbitero, 2008; Tarek & Ahmed, 2017). Conversely, poor institutional qualities affect the relationship between public debt and economic growth negatively in several ways. In addition to the high propensity of borrowing and high level of corruption (Jalles, 2011), poor institutions have the tendencies to desterilize the borrowing decisions of a country by diverting the borrowed funds from the projects of higher economic impacts to potentially meaningless projects (Shleifer & Vishny, 1993). On the other hand, poor institutional quality has been blamed for a greater likelihood of debt defaulting, which aggravates indebtedness and poor economic performance (Ciocchini, Durbin, & Ng, 2003). Therefore, the total amount of debt could be immaterial when the borrowing country is embedded within poor institutional quality.

Furthermore, the new wave of research indicates that the effective utilization of public debt depends to a great extent on the quality of the institutions in the country (Cooray, Dzhumashev, & Schneider, 2017; Daud & Podivinsky, 2014; Jalles, 2011; Kim, Ha, & Kim, 2017; Presbitero, 2008). This suggests that countries with good institutions are better able to manage and use their debt efficiently. Moreover, the effectiveness and relevance of health care financing for better health outcomes are found to be mediated by the quality of the institutions in the country (Bousmah, Ventelou, & Abu-Zaineh, 2016; Makuta & O'Hare, 2015). This might not be unconnected with the fact that good institutions are necessary for an allocative efficiency and effective utilization of the overall national resources and public debt in particular (Agnor & Montiel, 2010). Against this backdrop, this study examines the impact of public debt burden on public health expenditure in SSA and also investigates whether the impact of public debt burden on health expenditure would change with the interaction of institutional quality.

However, countries in SSA have been ruled by a rapacious government characterized by a high level of corruption, lack of rule of law, recurrent social unrest, terrorist attacks, and arm conflict across the region (Onuoha, Science, & Qobo, 2012; Tarek & Ahmed, 2017), which could have a profound influence on debt-growth relationship. It is pertinent to highlight the state of institutional quality in SSA. Using the data from the World Governance Indicators have the average level of institutional quality across the region is shown in the figure below:

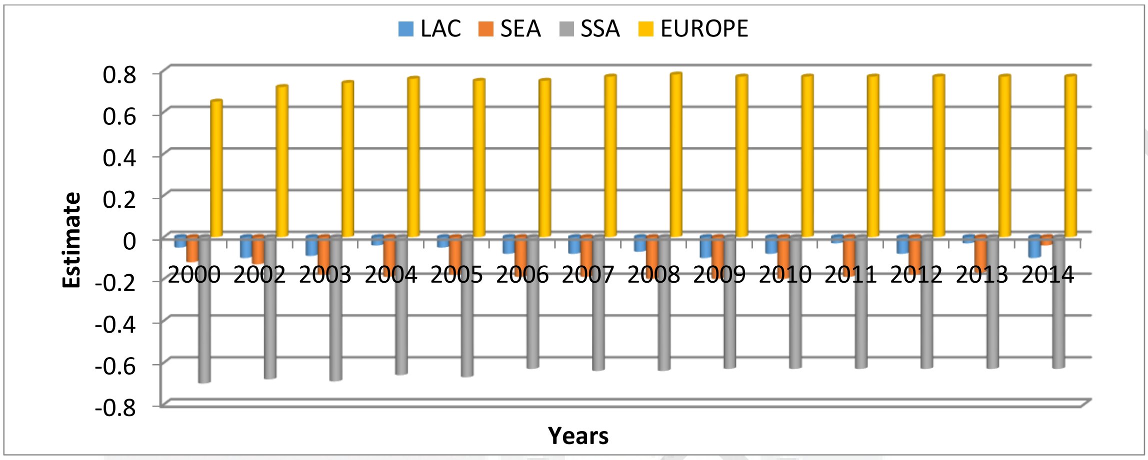

Figure 1.6 : Average institutional quality across the region of the world
(Source: World Governance Indicators)
LAC=Latin America & Caribbean, SEA=South East Asia, SSA=Sub-Saharan Africa, Europe = Europe & Central Asia.

Figure 1.6 above shows the trend of the average score of the overall institutional quality across the region and that SSA is having the weakest institutions compared to other regions in the world. Since public debt has a negative impact on economic growth in both theoretical and empirical literature and that empirical studies confirmed a positive relationship between the institutional quality and economic growth, this study trudges further look at the indirect impact of institutional quality to ascertain whether institutional quality matters on a debt-growth relationship in SSA.

1.3 Statement of the Problem

This study is motivated by three different but related issues regarding the impact of public debt on the economy. Firstly, the economic theories recognized the role of saving and investment in stimulating the economic growth of a nation. Likewise, the historical record has shown that most countries with sustainable economic growth are those that maintained adequate domestic saving to finance their investment needs (Todaro, M. P., & Smith, 2012). In view of the above, SSA countries continue to accumulate public debt since the 1980s, with the aim to increase their investment and stimulate economic growth. However, empirical evidence presents counterintuitive results (Fosu, 1999; Megersa, 2014; Milton, 1999). Whereas, the data available shows that public debt exhibits a rising trend over the period, the economic growth was seen to be very unstable showing a downward trending as in figure 1.1 and 1.2 respectively. This has led to the accumulation of debt that rose monumentally from US$ 206 billion in 2000 to approximately US$ 400 billion in 2014 (WEO, 2017). However, the empirical evidence has shown that while other regions with a better institutional quality have benefitted considerably from public debt (Jalles, 2011; Kim et al., 2017), SSA continues to accumulate public debt with a historically dismal economic performance. This situation constitutes a challenge that many analysts believed to be one of the biggest single barriers that have affected and continue to affect all efforts aimed at stimulating the economic growth of the region.

This study presents an improvement over the previous work on the debt-growth relationship in many important aspects. First, it looks at the direct impact of institutional quality on economic growth and the indirect impact of institutional quality through the interaction term on the debt-growth relationship. Second, it employs the system GMM approach that has a number of econometric benefits over the traditional panel approach and thus, provides a more robust conclusion.

The second issue strives to ascertain whether countries overburdened with public debt tend to spend less on health expenditure. While the pattern of health expenditure affects the health outcome and the rate of economic growth, public health expenditure in SSA has been the lowest compared to the other regions of the world (see figure 1.4). The average per capita health expenditure in the region have been $ 42.5 US, in 2001, $79 US in 2006, $114 US in 2010 and the $ 132 US in 2014; this is very low considering the world average estimated at $ 650 US, $ 890 US, $ 1095 US and the $ 1225 US respectively. This has compelled many Africans to take out-of-pocket health expenditure as an alternative to access medical services, which subjected them to poor health status. As the most disproportionate form of health care financing, out-of-pocket health expenditure deters many people from accessing the healthcare services and exposes them to the danger of poor health and destitution (Nabyonga-Orem et al., 2013). It equally deters them from taking medications at the right time until they are critically ill.

While various governments in SSA has shown their political will to improve the healthcare financing, for a country having unfavourable balance-of-payments and fiscal deficits public debt accumulation can never be free of cost. This is because a sizable proportion of their domestic saving has to be set aside to debt servicing. This is expected to consume their foreign exchange earnings, reduce their government spending, and the level of public health expenditure. This study hypothesized that high public debt burden potentially upset the financial allocations to the various sectors and healthcare financing in particular. This resonates powerfully in SSA, where public debt servicing engulfed whopping billions that could otherwise be used to improve the extremely lower level of health expenditures. This is particularly relevant considering the health-related challenges and a rising debt burden in SSA. Therefore, the heavy debt burden in SSA is expected to shift away from the government budgetary allocation from health care financing to debt servicing. While a number of empirical studies attempted to examine the determinants of health expenditure in the developing countries, research on the impact of public debt burden on health expenditure received little consideration in the literature. This study contributes to the literature by examining the impact of public debt on health expenditure in SSA, a region where the health challenges are abysmal and the debt burden is predominantly worrisome and also investigates whether the impact of public debt burden on health expenditure would change with the improvement of institutional quality.

