

**LINKAGES BETWEEN GOVERNANCE, GLOBALIZATION,
AND SUSTAINABLE DEVELOPMENT: A COMPARATIVE
STUDY OF SUB-SAHARAN AFRICA AND
EAST/SOUTH-EAST ASIA**



Zechariah Langnel

**A Dissertation Submitted in Partial
Fulfillment of the Requirements for the Degree of
Doctor of Philosophy (Development Administration)
School of Public Administration
National Institute of Development Administration
2020**

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ABSTRACT

Title of Dissertation	LINKAGES BETWEEN GOVERNANCE, GLOBALIZATION, AND SUSTAINABLE DEVELOPMENT: A COMPARATIVE STUDY OF SUB-SAHARAN AFRICA AND EAST/SOUTH- EAST ASIA
Author	Zechariah Langnel
Degree	Doctor of Philosophy (Development Administration)
Year	2020

Since the launch of the Brundtland report in 1987, developing countries continue to face problematic trade-offs that must balance the pursuit of industrialization and economic development, reduce poverty, ensure environmental sustainability, and respect the welfare of future generations. Several contemporary trends warrant the positioning of this study in the academic literature and policy circle. At the policy level, though all regions of the world have made tremendous progress, sub-Saharan African countries remain the region with the worst human development outcomes. Also, air pollution climate change, and global warming have been found to be the major cause of welfare losses in sub-Saharan Africa and many Asian countries. In the literature, several explanations on the causes of poverty and underdevelopment in developing countries have largely focused on how to achieve economic growth. The discussions in these papers have seemingly ignored other national level and global factors that may push developing countries to manage the trade-offs between the natural resource usage today and how to lower the level of harm to its use by future generation. Against this backdrop, this study takes a comparative approach and examines how governance, democracy, and globalization affect sustainable human development in developing countries particularly in sub-Saharan African and East and South-East Asia. A panel data analysis of 56 countries was employed within the period of 25 years from 1990-2015. Pooled/Ordinary Least Squares, fixed effects, instrumental variable in Two stage Least Squares and system Generalized Method of Moments were employed to control for specific characteristics

Several results were established after controlling for confounding factors. *First*, governance, which is measured by governance effectiveness, control of corruption, and

the regulatory quality showed a negative relationship with sustainable development in sub-Saharan Africa. *Second*, governance (governance effectiveness, control of corruption, and regulatory quality) has a positive impact on sustainable development of Asian countries. *Third*, economic and social globalizations exert a negative impact on sustainable development in both regions. *Fourth*, political globalization has a positive effect on sustainable development of all countries included in the study. *Fifth*, social globalization has a positive effect on human development among African countries. *Sixth*, economic and political globalizations showed a negative impact on human development in African. *Seventh*, the economic, social, and political dimensions of globalization have consistently shown a negative impact on human development among Asian countries. *Eighth*, whilst democracy index and political rights have a positive effect on sustainable development, but, show no relationship or negatively direct effect on human development in Africa, they were found to be entirely negative for both sustainability and human development among Asian countries. *Ninth*, press freedom showed a negative effect on development outcomes in the two regions. *Tenth*, genuine wealth per capita as a measure of sustainability showed a negative impact on human development, suggesting that the current development of the two regions is not on the sustainable path.

Another important finding of this study is that democracy reduces the negative impact of globalization on sustainable development in sub-Saharan Africa. Thus, globalization is likely to facilitate the achievement of sustainable development in the study context if the level of democracy is high. It also means that democracy has the potential of modulating the negative impact of globalization on sustainable development agenda. As such, democracy matters for the extent to which globalization will exert influence on development outcomes in Africa. This is particularly true under the high quality of democracy where access to and flow of information is very high. Hence, citizens will be well-informed about the problems engineered by the current wave of globalization. Among Asian countries, however, our findings revealed that the current status of democracy in the region has no potential of reducing the negative impact of globalization on sustainable development. A number of policy recommendations are offered towards the achievement of sustainable development agenda of the two regions.

ACKNOWLEDGEMENTS

"For I know the thoughts that I think toward you, saith the LORD, thoughts of peace, and not of evil, to give you an expected end" (Jeremiah 29 v 11). Thanks be to the LORD JESUS CHRISH whose grace has sustained me throughout this my PhD program.

I would also like to express my sincere gratitude to my advisor, Associate Professor Pairote Pathranarakul, the Committee Chair, and the other astute committee members for their encouragement and intellectual guidance that have shaped my thoughts and contributed significantly towards the production of this work. I am equally indebted to the National Institute of Development Administration and the staff of GSPA for awarding me the type 1 scholarship for my PhD studies.

I wish to further express my deepest gratitude to some individuals who have contributed in diverse ways towards my PhD journey. Many thanks to Koray and James who have given both emotional and financial support. I also thank Professor Bawole for nurturing and nursing me to effectively pursue a terminal degree. I would also register my sincerest appreciation to Kingsley Agomor (PhD) who had been with me through the stormy days. Also, thanks to my friends and PhD colleagues including Marwan, Angkana, Pat, Guberto, Sam, George, Maliha, Julie, Clement, Gideon, Prince, Harriet, Edinam, and all those who have played a part in my academic success. To my hardworking big brother - Ndabiche Langnel - thank you for your unwavering support for my education. Thanks to Ngbanbaan, Solomon, and Felix too.

Last, but certainly not least, I owe my largest amount of thanks to my dear wife, Edith Langnel, who had to endure a long period of my absence. Madam, thanks very much to you and baby Michelle for your emotional support and love without which my PhD journey would not have been successful. Thanks also to my dear Mum, Kamopi Langnel - for your motherly care and support for me throughout my academic journey. Finally, I dedicate this thesis to LANGNEL's family. Amen!

Zechariah Langnel

October 2020

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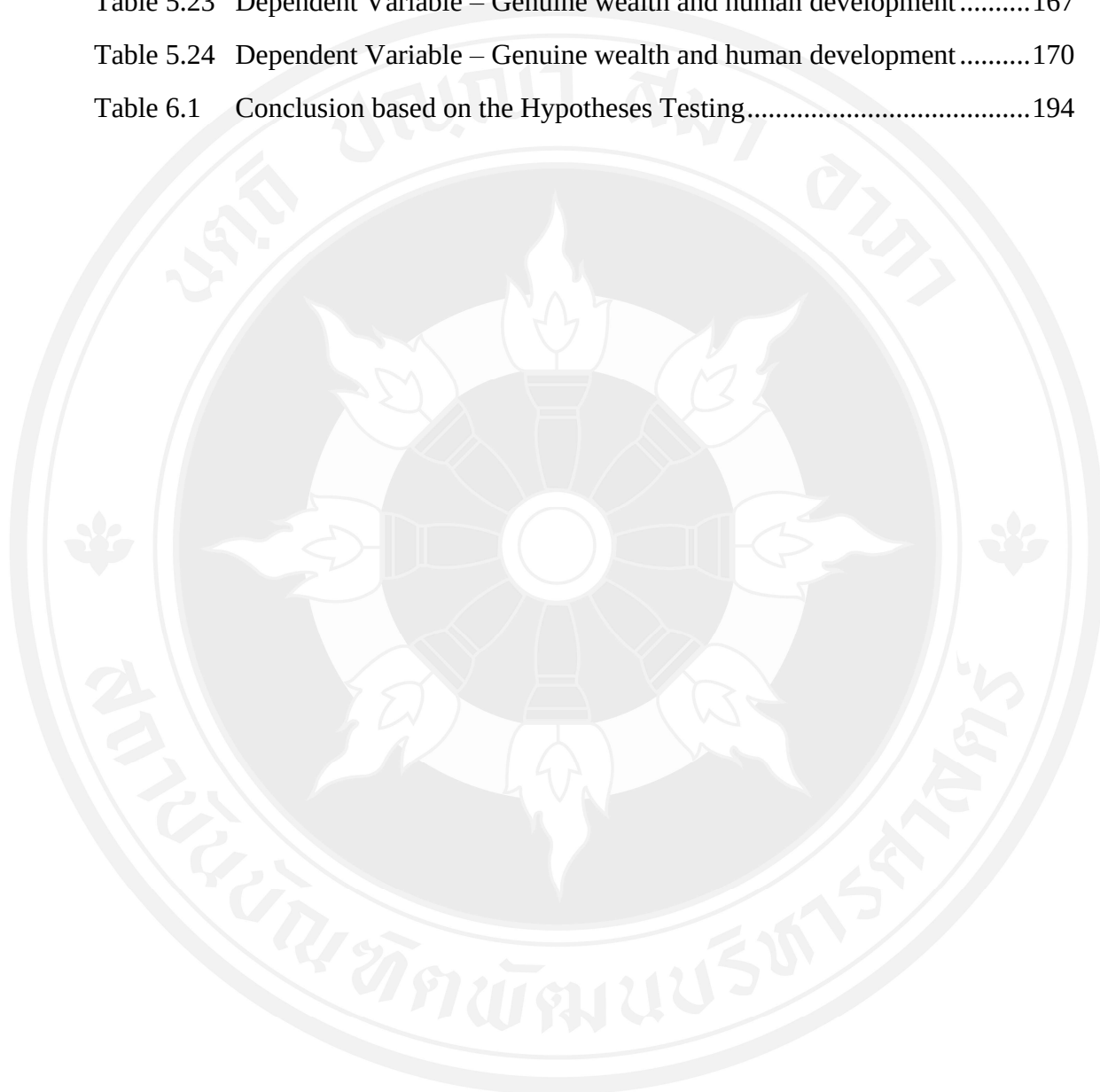
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ABBREVIATIONS