The third issues raised concerns about the relationship between public indebtedness and the incidence of poverty in SSA. Usually, government resorts to public debt to address the socio-economic and developmental challenges facing the countries and put a smile on the faces of those governed. Notwithstanding the decades of mounting indebtedness accompanied by several policy initiatives to alleviate penury, poverty continues to be a challenging monster in SSA. The political instability continues to erupt in many countries of SSA that seems to be context-specific, however, widespread poverty could be the reason. Poverty can deny the basic human rights of the citizenry and thus aggravate social tension and fuels political instability. Poverty makes it easier for the radical group to recruit deprived unemployed youth into terrorism activities. This could explain why many youths are anxious to migrate to another continent through the sea despite the risk involved in their lives. Therefore, poverty does not only jeopardize the effort to achieve economic growth but also destabilizes the sense of responsibility, kindness and peaceful coexistence among African societies. Startlingly, a region blessed with super-abundant human and natural resources but ranked as the poorest region in the world with a huge percentage of its population wallowing in crass poverty. This scenario poses the challenge of answering the question of why this region is the poorest in the world and what remedies can be applied to reverse the appalling trend.

While public debt affects economic growth negatively, the impact of public indebtedness on the incidence of poverty receive very little attention in the literature. It has been argued that poor people mostly suffer more the brunt of economic hardship triggered by the adoption of austerity measures such as the removal of subsidy, reduction in government expenditures, privatization, and commercialization of public enterprises, devaluation of the currency, market deregulation by the indebted country (Shah, 2013). However, this claim can only be justified when the empirical evidence is confirmed. Therefore, to unravel the mysteries of the long-lasting challenge of the incidence of poverty and proffer a workable solution, this study examines the relationship between public indebtedness and the incidence of poverty in SSA.

1.4 Research Questions

This research aimed at providing the answers to the following questions:

- Does institutional quality has any influence on the debt-growth relationship in SSA?
- What is the impact of public debt burden on health expenditure in SSA?

- Does the quality of the institutions have any influence on public debt burden and health expenditure relationship?
- What is the impact of public indebtedness on the incidence of poverty in SSA?

1.5 Objective of the Study

The general objective of this study is to explore the impact of public debt on economic growth, health expenditure, and poverty in SSA countries.

Specifically, the study intends:

i. To examine the impact of public debt on economic growth highlighting the role of institutional quality in SSA.
ii. To investigate the impact of public debt burden on health expenditure incorporating the role of institutional quality in SSA.
iii. To analyse the impact of public indebtedness on the incidence of poverty in SSA.

1.6 Significance of the Study

This study contributes to the existing body of knowledge and has policy implications. Specifically, the first objective highlighted the role of institutional quality on the debt-growth relationship. This is relevant because, over the years, SSA economies have been managed under poor institutional quality, characterized by corrupt and rapacious leaderships, protracted political instability, recurring social tension, and lack of check and balance in collecting and spending public debt, which could certainly hinder the effective utilization of public debt in the region. Therefore examining the debt-growth relationship in SSA without considering the role of institutional quality could affect the reliability of the analysis. It is expected that the finding of this study may influence decisions of governments in SSA to consider the necessity of upholding high-quality institutions that guarantee effective debt management to mitigate or even forestall its negative impacts on the economy. It will also serve as a solid basis to revolutionize the policy formulation of the international financial institutions to set institutional improvement as a requisite condition for a country to access their loans. Furthermore, Brambor, Clark, & Golder, (2006) have recently queried the interpretations of the multiplicative interactive term in the literature. This study has gone beyond the traditional interpretation by adopting the updated approach that better interprets the interaction models by capturing the different values of the standard errors (minimum, mean and maximum), which is believed to be more robust.

The second objective contributes to the existing body of knowledge by examining the relationship between public debt burden and health expenditure relationship in SSA. This is timely, as the world is actively committed toward the achievement of the health-related Sustainable Development Goals by 2030. Hence, there is the need to have a proper understanding of the determinants of health expenditure in SSA. This will help the policymakers and health-related agencies to have a proper understanding of the reasons why many developing countries have failed to meet up with MDGs health-related target of 2015. This will provide a workable solution for a practical intervention and simplifies the achievement of Sustainable Development Goals (SDGs) by 2030. This helps not only in the rationalization of the policy debate on health-related target but also in enhancing the pace at which the socioeconomic development in SSA economies could be achieved. This study provides a new insight into the factors affecting the level of health expenditure and offers a policy option to improve the health care financing of the developing countries and SSA in particular. The study further improves from the existing ones by highlighting the indirect impact of institutional quality on debt burden and health expenditure nexus, since institutional quality is relevant in proper utilization of resources in an economy.

The third objective investigates the relationship between public indebtedness and the incidence of poverty in SSA. The study looked at the welfare implications of public indebtedness; an issue that is scarcely explored in the literature. The finding of this study provides the relevant information required by the policymakers to serve as guidelines for understanding the determinants of poverty for a proper policy recommendation. This study sheds light on stakeholders, governments, and policymakers to consider public debt as one of the potential causes of poverty in developing countries, and SSA in particular. The study informs the policymakers about the risk accompanying the excessive indebtedness and its attendant implication on the incidence of poverty in SSA. Furthermore, the proxy used to measure the incidence of poverty in SSA has been mostly in terms of income; this study employed the expenditure approach, which is believed to be more appropriate as it captures the ability of a household to secure its necessities of life like food, shelter, clothing, and health. Prospective researchers would benefit from this study by using a more reliable proxy to capture the incidence of poverty in their studies.

1.7 Scope of the Study

To explore the impact of public debt on economic growth, health expenditure, and poverty, data were collected from SSA for the period 2000-2014. This period was chosen because it witnessed the most rising indebtedness ever, since the debt-relief era, recurrent political instability and global shocks in the price of primary products. These situations have a tremendous influence on debt accumulation of SSA. Geographically, the study is confined to SSA because it consists of a group of countries that share common characteristics, having the same poor rating of the level of institutional quality, and offer economic dynamics that are hardly found in the other regions. Thus, the region requires a special attention regarding the reasons behind its massive build-up of debt, despite the approval of the debt relief initiatives in 1996 and 2005.

1.8 Organization of Studies

This study was designed to cover five chapters. The foregoing chapter covers the introduction, background information, the research problem statement, research questions and objectives of the study, significance, scope, and organization of the study. Chapter 2 provides a comprehensive review of the theoretical and empirical literature on the issues raised in the background of the study. The chapter is divided into four main sections. The first section reviews the theoretical and empirical literature on the relationship between public debt and economic growth. The literature on the debt-growth nexus is debatable, inconclusive and therefore not yet exhaustive. Whereas others argued positive relationship, some argued a negative and yet other non-linear relationship. Interestingly, research on the impact of institutional quality on the debt-growth nexus is mostly overlooked in the literature. The second section reviewed the literature on the relationship between the public debt burden and health expenditures. The reviewed literature has shown that findings on the debt-growth nexus are inconclusive and debatable and that the nexus is scarcely exploded in the literature, even in SSA where health-related challenges have been great and debt burdens have been burdensome over the years. The third section reviews the literature on the relationship between public indebtedness and the incidence of poverty. Although both the incidence of poverty and indebtedness are on the increase in SSA, empirical studies on the impact of former to the latter are generally overlooked. The last section gives a highlight of the existing gap in the literature.