Abbreviations

Equivalence

ANS	Adjusted-Net Savings
ASEAN	Association of South-East Asian Countries
AVGIQ	Composite Index of Institutional quality
BCOLONY	British Colonial Origin
CC	Control of Corruption
CO2	Carbon Dioxide
DEMO	Democracy
EAW	Economic Aspect Welfare
EET	Ecological Exchange Theory
EF	Ecological Footprint
EKC	Environmental Kuznets Curve
ELF	Ethnic and Linguistic Fractionalization
EMT	Ecological Modernization Theory
ESEA	EAST and South-East Asia
EU	European Union
FAID	Foreign Aid
FE	Fixed Effect
GE	Government effectiveness
GDP	Gross Domestic Product
GDPPCGR	GDP per capita Growth Rate
GINI	Gini Inequality Index
GMM	Generalized Methods of Moment
GNI	Gross National Income
GNH	Gross National Happiness
GPI	Genuine Progress Indicators
GS	Genuine Savings

GW	Genuine Wealth
GWP	Genuine Wealth Per Capita
HCPRM	Primary education
HCSEC	Secondary Education
HDI	Human Development Index
HPI	Happy Planet Index
ICRG	International Country Risk Guide
ICT	Information Communication Technology
IHDI	Inequality-Adjusted Human Development Index
ILO	International Labor Organization
IMF	International Monetary Fund
IRIS	International Reform and Informal Sector
ISEW	Index of Sustainable Economic Welfare
IV(2SLS)	Instrumental Variable in Two Staged Least Squares
KOF	Konjunktur for schungsstelle (Zurich, Switzerland)
KOFE1	Economic globalization
KOFs2	Social globalization
KOPE	Political globalization
LEXP	Life Expectancy
LPI	Living Planet Index
MDGs	Millennium Development Goals
MEW	Measure of Economic Welfare
MENA	Middle East and North Africa Countries
MNCs	Multinational Corporation
NIT	New Institutional Theory
OIC	Organization of Islamic Countries
OIR	Over-identification Restrictions
OECD	Organization for Economic Cooperation and Development
OLS	Ordinary Least Squares
OPNESS	Trade Openness
PCT	Political Coase Theorem



POPGR	Population Growth Rate
PRESS	Press Freedom
SDGs	Sustainable Development Goals
SSA	Sub-Saharan Africa
SNA	System of National Accounting
SWB	Subjective Well-being
RE	Random Effect
RI	Rule of law
RQ	Regulatory Quality
UK	United Kingdom
UNDP	United Nations Development Programme
UN	United Nations
UNEP	United Nations Environmental Programme
UNICEF	United Nations Children's Fund
US	United States
URB	Urbanization
VIF	Variance Inflation Factor
WB	World Bank
WCED	World Commission on Environment and Development
WEF	World Economic Forum
WDI	World Development Index
WGI	World Governance Indicators
WHO	World Health Organization
WTO	World Trade Organization

CHAPTER 1

GENERAL INTRODUCTION

1.1 Background of the Study

Recent years have witnessed renewed global attention to persistent poverty, inequality, and worsening environmental conditions and the role of governance both in redressing and reinforcing them. This has made sustainable human welfare a key milestone in Post-2015 development agenda. The Sustainable Development Goal 16 states that “*peace, justice, and strong institutions* are essential for the achievement of SDG goals. This is underpinned by the view that the achievement of Post-2015 development agenda will be illusionary without sustained peace, stability, human rights, effective governance and environmental sustainability. Several contemporary trends warrant the positioning of this study in academic and international development policy circle.

The “transition from the Millennium Development Goals (MDGs) to the Sustainable Development Goals (SDGs) showed that all regions of the world have improved in “Human Development” with the exception of sub-Saharan Africa” (SSA) (S. A. Asongu & Le Roux, 2017). The World Bank for instance reports that SSA has the largest number of extreme poor people – about 389 million – and accounts for half of the total number of the global figure. It has been argued exasperatedly that the fact that a greater number of countries in the SSA missed the MDGs targets on extreme poverty and human development shows that the “fruits of economic prosperity accruing from the recent” economic growth in Africa “have not been trickling down to the poorest” segment of the population (Tchamyou, 2018). As a consequence, social exclusion is still a challenge in the sub-region (Beegle, Galasso, & Goldberg, 2015).

Furthermore, the environmental sustainability is one of the key themes that underpin the “Post-2015 development agenda” (Akpan, Green, Bhattacharyya, & Isihak, 2015; Asongu & Nwachukwu, 2016b). However, the consequent of climate change and global warming are predicted to be dire for developing countries. Analysts contend that a “consistent trend of economic growth logically has a positive effect on the emission of greenhouse gases which poses the greatest challenge to human welfare development” (Mak & Lew, 2011). Thus, atmospheric pollution such as the emission of greenhouse gases is the major cause of climate change. Thus, it is argued that environmental pollution due to economic activities tends to affect the “three dimensions of human development: health, education, and well-being” (C. Currie et al., 2009). From education perspective, atmospheric pollution negatively affects the “ability of parents to send their children to school”, and also affect students’ ability to study effectively in class (Boogaard, van Erp, Walker, & Shaikh, 2017). From health standpoint, air pollution tends to harm “peoples’ health and shorten life expectancy” (Boogaard et al., 2017) and overall well-being (Graff Zivin & Neidell, 2012). Additionally, the World Bank reports that household air pollution from “cooking with solid fuels was the major cause of welfare losses” in sub-Saharan Africa and South East Asia in 2013 (World Bank, 2016).

However, Asian countries particularly the East have made improvements and have since attracted attention from global policy makers as well as academic researchers. For instance, the global transition from MDGs to SDGs showed a general decline in the global extreme poor people and that was due to the rapid advances in Asian region – particularly China, Indonesia, and India. The development in the region has been much touted and often christened as “Asian tigers” and “Asian miracle”. Many global discussions and policy conferences have pointed to many Asian countries as laboratory of development for other low-income and transitional economies to experiment. Yet, we know a lot less about the exact issues upon which such regional policy learning platform can take place. South-East Asian countries are governed by different political regimes ranging from democracy to autocratic or authoritarian. While some are governed by democratic regimes (e.g. Philippines, Indonesia etc.), others operate under controlled democracy (e.g. Malaysia, Singapore, and Cambodia), unstable political system (e.g. Thailand and Myanmar), and

autocratic regimes in countries such as Laos, Vietnam, and Brunei (Laiprakobsup, 2019). It must be emphasized that sub-Saharan Africa and countries in Asia have some common historical, geographic, and institutional characteristics that form the basis for comparative approach. Nevertheless, the drive to provide scientific evidence based on the national and global level factors bodes much policy prospects and will shed light for the advancement of sustainable development for the two regions.