Chapter 3 provides the discussion on the estimation methodology employed to carry out the study. This chapter is structured into three separate sections based on the objectives of the study. Based on the literature reviewed, in each objective a theoretical framework that underpins the study was discussed. Econometric models were specified to test the hypotheses, variables descriptions and their hypothesized sign, estimation methodology and its justification were highlighted. The growth model consists of the Real GDP per capita, Institutions, gross fixed capital formation, population growth, and trade openness. The health expenditure model consists of public health expenditure as percentage to government expenditure, GDP per capita, debt variables, institutions, urbanization, the percentage of population 65 years and above, and foreign aids. The poverty models consist of consumption expenditure, debt variables, real GDP, employment rate and inflation. In total the growth model consist of 14 equations for the direct and indirect impact, the health expenditure models consist of 6 equations for the direct impact of debt and the moderating role of institutional quality and the poverty model consists of 6 equations.

Chapter 4 is the presentation and interpretation of results. The chapter presents the descriptive statistics, correlation matrix, estimation method, discussion and summary of the results. The system GMM technic has been employed to achieve all the three objectives of the study. Finally, chapter five discusses the conclusion, makes policy recommendations, highlights the limitations of the studies and makes suggestions for further studies.

REFERENCES

Acemoglu, D., Johnson, S. H., & Robinson, J. a. (2001). An african success story: Botswana. *SSRN Electronic Journal*, 1–53. https://doi.org/10.2139/ssrn.290791

Acemoglu, D., Johnson, S., & Robinson, J. A. (2005). *Institutions as a fundamental cause of long-run growth. Handbook of economic growth*.

Addae-Korankye, A. (2014). Causes of Poverty in Africa: A Review of Literature. *American International Journal of Social Science*, *3*(7).

Adegbola, O. (1987). The Impact of Urbanization on Health Condition: The case of Nigeria. *World Health Statistics Quarterly*, *40*(1), 74–83.

Adenike, T. (2014). Poverty and unemployment paradox in Nigeria . *Journal of Humanities and Social Science*, *19*(5), 106–116.

Adepoju, A. A., Salau, A. S., & Obayelu, A. E. (2007). The Effects of External Debt Management on Sustainable Economic Growth and Development: Lessons from Nigeria. *Munich Personal RePEc Archive*, (2147).

African Data Report. (2016). *Health financing outcome and Inequality in Sub-Saharan Africa.*

Agnor, P., & Montiel, P. . (2010). *Development Macroeconomics. 3rd Edition. Princeton University Press.*

Aiyedogbon, J. O., & Ohwofasa, B. O. (2012). Poverty and youth Unemployment in Nigeria , 1987-2011. *International Journal of Business and Social Science*, *3*(20), 269–279.

Akram, N. (2015). Impact of Public Debt on Economic Growth of PakistanPakistan. In *The 27th Annual General Meeting and Conference of the Pakistan Society of Development Institute of Development Economics , Islamabad* (Vol. 50).

Akram, N. (2016). Public debt and pro-poor economic growth evidence from South Asian countries Public debt and pro-poor economic growth evidence from South Asian countries. *Economic Research-Ekonomska Istraživanja*, *29*(1), 746–757. https://doi.org/10.1080/1331677X.2016.1197550

Alesina, A., & Tabellini, G. (1989). External debt, capital flight and political risk. *Journal of International Economics*, *27*(3–4), 199–220. https://doi.org/10.1016/0022-1996(89)90052-4

Ali, M. B. (2011). Debt Relief or Debt Cycle : A Secondary Analysis of the Heavily Indebted Poor Countries (HIPC) Initiative in African Nations A Secondary Analysis of the Heavily Initiative in African Nations. *The McNair Schorlars Research Journal*.

Allison, P. D. (2005). *Fixed effects regression methods for longitudinal data using SAS. Sas Institute.*

Aluko, F., & Arowolo, D. (2010). Foreign aid , the Third World ' s debt crisis and the implication for economic development : The Nigerian experience, *4*(April), 120–127.

Amiri, A., & Ventelou, B. (2012). Granger causality between total expenditure on health and GDP in OECD : Evidence from the Toda – Yamamoto approach. *Economics Letters*, *116*(3), 541–544. https://doi.org/10.1016/j.econlet.2012.04.040

Amoateng, K., & Amoaku-Adu, B. (1996). Economic growth, export and external debt causality: the case of African countries. *Applied Economics Letters*, *28*(1), 21–27.

Anyanwu, J. C. (2007). *African Development Bank Economic Research Working Paper Series Africa*. *African Development Bank* (Vol. 91).

Arellano, M., & Bond, S. R. (1991). Some Test of Specificatio fo Panel Data: Monte Carlo Evidence and an Application to Employment Equations. Review of Economic Studies.

Arellano, M., & Bover, O. (1995). Another look at the instrumental variable estimation of error-components models. *Journal of Econometrics*, *68*(1), 29–51. https://doi.org/10.1016/0304-4076(94)01642-D

Aron, J. (2000). Growth and Institutions: A Review of Evidence. *World Bank Research Observer*, *15*(1), 99–135.

Asiedu, E. (2003). Debt relief and institutional reform : a focus on Heavily Indebted Poor Countries, *43*, 614–626. https://doi.org/10.1016/S1062-9769(03)00038-3

Audu, I. (2004). The impact of external debt on economic growth and public investment: The case of Nigeria. *African Institute for Economic Development and Planning (IDEP), Dakar.*

Ayyoub, M., Chaudhry, I., & Yaqub, S. (2012). Debt Burden of Pakistan : Impact and Remedies for Future. *Universal Journal of Management and Social Science*, *2*(7).

Azman-Saini, W. N. W., Baharumshah, A. Z., & Law, S. H. (2010). Foreign direct investment, economic freedom and economic growth: International evidence. *Economic Modelling*, *27*(5), 1079–1089. https://doi.org/10.1016/j.econmod.2010.04.001

Barro, R. J. (1996). Democracy and Growth. *Jounal of Economic Growth*, *27*(1992), 1–27.

Barro, R., & Lee, J. (2000). International data on educational attainment: updates and implications. *Oxford Economic Papers*, *53*(3), 541–563. https://doi.org/10.1093/oep/53.3.541

Beck, N., & Katz, J. N. (1996). Nuisance vs. Substance: Specifying and Estimating Time-Series-Cross-Section Models. *Political Analysis*, *6*, 1–36. https://doi.org/10.1093/pan/6.1.1

Bein, M. A., Unlucan, D., Olowu, G., & Kalifa, W. (2017). Healthcare spending and health outcomes : evidence from selected East African countries, *17*(1).

Bicaba, Z., Brixiová, Z., Ncube, M., Kayizzi-mugerwa, S., & John, C. (2015). *Eliminating Extreme Poverty in Africa : Trends , Policies and the Role of International Organizations. Afrobarometer survey*.