1.2 Statement of the Research Problem

The empirical evidence suggests that the predictors of economic growth have varied impacts for countries in SSA (Artadi & Sala-i-Martin, 2003; Block, 2001). It is argued that development in SSA may differ from other regions because of its colonial heritage, ethnic diversity, and geographical location (Asiedu, 2014). For instance, some recent studies (Dalgaard, Hansen, & Tarp, 2004; William Easterly, Levine, & Roodman, 2004) contend that donor assistance has no influence on the development outcomes in Africa. A growing body of literature showed that foreign aid has no significant impact on inequality and poverty reduction (Graff Zivin & Neidell, 2012; Ijaiya & Ijaiya, 2004; Mlambo, 2019). However, Younsi and Nafla (2019) argue that foreign aid could reduce income inequality only when the recipient country has good institutions and sound policies. Some other scholars find that foreign aid tends to have an insignificant and deteriorating effect on political and economic institutions in Africa (Asongu & Nwachukwu, 2016a).

The development economists have traditionally focused on economic growth or income as a measure of development (R. H. Bates & Block, 2013; Franklin Obeng-Odoom, 2015). They contend that as the economy grows, the poor will benefit, the unemployed will find jobs, and the “world will become more equal, cities more livable, and the environment more sustainable”. In sync with the classical growth theories, recent scholars (Pinkovskiy & Sala-i-Martin, 2016) have acknowledged and trumpeted Africa’s “growth miracle”. However, upon close scrutiny of how developing countries are faring individually, many scholars (Devarajan & Wealth, 2013; Harttgen, Klasen, Vollmer, & Wealth, 2013; Dani Rodrik, 2016) have questioned the “effectiveness of gross domestic product (GDP)” as a measure of

development. Consequently, scholars have argued for the need to move beyond GDP (Fioramonti, 2013; Nahman, Mahumani, & De Lange, 2016; Joseph Stiglitz, Sen, & Fitoussi, 2009; Van den Bergh, 2009). Analysts have argued that “natural environment, mortality rate, morbidity, inequality, and leisure are some of the major social well-being outcomes that affect living standards”. Therefore, the study argues that since “development is everything about sustainable improvements in human welfare”, the focus on GDP as a conventional metric of development gives a limited picture of the real conditions under which people live. Against this backdrop, Franklin Obeng-Odoom (2014, p. 237) posits that “if growth is inclusive, ecologically sustainable and job creating, it offers stronger grounds to be optimistic”. Hence, the debate regarding the factors that determine better human well-being outcomes is inconclusive (Obeng-Odoom, 2015; Klenow, 2016).

Accordingly, studies on environmental quality tend to emphasize its implications on income level of a country (Costantini & Monni, 2008; Panayotou, 2016; Tiba & Omri, 2017). It is argued that as income level of a country moves above a certain threshold, its environmental quality improves. However, the discussions in these papers have seemingly ignored other national level and global factors that may push some polities to be more concerned about environmental quality in order to achieve sustainable development. Whereas national level factors such as governance/institutions and regime type (democracy/autocracy) are likely to impact on environmental quality, research in this area has been limited. Of more interest is the emergence of the phenomenon of globalization, and the concomitant “fears of erosion of social and environmental standards, high poverty rates in developing countries as well as high incidence of domestic volatility, and even protests and riots” (Axel Dreher, 2006). Additionally, the decision by the US president (Donald Trump) to reintroduce tariffs which led to ‘trade/tariffs war’ with China through trade protectionism policies and the decision by the citizens of United Kingdom to leave the European Union (EU) through BREXIT further raise a critical question of whether globalization or integration is good for sustainable development. To respond to the above gap in the literature, this study investigates the linkages between governance/institutional quality, level of democracy, globalization, and sustainable human development. It must be noted that in this study, governance and institutions

are used interchangeably. The terms refer to good governance or institutional frameworks required to improve human development outcomes.

1.3 Main Objective

The aim of this study is to develop an empirical model to investigate whether the linkages between institutional quality, level of democracy, and globalization predict the heterogeneity of sustainable development in sub-Saharan Africa and East and South East Asia.

1.3.1 Specific Objectives

- 1) To analyze the implication of governance on sustainable development.
- 2) To interrogate and analyze the nexus between globalization and sustainable development
- 3) To examine the linkages between globalization, democracy and sustainable development.
- 4) To analyze the relationship between sustainability and human development.

1.3.2 Hypotheses

H1: There is direct positive effect of governance on sustainable development (SD).

H2: The relationship between the measures of globalization (economic, social, political, total globalization) and sustainability is negative.

H3: Globalization exerts a significantly positive effect on human development.

H4: Democracy positively affect sustainable development.