Bloom, D., Canning, D., & Sevilla, J. (2004). The effect of health on economic growth: A production function approach. *World Development*, *32*(1), 1–13. https://doi.org/10.1016/j.worlddev.2003.07.002

Blundell, R., & Bond, B. (1998). Initial conditions and moment restrictions in dynamic panel data models. *Journal of Econometrics*, *87*(1), 115–143. https://doi.org/10.1016/S0304-4076(98)00009-8

Boboye, A. L., & Ojo, M. O. (2012). Effect of External Debt on Economic Growth and Development of Nigeria. *International Journal of Business and Social Science*, *3*(12), 297–304.

Bond, S. R. (2002). Dynamic panel data models: A guide to micro data methods and practice. *Cemmap Working Paper, Centre for Microdata Methods and Practice, No. CWP09/02, http://dx.doi.org/10.1920/wp.cem.2002.0902*.

Bond, S. R., Hoeffler, A., Temple, J., & Ruj, Z. Z. Z. F. (2001). *Gmm Estimation of Empirical Growth Models. International Macroeconomics*.

Boserup, E. (1965). *The condition of agricultural growth. The Economics of Agrarian Change under Population Pressure. Allan and Urwin, London.*

Bousmah, M. al Q., Ventelou, B., & Abu-Zaineh, M. (2016). Medicine and democracy: The importance of institutional quality in the relationship between health expenditure and health outcomes in the MENA region. *Health Policy*, *120*(8), 928–935. https://doi.org/10.1016/j.healthpol.2016.06.005

Brambor, T., Clark, W. R., & Golder, M. (2005). Understanding interaction models: Improving empirical analyses. *Political Analysis*, *14*(1), 63–82. https://doi.org/10.1093/pan/mpi014

Brambor, T., Clark, W. R., & Golder, M. (2006). Understanding interaction models: Improving empirical analyses. *Political Analysis*, *14*(1), 63–82. https://doi.org/10.1093/pan/mpi014

Brautigam, D., & Knack, S. (2004). Foreign Aid, Institutions, and Governance in Sub-Saharan Africa. *The University of Chicago Press*, *Vol. 52*(2), 31.

Brown-Collier, E. K., & Collier, B. E. (2015). What Keynes really said about deficit spending. *Journal of Post Keynesian Economics*, *17*(3), 341–355.

Buchanan, J. M. (1989). The public choice perspective: Essay on political economy. *(Honolulu: University of Hawaii Press)*, 13–24.

Butkiewicz, J. L., & Yanikkaya, H. (2006). Institutional quality and economic growth: Maintenance of the rule of law or democratic institutions, or both? *Economic Modelling*, *23*(4), 648–661. https://doi.org/10.1016/j.econmod.2006.03.004

Cashel-Cordo, P., & Craig, S. G. (1990). The public sector impact of international resource transfers. *Journal of Development Economics*, *32*(1), 17–42. https://doi.org/10.1016/0304-3878(90)90050-L

Cecchetti, S., Mohanty, M., & Zampolli, F. (2010). The future of public debt: prospects and implications. *BIS Working Papers*, (300), 1–26. https://doi.org/10.2139/ssrn.1599421

Chauvin, N. D., & Kraay, A. (2005). What Has 100 Billion Dollars Worth of Debt Relief Done for Low-Income Countries ? *Princeton University and Inter-American Development Bank*, 1–60. https://doi.org/10.2139/ssrn.818504

Chenery, H. B., & Strout, A. M. (1966). Foreing Assistance and Economic Development. *The American Economic Review*, *56*(4), 679–733.

Chervin, M. W. (2009). *Economic growth and volatility of foreign aid* (No. 2010–002/2). Amsterdam.

Choong, C., Lau, E., Liew, V. K., & Puah, C. (2010). Does debts foster economic growth? The experience of Malaysia. *African Journal of Business Management*, *4*(8), 1564–1575.

Chowdhury, A. (2001). External debt and growth in developing countries: A sensitivity and causal analysis. *United Nations University (UNU), World Institute for Development Economics Research (WIDER)*, *95*(95), 17–18. https://doi.org/http://hdl.handle.net/10419/52785

Ciocchini, F., Durbin, E., & Ng, D. (2003). *Does Corruption Increase Emerging Market Bond Spreads?*

Clements, B. J., Bhattacharya, R., & Nguyen, T. Q. (2003). External debt, public investment, and growth in low-income ountries. *IMF Working Papers*, *3*(249), 1–25. https://doi.org/10.5089/9781451875904.001

Cohen, D. (1993). Low Investment and Large LDC Debt in the 1980's. *American Economic Review*, *83*(No.3), 437–449.

Coleman, S. (2012). Where Does the Axe Fall ? Inflation Dynamics and Poverty Rates : Regional and Sectoral Evidence for Ghana. *World Development*, *40*(12), 2454–2467. https://doi.org/10.1016/j.worlddev.2012.05.019

Collier, P. (2006). African Growth "Why a BigPush." *Journal of African Economies*, *15*(2), 188–211.

Commission of Macroeconomics and Health. (2002). Macroeconomics and health: investing in health for economic development. *Revista Panamericana de Salud Pública*, *12*(December), 143–144. https://doi.org/10.1590/S1020-49892002000800017

Cooray, A., Dzhumashev, R., & Schneider, F. (2017). How Does Corruption Affect Public Debt? An Empirical Analysis. *World Development*. https://doi.org/10.1016/j.worlddev.2016.08.020

Datt, G., & Ravallion, M. (1992). Growth and Redistribution of Component of Changes in Poverty Measuses: A decomposition with Application to Brazil and India in the 1980s. *Journal of Development Economics*, *38*(2), 275–295.

Daud, S. N. M., & Podivinsky, J. (2014). Government debt and economic growth in Malaysia: the role of institutional quality. *Applied Economics Letters*, *21*(17), 1179–1183. https://doi.org/10.1080/13504851.2014.916378

Dinca, G., & Dinca, M. (2015). Public Debt and Economic Growth In the Eu Post-Communist Countries. *Romanian Journal of Economic Forcastinting*, (2). https://doi.org/10.1017/CBO9781107415324.004

Domar, E. D. (1946). Capital Expansion , Rate of Growth , and Employment. *The Econometric Society*, *14*(2), 137–147.

Doytch, N., & Uctum, M. (2011). Does the worldwide shift of FDI from manufacturing to services accelerate economic growth? A GMM estimation study. *Journal of International Money and Finance*, *30*(3), 410–427. https://doi.org/10.1016/j.jimonfin.2011.01.001

Dulani, B., Mattes, R., & Logan, C. (2013). After a decade of growth in Africa, little change in poverty at the grassroots. *Afrobarometer Policy Brief*, *2001*(1), 22. Retrieved from http://afrobarometer.org/files/documents/policy_brief/ab_r5_policybriefno1.pdf

Ebeke, C., & Drabo, A. (2011). Remittances, public health spending and foreign aid in the access to health care services in developing countries. *Etudes et Documents Du CERDI*.

Egbetunde, T. (2012). Public Debt and Economic Growth in Nigeria : Evidence from Granger Causality, *2*(6), 101–106. https://doi.org/10.5923/j.economics.20120206.02

Ershad Hussain, M., Haque, M., & Igwike, R. S. (2015). Relationship between Economic Growth and Debt: An Empirical Analysis for Sub-Saharan Africa. Retrieved from www.kspjournals.org

Fan, S. (2008). *Public Expenditures, Growth and Poverty: Lesson from developing countries. international food policy research institute. Johns Hopkins university press Baltimore*.

FAO. (2015). *The State of Food Security in the World: Food and Agricultural Organization of the United Nations.*

Fayissa, B., & Gutema, P. (2005). A Health Production Function for Sub-Saharan Africa (SSA). *Applied Economics*, *37*(April), 155–164.