H5: There is likely to be a positive relationship between globalization and sustainable development if a high level of democracy is present.

H6: The relationship between sustainability and human development is positive.

1.4 Definition of Basic Concepts

Several concepts have been used to examine the relationships between governance, level of democracy, globalization, and sustainable human development. These concepts and terms are discussed below:

Sustainable development: Is denoted as how to “meet the needs of the current generation without harming that of future generation”(Brundtland, 1987). **Governance:** Is defined here as the “capacity to deliver three development outcomes – minimize threat to violence (security), promote prosperity (growth), and ensure that such prosperity is shared (equity)” (World Bank, 2017). **Human development:** Is the “process of enlarging peoples’ choices” (UNDP, 1990). It “encapsulates elements such as long and healthy life, to be educated and enjoy a decent standard of living as well as self-respect” (United Nations Development Programme, 1990). **Democracy:** Is defined as the “competitiveness of political participation, the openness and competitiveness of executive recruitment, and constraints on the chief executive” (Freedom House, 2019). The definition also “captures the freedom of the press, and freedom regarding political and civil rights” (Marshall, Gurr, & Jaggers, 2016). **Institution:** Is defined as the “humanly devised rules that regulate the behaviour of social actors” (North, 1990). **Globalization:** Is conceptualized as the “process of integrating nations, societies, peoples, and institutions in the economic, political cultural, and intellectual domains through means such as capital, production, exchange, and information owned and controlled unequally by various states, classes, groups, and individuals”(Haque, 2002, p. 105) .

1.5 Significance of the Study

The study modestly contributes to the emerging literature on “governance and sustainable development”. That said, the study is grounded in three theoretical avenues: the new institutional theory, the “theory of political economy”, and the theory of globalization (compensation theory). The study depends on these “theoretical avenues to explain whether the current development trajectory of

developing countries is on the sustainable path”. By so doing, the strength of the study lies in its ability to interrogate the variables employed in the study through a comparative approach with some countries in Asia. The priori assumption of the study is that if the institutional quality influences the actions of social actors, then, the ‘right mix’ of institutions should have independent effect on the global effort towards achieving sustainable and inclusive development, especially in developing countries. Again, the study assumes that given the complexity of global challenges, quality institutions, policies, and regimes types are not the only determinant factors, however, there is a possibility that the influence of globalization and its concomitant challenges are linked to the concerns of sustainable development, climate change as well as inter-temporal human welfare outcomes. It must be emphasized that it is not only important to examine why most African countries continue to perform worst on human development outcomes compared to other regions of the world, however, it is urgently critical to empirically verify whether their current development trajectory is on the sustainable path.

The approach of the study warrants a comparative analysis on the sustainability and inclusive development paradigm because of some underpinning global trends highlighted at the beginning. It is also instructive to note that countries in Africa as well as those in Asia share some common historical and institutional characteristics that form the basis of comparative approach. Although both sub-Saharan and Asian countries were originally poor and undeveloped, some countries in Africa were at the same footing with today’s economic giants in Asia. For instance, in the mid-1960s, Ghana’s per capita income matched that of South Korea and more than many Asian countries such as Malaysia, Singapore, Thailand, and many others. However, today, most Asian countries have transformed their economies and ranked higher on “Human Development Index”. The finding of the study is expected to shed light on the existing body of literature by highlighting the strengths of Asian countries that can serve as ‘experimental laboratory’ for other developing countries particularly in African.

Theoretically, the results of this study made a moderate contribution to the new institutional theory and the governance hypothesis, globalization, and the theory of sustainability. Thus, by following the existing literature to derive an indicator (s) to

represent sustainable development and the focus on the Human Development – as the broader dimension of development is innovative and shows a bold departure from the mainstream literature on economic development. This will provide blueprint for future researchers in development studies and other development-oriented researchers. This is particularly important because there is a clarion call for the need to go beyond traditional GDP as the measure of development towards a “green GDP” or “green economy”.

By policy implication, sustainability, climate change, global warming, and carbon dioxide emissions have become key themes on global agenda. Nevertheless, no decisive policy implication can be drawn without empirical evidence to support the post-2015 global development agenda, especially, in developing countries. It is our believe that the results will provide the right impetus for both international and national policy makers to devise direct policies targeting both institutional and environmental reforms. This is expected to help redress institutional ineffectiveness, unsustainable environmental practices and low technological productivity that trap most developing countries in perpetual poverty and underdevelopment.

1.6 Limitation and Scope of the Study

From the beginning of the write-up of this dissertation, some challenges were anticipated that were likely to impair successful completion of this work. As usual for all cross-country studies, data accessibility was the greatest challenge. Consequently, the study was limited to the countries that data were available in both sub-Saharan Africa as well as the Asian countries, the study considers 37 countries in SSA and 19 countries in East and South-East Asia within the period of 1990-2015. Additionally, financial challenges as well as time posed serious challenge. Nevertheless, the study was completed within the stipulated timeframe.

1.7 The Organization of Study and the Chapter Disposition

In all, there are six Chapters in this study. Chapter One captured the general introduction and the background, statement of the problem, the study aims and hypotheses, and the definition of basic concepts and terms. The others include the importance of the research and the limitation and the scope. Chapter Two is dedicated to the review of both theoretical and empirical literature. It includes growth and development theories, the theory, nature and dimensions of governance/institutions, the theory and empirics of globalization, and environmental sustainability. The chapter also captures a detailed description of the conceptual framework that guided the conduct of the study.

Chapter three captures the research methodology. Specifically, it includes the philosophical assumptions or paradigms of the study, research method and the sample selection, data collection process and procedure, measurement of the constructs, and the empirical procedure for the derivation of the construct for sustainability, and the estimation techniques. Chapter four provides detailed description of study area (Africa and Asia) and Chapter five consists of the analysis, and the discussion of findings. Lastly, Chapter six provides the summary of findings, conclusion, and the recommendations.

CHAPTER 2

REVIEW OF THE RELATED LITERATURE AND FRAMEWORK

2.1 Introduction

This chapter discusses the related studies. Specifically, it examines the nexus between governance, democracy, globalization and sustainable human development. Key constructs from the related literature are used to development the theoretical framework for the study.

2.1.1 Theories of Growth and Development

The theories of growth have attracted a lot of research attention in the late 1980s. This is perhaps due to sharp divisions between the rich and poor nations, within nations, and much human suffering in several parts of the world. It is also partly because comparative economic development is analyzed in light of appreciating the view of the world not only to analyze societies as different entities, but to appreciate that the culture of societies evolved in their own right and characterized by the intricacies embedded in institutions and norms. Consequently, economic growth is shaped by the neoclassical and the endogenous schools of thought. From the traditional growth theories perspective, “economic growth” is spurred by the technological advancement, human development and capital accumulation. Nevertheless, countries that are endowed with these human and natural resources have not developed on the same footing – but shows obvious differences in the level of development. These ostensible diversities in the level of development have triggered research interest to examine the nuances of growth disparities (Putnam, 2000). Owing to this, many scholars have relied on non-traditional factors like institutions, culture, and social capital to account for disparities in country-level growth paths.

The history of economic growth has witnessed the dominance of the structuralist view, especially, in the 1960s which placed emphasis on the government interventionist role in the economy. However, as a result of the government failure to ensure efficiency in the market, neoclassical school of thought emerged with much emphasis on the invisible hand of market forces (Knight, Loayza, & Villanueva, 1993; List, 2004). The debate has raged since the 1990s after the neoclassical school of failed to significantly contribute to the scholarship of economic development. The move has not rejected the basic tents of neoclassical school but rather triggered the emergence of other variants in the form of capability approach as well as new institutional school of thought. This shift did not necessarily relegate the basic assumptions of neoclassical school of thought but created some new economic models that is founded in the institutional renewal as well as building the capabilities of the population in a manner that will engender economic growth and improve standard of living. Drawing insight from these developments, the following theories are reviewed and served as a foundation for the study: the classical growth theory, the institutional theory, the neoclassical theory and the endogenous in the quest to respond to some critical issues with respect to the disparities of sustainable growth trajectories in developing countries.