Fazaeli, A. A., Ghaderi, H., Abbas Fazaeli, A., Lotfi, F., Salehi, M., & Mehrara, M. (2015). Main Determinants of Catastrophic Health Expenditures: A Bayesian Logit Approach on Iranian Household Survey Data (2010). *Global Journal of Health Science*, *7*(4), 335–340. https://doi.org/10.5539/gjhs.v7n4p335

Fosu, A. K. (1996). The Impact of External Debt on Economic Growth in Sub-Saharan Africa. *Journal of Economic Development*, *21*(1).

Fosu, A. K. (1999). The External Debt Burden and Economic Growth in the 1980s: Evidence from sub-Saharan Africa. *Canadian Journal of Development Studies*, *20*(2).

Fosu, A. K. (2007a). Fiscal Allocation for Education in Sub-Saharan Africa: Implications of the External Debt Service Constraint. *World Development*, *35*(4), 702–713. https://doi.org/10.1016/j.worlddev.2006.06.008

Fosu, A. K. (2007b). The External Debt-Servicing Constraint and Public Expenditure Composition: Evidence from African Economies By, (June), 1–36.

Fosu, A. K. (2008). Implications of External Debt-Servicing Constraint for Public Health Expenditure in Sub-Saharan Africa. *Oxford Development Studies*, *36*(December 2008). https://doi.org/10.1080/13600810802455112

Francis, T. (2001). The Causes and Impact of Poverty on Sustainable Development in Africa: A paper Presented Bordeaux, France From November 22-23, (237).

Friedman, B. M. (1978). *Crowding out or Crowding in: The economic sonsequences of financing government deficit*.

Friesecke, U. (2001). Globalization Left a Suffering Africa. *Issue of EIR*, *28*(10).

Furuoka, F. (2010). Population Growth and Economic Development : Empirical Evidence from the Philippines. *Philippine Journal of Development*, *XXXVII*(1), 82–93. Retrieved from http://dirp3.pids.gov.ph/ris/pjd/pidspjd10-1population.pdf

Gayle, V. (2000). Descriptive Statistics. In Burton (ED.) Research Training for Social Scientists. London, Sage.

Gbesemete, K. P., & Gerdtham, U.-G. (1992). Determinants of health care expenditure in Africa: A cross-sectional study. *World Development*, *20*(2), 303–308. https://doi.org/10.1016/0305-750X(92)90108-8

Gerdtham, U.-G., Søgaard, J., Andersson, F., & Jönsson, B. (1992). An econometric analysis of health care expenditure: A cross-section study of the OECD countries. *Journal of Health Economics*, *11*(1), 63–84. https://doi.org/10.1016/0167-6296(92)90025-V

Getzen, T. E. (1992). Population Aging and the Growth of Health Expenditures, *47*(3), 98–104.

Getzen, T. E. (2000). Forecasting Health Expenditures : Short, Medium and Long term. *Journal of Health Care Finance*, *26*(3), 56–72.

Gong, L., Li, H., & Wang, D. (2012). Health investment, physical capital accumulation, and economic growth. *China Economic Review*, *23*(4), 1104–1119. https://doi.org/10.1016/j.chieco.2012.07.002

Gupta, S., Clements, B., Baldacci, E., & Mulas-Granados, E. (2006). Fiscal Policy, Expenditure Composition, and Growth in Low-Income Countries. In *[IMF-supported programs: recent staff research*.

Gupta, S., Davoodi, H., & Alonso-Terme, R. (2002). Does corruption affect income inequality and poverty? *Economics of Governance*, *3*(1), 23–45. https://doi.org/10.1007/s101010100039

Gupta, S., Verhoeven, M., & Tiongson, E. R. (2001). *Public spending on health care and the poor. International Monetary Fund. Health Economics* (Vol. 12). https://doi.org/10.1002/hec.759

Gurvich, E. (2016). Institutional constraints and economic development. *Russian Journal of Economics*, *2*(4), 349–374. https://doi.org/10.1016/j.ruje.2016.11.002

Habte, D., Dussault, G., & Dovlo, D. (2004). Challenges confronting the health workforce in Sub-Saharan Africa. *World Hospitals and Health Services*, *40*(2), 23–26. Retrieved from https://www.researchgate.net/profile/Gilles_Dussault/publication/8373533_Challenges_confronting_the_health_workforce_in_sub-Saharan_Africa/links/0fcfd510c3af1833e7000000.pdf#page=22

Halaby, C. . (2004). Panel models in sociological research: Theory into practice. 30, 507-544. *Annu. Rev. Sociol*.

Hansen, L. P. (1982). Large Sample Properties of Generalized Method of Moments Estimators Author (s): Lars Peter Hansen Reviewed work (s): Published by : The Econometric Society Stable URL : http://www.jstor.org/stable/1912775 . *Econometrica*, *50*(4), 1029–1054.

Harrod, R. F. (1939). An Essay in Dynamic Theory. *The Economic Journal*, *49*(193), 14–33.

Holtz-Eakin, D., Newey, W., & Rosen, H. S. (1988). Estimating vector autoregressions with panel data. *Journal of the Econometric Society*, 1371–1395.

Hussain, M. E., Haque, M., & Igwike, R. S. (2015). Relationship between Economic Growth and Debt: An Empirical Analysis for Sub-Saharan Africa. *Journal of Economics and Political Economy*, *2*(2), 262–275. https://doi.org/10.1453/JEPE.V2I2.222

IMF. (2016). *Regional Economic Outlook: Sub_saharan Africa. Time for Policy Reset*.

Jalles, J. T. (2011). The Impact of Democracy and Corruption on Debt-Growth Relationship In Developing Countries. *Economic Development*, *36*(4), 41–72.

Jaunky, V. C., & Khadaroo, a J. (2008). Health Care Expenditure and GDP: An African Perspective. *Applied Econometrics and International Development*, *8*(1), 131–146. https://doi.org/http://dx.doi.org/10.2139/ssrn.993033

Kam, C. D., Robert, J., & Franzese, J. 2007. (2007). Modeling and interpreting interactive hypotheses in regression analysis.

Kaseje. (2006). Health care in Africa: Challenges, Oppotunities and an Emerging model for Improvement. In *woodrow wilson international centre for schorlars*.

Kashi, F. K., Nabi, M., & Tash, S. (2014). Effects of macroeconomic variables on poverty in Iran (Application of bootstrap technique). *Theoretical and Applied Economics*, *XXI*(5594), 85–96. Retrieved from http://store.ectap.ro/articole/984.pdf

Keele, L., & Kelly, N. J. (2006). Dynamic models for dynamic theories: The ins and outs of lagged dependent variables. *Political Analysis*, *14*(2), 186–205. https://doi.org/10.1093/pan/mpj006

Keho, Y. (2017). The impact of trade openness on economic growth: The case of Cote d'Ivoire. *Cogent Economics & Finance*, *5*(1), 1332820. https://doi.org/10.1080/23322039.2017.1332820

Kemal, A. R. (2001). Debt accumulation and its implications for growth and poverty. *Pakistan Development Review*, *40*(4 PART I), 263–281.

Kilishi, A. A., Mobolaji, H. I., Yaru, M. A., & Yakubu, A. T. (2013). Institutions and Economic Performance in Sub-Saharan Africa: A Dynamic Panel Data Analysis. *Journal African Development*, *15*(2), 91–120.

Kim, E., Ha, Y., & Kim, S. (2017). Public Debt , Corruption and Sustainable Economic Growth. *Sustainability*, 1–30. https://doi.org/10.3390/su9030433

Kirigia, J., & Barry, S. (2008). Health challenges in Africa and the way forward. *International Archives of Medicine*, *1*(1), 27. https://doi.org/10.1186/1755-7682-1-27

Knack, S., & Keefer, P. (1995). Institutions and Economic Performance: Cross-Country Tests Using Alternative Institutional Indicators. *Online at Http://mpra.ub.uni-muenchen.de/23118/ MPRA Paper No. 23118, Posted 8. June 2010 02:13 UTC*, (23118).

Kpodar, K., & Singh, R. (2011). Does Financial Structure Matter for Poverty? Evidence From Developing Countries. *The World Bank, Washington D.C (Jan).*, (December).

Krueger, A. . (1987). Origins of the developing countries debt crisis 1970 to 1982. *Journal of Development Economics*, *27*(1–2), 165–187.

Krugman, P. (1988). Financing Vs. Forgiving a Debt Overhang. *Development Economics*, (2486).

Kumar, M. S., Woo, J., & Kumar, M. S. (2010). Public debt and growth. *IMF Working Papers*, *82*(328), 1–47. https://doi.org/10.1111/ecca.12138

Law, S. H., Azman-Saini, W. N. W., & Ibrahim, M. H. (2013). Institutional quality thresholds and the finance - Growth nexus. *Journal of Banking and Finance*, *37*(12), 5373–5381. https://doi.org/10.1016/j.jbankfin.2013.03.011

Law, S. H., & Habibullah, M. S. (2006). Financial development, institutional quality and economic performance in East Asian economies. *Review of Applied Economics*, *2*(2), 1–16.

Law, S. H., & Singh, N. (2014). Does too much finance harm economic growth? *Journal of Banking and Finance*, *41*(1), 36–44. https://doi.org/10.1016/j.jbankfin.2013.12.020

Le Goff, M., & Singh, R. J. (2014). Does trade reduce poverty? A view from Africa. *Journal of African Trade*, *1*(1), 5–14. https://doi.org/10.1016/j.joat.2014.06.001

Lee, S., & Ng, Y. (2015). Public Debt and Economic Growth in Malaysia. *Asian Economic and Financial Review ISSN(e): 2222-6737/ISSN(p): 2305-2147 J*, *5*(1), 119–126. https://doi.org/10.18488/journal.aefr/2015.5.1/102.1.119.126

Levins, R., & Easterly, W. (1997). Africa’s Growth Tragedy: Policies and Ethnic Divisions William. *Oxford University Press*, *112*(4).

Loko, B., Mlachila, M., Nallari, R., & Kalonji, K. (2003). *The Impact of External Indebtedness on Poverty in Low-Income Countries*.

Loko, B., Mlachila, M., Nallari, R., Kalonji, K., Daseking, C., Ghura, D., … Wei, S.-J. (2003). The Impact of External Indebtedness on Poverty in Low-Income Countries.

Lopreite, M., & Mauro, M. (2017). The effects of population ageing on health care expenditure: A Bayesian VAR analysis using data from Italy. *Health Policy*, *121*(6), 663–674. https://doi.org/10.1016/j.healthpol.2017.03.015

Lora, E., & Olivera, M. (2006). *Public Debt and Social Expenditure : Friends or Foes ? by* (No. 563).

Lora, E., & Olivera, M. (2007). *Public Debt and Social Expenditure: Friends or Foes? International Journal of Agricultural, Resources, Governance and Ecology* (Vol. 6). https://doi.org/10.1007/s10273-011-1262-2

Luckham, R., Ahmeb, I., Muggah, R., & White, S. (2001). *Conflic and Poverty in Sub-Saharan Africa: An assessment of the issue and evidence: Institute of Development Studies, Brighton Sussex*.

Lumina, C. (2008). *Foreign Debt and Poverty: Exploring the Linkage in the Context of Human Rights*.

Mahdavi, S. (2004). Shifts in the Composition of Government Spending in Response to External Debt Burden. *World Development*, *32*(7), 1139–1157. https://doi.org/10.1016/j.worlddev.2004.01.011

Majumder, A. (2007). *Does Public Borrowing Crowd-out Private Investment ? The Bangladesh Evidence*.

Makuta, I., & O'Hare, B. (2015). Quality of governance , public spending on health and health status in Sub Saharan Africa : a panel data regression analysis. *BMC Public Health*, *15*, 1–11. https://doi.org/10.1186/s12889-015-2287-z

Malthus, T. (1959). *Population: The first Essay. University of Michigan Press.*

Mankiw, G., Weinzierl, M., & Yagan, D. (2009). Optimal Taxation in Theory and Practice. *Journal of Economic Perspective*, *23*(4), 147–174.

Mankiw, N., Romer, D., & Weil, D. (1992). A contribution to the empirics of economic growth. *The Quarterly Journal of Economics*, *107*(2), 407–437.

Mark, M., & Bazoumana, O. (2003). *Aid, debt burden and government fiscal behaviour in Côte d'Ivoire CREDIT Research Paper, No. 03/05.*

Matthew, A., Mordecai, B., & Anda, O. (2016). The Impact of Corruption on External Debt in Ni geria : A Co integration Approach (1996-2014). *Advances in Social Sciences Research Journal*, *3*(4), 84–95.

Megersa, K. (2014). The Lafter Curve and the Debt-Growth Link in Low Income Sub-Saharan African Economy. *MPRA*, (54362).

Metwally, M. M., & Tamaschke, R. (1994). The interaction among foreign debt, capital flows, and growth: Case studies. *Journal of Policy Modeling*, *16*(6), 597–608. https://doi.org/10.1016/0161-8938(94)90010-8

Milton, A. (1999). External debt and economic growth in sub-Saharan African countries : An econometric study, (March).

Mincer, J. (1974). *Schooling, Earnings, and Experience.* New York: Columbia University Press.

Murthy, V. N. R., & Okunade, A. A. (2009). The core determinants of health expenditure in the African context: Some econometric evidence for policy. *Health Policy*, *91*(1), 57–62. https://doi.org/10.1016/j.healthpol.2008.10.001

Musango, L., Elovainio, R., Nabyonga, J., & Toure, B. (2013). The state of health financing in the African Region. WHO, Regional office for Africa. *African Health Monitor*, (16), 9–14. Retrieved from http://www.aho.afro.who.int/en/ahm/issue/16/reports/state-health-financing-african-region

Musila, J. W., & Yiheyis, Z. (2015). The Impact of Trade Openness on Growth: the Case of Kenya. *Journal of Policy Modeling*, *37*(2), 342–354. https://doi.org/10.1016/j.jpolmod.2014.12.001

Mutasa, C. (2003). *Regional Integration and Debt in Africa: A Comparative Report of Africa's Regional Groupings. AFRODAD Research Series.*

Mweni, F. T., Njuguna, A., & Oketch, T. (2016). The Effect of External Debt on Inflation Rate in Kenya , 1972-2012, *7*(4), 198–207. https://doi.org/10.5430/ijfr.v7n4p198

Nabyonga-Orem, J., Mugisha, F., Okui, A. P., Musango, L., & Kirigia, J. M. (2013). Health care seeking patterns and determinants of out-of-pocket expenditure for Malaria for the children under-five in Uganda. *Malaria Journal*, *12*(1), 175. https://doi.org/10.1186/1475-2875-12-175

Ndikumana, L., & Boyce, J. K. (2008). *New Estimates of Capital Flight from Sub-Saharan Africa: Linkages with external Borrowing and policy option*. *Political Economy Research Institute*.

Ndulu, B. J. (2006). Ramping up African growth: Lessons from five decades of growth experience. *Economic Affairs*, *26*(4), 5–11. https://doi.org/10.1111/j.1468-0270.2006.00662.x

Nelson, R. M., & Ave, I. (2013). *Sovereign Debt in Advanced Economies : Overview and Issues for Congress. Congressional Research Service*.

Newhouse, J. P. (1977). Medical-Care Expenditure: A Cross National Survey. *The Journal of Human Resources*, *12*(1), 115–125.

Ngerebo, A. T. (2014). Domestic Debt and Poverty in Nigeria: An Empirical Time Series Investigation. *European Journal of Accounting Auditing and Finance Research*, *2*(5), 33–44.

Njuguna, N., Kimani, D. N., & Kinyanjui, B. (2017). Determinants and Distribution of Catastrophic Health Expenditures and Impoverishment in Kenya. *Journal of Economics and Development Studies*, *5*(2), 78–85. https://doi.org/10.15640/jeds.v5n1a8

North, D. C. (1990). *Institutions, Institutional Change and Economic Performance*. *New York cambridge university press*. https://doi.org/10.2307/2234910

Novignon, J., Olakojo, S. A., & Nonvignon, J. (2012). The effects of public and private health care expenditure on health status in sub-Saharan Africa : new evidence from panel data analysis. *Health Economics Review*, *2*(1), 1. https://doi.org/10.1186/2191-1991-2-22

Nurkse, R. (1953). *The Problem of Capital Formation in Les-Developed Countries. Oxford university press*.

Odhiambo, M. . (2009). Finance-Growth-Poverty Nexus in South Africa. A dynamic causality linkage. *Journal of SocioEconomics*, *38*(2).

Ogunlana, O. (2005). *Nigeria and the Burden of external debt: The need for debt relief. Central Bank of Nigeria.*

Okonjo-Iweala, N., Soludo, C., & Muhtar, M. (2003). Debt, Poverty and Inequality: Toward an exit strategy for Nigeria. In *The debt trap in Nigeria: Towards a sustainable debt strategy. Africa World Press.*

Oloruntoba Oyedele, S., Ajevata Emerah, A., & Ogege, S. (2013). External Debt, Debt Servicing and Poverty Reduction in Nigeria: An Empirical Analysis. *ISSN*, *4*(19), 2222–1700. Retrieved from www.iiste.org

Olumide, o. A. (2016). The Sovereign Debt Crisis in Africa and its Impact on African States Economic Growth And Development : A Case Study of Nigeria. *Ideal Journal of Art and Humanities*, *2*(3), 103–114.

Omotola, J. S., & Saliu, H. (2009a). Foreign aid, debt relief and Africa's development: problems and prospects. *South African Journal of International Affairs*. https://doi.org/10.1080/10220460902986180

Omotola, J. S., & Saliu, H. (2009b). Foreign aid , debt relief and Africa â€™ s development : problems and prospects. *South African Journal of International Affairs ISSN:*, *16*(1), 87–102. https://doi.org/10.1080/10220460902986180

Onuoha, G., Science, H., & Qobo, M. (2012). Africa and Twenty - First Century Development Challenges the North-South Development Agenda Reconsidered: The Wilson Center's Africa Program and Leadership Project 2012 Southern Voices in the Northern Policy Debate Initiative, supported by the Carnegie Co, 1–61.

Onyekwelu, U. L., Okoye, E., & Ugwuanyi, U. B. (2014). External Debts Management Strategies in Developing Economies: An Impact Assessment on Selected Economic Indices of Nigeria (2002–2011). *International Journal of Economics and Finance*, *6*(8), 137–152. https://doi.org/10.5539/ijef.v6n8p137

Oyedele, S. O., Emerah, A. A., & Ogege, S. (2013). Economic Growth and Poverty Reduction in Nigeria : An Empirical Investigation. *Journal of Economics and Sustainable Development*, *4*(7), 117–130.

Panizza, U. (2008). Domestic and External Public Debt in developing Countries. *United Natons Conference on Trade and Development Discussion Papers*, (188), 1–20. Retrieved from http://unctad.org/en/docs/osgdp20083_en.pdf

Patenio, J., & Augustina, T. (2007). Gupta et al., 2005). In *10th convention on statistics*.

Patil, R. R. (2014). Urbanization as a determinant of health: A socioepidemiological perspective. *Social Work in Public Health*, *29*(4), 335–341. https://doi.org/10.1080/19371918.2013.821360

Pattillo, C., Poirson, H., & Ricci, L. (2002). External Debt and Growth, *39*(2).

Poirson, M. H., Ricci, M. L. A., & Pattillo, M. C. A. (2004). What are the channels through which external debt affects growth? *IMF Working Papers*, *4*(15), 1. https://doi.org/10.5089/9781451843293.001

Presbitero, A. F. (2008). The Debt-Growth Nexus in Poor Countries: A Reassessment — Economics E-Journal. *Economics, The Open-Access, Open-Assessment E-Journal*, *2*(2008–30), 1–28. https://doi.org/10.5018/economics-ejournal.ja.2008-30

Prodan, I. (2013). *The effect of weather on stock returns: A comparison between emerging and developed markets. Anchor Academic Publishing (aap_verlag).*

Qayyum, U., Din, M. ud, & Haider, A. (2014). Foreign aid, external debt and governance. *Economic Modelling*, *37*, 41–52. https://doi.org/10.1016/j.econmod.2013.08.045

Ravallion, M., & Chen, S. (2001). *Measuring Pro-Poor Growth: The World Bank Development Research Group Povert*.

Reinhart, C. M., & Rogoff, K. S. (2010). Growth in a time of a debt. *National Bureau of Economic Research*, ((No. w 15639)).

Richards, D., & Nwankwo, N. S. (2010). Debt burden and corruption impacts : African market dynamism. *Management Decision*, *41*(3), 304–310. https://doi.org/10.1108/00251740310469486

Rolf, M. (2005). External Debt and Pro-Poor Growth. In *german development economics conference*.

Roodman, D. (2006). How to Do xtabond2: An Introduction to "Difference" and "System" GMM in Stata. *Centre for Global Development*, (103), 1–48. https://doi.org/The Stata Journal

Roodman, D. (2009). How to do Xtabond2: An Introduction to difference and system GMM in stata. *Stata Journal*, *9*(1).

Rostow, W. W. (1960). *The stages of economic growth: A non communist manifesto*.

Sachs, J. (1989). *Developing Country Debt and the World Economy Edited. A National Bureau of Economic Research Project Report*.

Sachs, J. (2002). Resolving the Debt Crisis of Low-Income Countries. *Brookings Papers on Economic Activity*, *2002*(1), 257–286. https://doi.org/10.1353/eca.2002.0013

Sachs, J. D. (1989). *Conditionality, Debt Relief, and the Developing Country Debt Crisis. Developing Country Debt and Economic Performance, Volume 1: The International Financial System* (Vol. 1). https://doi.org/10.3386/w2644

Safdari, M., & Mehrizi, M. A. (2011). External debt and economic growth in Iran, *3*(May), 322–327.

Saha, S. (2013). Impact of Health on Productivity Growth in India. *International Journal of Economics, Finance and Management*, *2*(4), 303–312.

Samadi, A., & Homaie Rad, E. (2013). Determinants of Healthcare Expenditure in Economic Cooperation Organization (ECO) Countries: Evidence from Panel Cointegration Tests. *Int J Health Policy Manag*, *1*(1), 63–68. https://doi.org/10.15171/ijhpm.2013.10

Samuel, M., & Okey, L. E. (2015). the Relevance and Significance of Correlation in Social Science Research. *International Journal of Sociology and Anthropology Research*, *1*(3), 22–28. https://doi.org/10.1017/CBO9781107415324.004

Saungweme, T., & Mufandaedza, S. (2013). An Empirical Analysis of the Effects of External Debt On Poverty In Zimbabwe: 1980-2011., 20–27.

Schclarek, A. (2004). Debt and Economic Growth in Developing and Industrial Countries ∗, *46*(0).

Sembene, D. (2015). *Poverty, Growth, and Inequality in Sub-Saharan Africa: Did the Walk Match the Talk under the PRSP Approach? by*.

Serven, L. (1997). Irreversibility, Uncertainty and Private Investment: Analytical Issues and some lessons for Africa. *Journal of African Economies*, *6*(3), 229–268.

Seshamani, M., & Gray, A. (2002). The impact of ageing on expenditures in the National Health Service. *Health Economics Research Centre, University of Oxford, Oxford, UK*, 287–294.

Shabbir, S., & Yasin, H. M. (2015). Implications of Public External Debt for Social Spending : A Case Study of Selected Asian Developing Countries. *The Lahore Journal of Economics*, *20: 1*(Summer), 71–103.

Shah, A. (2013a). Structural Adjustment- a major cause of poverty.

Shah, A. (2013b). Structural Adjustment—a Major Cause of Poverty. Global Issues.

Shamsi, N., & Waqas, M. (2016). What Determine the Public Health Expenditure in Pakistan ? Urbanization , Income and Unemployment, *13*(2), 157–164. https://doi.org/10.5829/idosi.wjms.2016.13.2.102182

Sheikh, M. R., & Alam, T. (2013). Does External Indebtness Enhance the Incidence of Poverty in Pakistan ? An Empirical Evidence. *International Research Journal of Finance and Economics*, *106*(106).

Sheikh, M. R., Faridi, M. Z., & Tariq, K. (2010). Domestic Debt and Economic Growth in Pakistan : An Empirical Analysis. *Pakistan Journal of Social Sciences(PJSS)*, *30*(2), 373–387.

Shleifer, A., & Vishny, R. W. (1993). Corruption. *The Quarterly Journal of Economics*, *108*(3), 599–617.

Siba, E. G. (2007). International Conference on African Development Determinants of Institutional Quality in Sub- Saharan African Countries. In *International Conference on African Development*. Western Michigan University: ScholarWorks at WMU Center.

Siddique, A., Selvanathan, E. A., & Selvanathan., S. (2015). Economics the Impact of External Debt on Economic Growth : Empirical Evidence From Highly Indebted Poor Countries, *4*(8), 1–31.

Solow, R. (1956). A Contribution to the Theory of Economic Growth: Published by Oxford University Press. *Quarterly Journal of Economics*, *70*(1), 65–94.

Sulaiman, L, A., & Azeez, B. A. (2012). Effect of External Debt on Economic Growth of Nigeria. *Journal of Economic and Sustainable Development*, *3*(8), 71–80.

Sulaiman, C., Abdul-Rahim, A. S., Mohd-Shahwahid, H. O., & Chin, L. (2017). Wood fuel consumption, institutional quality, and forest degradation in sub-Saharan Africa: Evidence from a dynamic panel framework. *Ecological Indicators*, *74*, 414–419. https://doi.org/https://doi.org/10.1016/j.ecolind.2016.11.045

Swan, T. W. (1956). Economic growth and capital accumulation. *Economic Record*, *32*(2), 334–361.

Tarek, B. A., & Ahmed, Z. (2017). Governance and public debt accumulation : Quantitative analysis in MENA countries. *Economic Analysis and Policy*, *56*, 1–13. https://doi.org/10.1016/j.eap.2017.06.004

Teivainen, T. (2002). The World Social Forum and global democratisation : Learning from Porto Alegre. *Third World Quarterly*, *23*(4), 621–634. https://doi.org/10.1080/0143659022000005300

Temah, C. T. (2009). Does Debt Relief increase Public Health Expenditure?, 1–26.

Tiruneh, M. W. (2004). an Empirical Investigation Into the Determinants of External Indebtedness. *Prague Economic Papers*, *3*(April), 261–277. https://doi.org/10.18267/j.pep.242

Todaro, M. P., & Smith, S. C. (2012). *Economic development.*

Todaro, M. P., & Smith, S. C. (2003). *Development economics. Pearson education. Pearson Education*.

Tomori, S., & Adebiyi, M. . (2002). External Debt Burden and Health Expenditure in Nigeria. *Nigerian Journal of Health and Biomedical Sciences*, *1*(1), 1–5.

Tsaliki, P. (2014). Institutional Quality and Economic Growth: Empirical Evidence from the Sudanese Economy. *Economic Annals*, *LIX*(203), 119–138. https://doi.org/10.2298/EKA1403119A

Tullock, G. (1971). Public decision and public goods. *Journal of Political Economy*, *79*(4).

U.N. (2015). *United Nation Department of Economic and Social Affairs: Statistics Time*.

Uka, U. (1993). The african debt crisis and the challenge of development. *Intereconomics*, *28*(1), 35–43.

United Nation. (2015). *The Millennium Development Goals Report 2015*.

Vianna, A. C., & Mollick, A. V. (2018). Institutions: Key variable for economic development in Latin America. *Journal of Economics and Business*, *96*, 42–58. https://doi.org/10.1016/j.jeconbus.2017.12.002

WDI. (2015). *World Development Indicator*.

WEO. (2017). World Economic Outlook Database. International Monetary Fund (IMF).

Were, M. (2001). *The Impact of external debt on economic growth in Kenya: An empirical assessmen*. https://doi.org/10.1007/s10273-011-1262-2

WHO. (2014). *Atlas of African Health Statistics*. *WHO African Health Observatory and Knowledge Management*. https://doi.org/10.1007/s13398-014-0173-7.2

WHO. (2015). *World Malaria Report 2015*.

Williamson, O. E. (1998). The Institutions of Governance. *American Economic Review*, *88*(2), 75–79. https://doi.org/10.1080/14719039900000011

Windmeijer, F. (2005). A finite sample correction for the variance of linear efficient two-step GMM estimators. *Journal of Econometrics*, *126*(1), 25–51. https://doi.org/10.1016/j.jeconom.2004.02.005

Woolard, I., & Leibbrandt, M. (1999). *Measuring poverty in South Africa. Development Policy Research Unit, University of Cape Town. Statistics South Africa.*

World Bank. (1990). *World Development Report 1990: Poverty. Oxford University Press, New York. World Bank, 2001. 178.*

World Bank. (2007). *Strengthening World Bank Group Engagement on Governance and Anticorruption: updated version of the paper presented to the Development Committee in Singapore in September, 2006.*

World Bank. (2014a). *Global Monitoring Report: Ending Poverty and Sharing Prosperity, Washington DC.*

World Bank. (2014b). *Poverty and Equity Data Bank.*

Young, A. (1995). The tyranny of numbers: confronting the statistical realities of the East Asian growth experience. *The Quarterly Journal of Economics*, *110*(3), 641–680.

Zouhaier, H., & Fatma, M. (2014). Debt and Economic Growth. *International Journal of Economics and Financial Issues*, *4*(2), 440–448.