2.1.2 Classical Growth Theory

The classical growth theorists – “Adam Smith, Thomas Malthus, and David Ricardo” - held the view that gross domestic product (GDP) is the key determinant of “economic growth”. The key postulation of classical theorists was how to increase inputs. Thus, the decrease or decrease in GDP depends on the quantity and quality of inputs (land, labour, and capital). However, in his book, “*An inquiry into the Nature and causes of the Wealth of Nations*”, Adam Smith contended that the evolution of an economy is contingent on two factors - labour and capital. He argued for the free market economy and the “invisible hand” of “market forces”. He believed that it is the competition in the market economy which is an engine of “economic growth”. He asserts that property rights must be guaranteed for the accumulation of capital, which would permit an increase in terms of employment generation. Thus, given the large market and the division of industrial labour, it will increase the productivity per

worker. This suggests “that the higher the number of workers concentrated in an area, albeit, land is limited in supply – the more complex and effective the division of labour might be, and these dynamics depend on the size of the market” (A. Smith, 2010). Smith has argued, exasperatedly that the population growth determines economic growth in a situation where the salary of workers is held constant. Thus, the population growth can augment the number of workers needed in an area, however, this may in turn pose a serious threat because land is a limited factor, and given the increase in population, the quantity of goods per worker will be reduced, leading to a reduction in the marginal product of labour, and subsequently lead to a decline in real wages. Thus, the “continuous accumulation of capital, the increase in wages, and the increase in population would reduce the prices of manufactures, and purchasing power would be higher, relative prices in manufactures go down when a society progresses” (Eltis, 2000). These chain of events, although will eventually reduce profits, it will trigger economic growth. Hence, free market competition was central in Smith theory.

In his book “*An Essay on the Principles of population*” published in 1798, Malthus’s theory, reinvestment surplus determines the “level of economic growth”, albeit, its limitation is the growth of the population. However, his thesis argued that when salary is below the subsistence level, it is possible for an economic equilibrium to be reached. The equilibrium is likely because at that time, the job offer is no longer offered at the same level. For Malthus, these nuances allow an economy to be in a stationery state without any prospect of growth. Although Smith posits that “capital accumulation would increase productivity and this would increase the demand of labour, Malthusian theory believed that population would grow with an increase of wages due to the increase of the demand of labour” (Bloom, 2010; J. Cypher, 2014) . Contrary to Smith, Malthus advocated government’s intervention in the market by stating that government “should increase expenditures to keep production on a high note to allow capital accumulation” as a precondition to stimulate the economy (Eltis, 2000). Consequently, the “consumption would rise increasing the profits of the entrepreneurs and capital accumulation” (Eltis, 2000). Malthus “contends that a society should not save, but consume, because saving produces low demand and low profits”.

Ricardo's theory was "not only on economic growth" but to the extent that it serves as a limit on growth potential of a country. Ricardo proposed a law of diminishing return to back the claim of limit to economic growth. Nonetheless, he argued that to increase economic growth, "the theory of Comparative Advantage" can be employed in the international trade to help reduce the problem of the law of diminishing return (Adelman & Yeldan, 2000; Maneschi, 2008; Ruffin, 2002). According to Ricardo, comparative advantage as a theory in economics suggests that every country should specialize in what it is efficient in producing and open its borders to trade, so that they can buy goods and services which cannot be efficiently produced in the country. Although the three classical theorists differ in several respects. They converged that "with economic growth, an increase in wages reduces profits, and there is a point at which the stationary-state is reached and capital accumulation ceases" (Ruffin, 2002).

2.1.3 Growth Theory: The Neoclassical Growth Theory

The proponents of neoclassical growth-oriented theory posit that "the level and distribution of national product is based on the social endowments of the production factors like labour, capital, technical conditions of production, and consumer preferences" (Cesaratto, 1999). The neoclassical theory has been extensively developed during 1960s by a Nobel Prize winner in economics – Robert Solow in 1987. Solow (1956) growth model emerged in reaction or in modification of Harrod-Domar models in the 1940s and 1950s to allow for neoclassical factor substitution in production. Thus, the "assumption is that the capital and labour inputs are infinitely substitutable in production, albeit, subject to the law of diminishing returns". The central thesis in Solow's theory is that the rate of savings and investments must increase in order to spur the required development. Thus, this tradition further asserts that output is a function of other factors such as technology (J. Cypher, 2014; Prescott, 1988).

However, Solow introduced a third variable – "rate of technological progress into the production function", although it was not considered in the Harrod-Domar models" (Solow, 1956). He argued that if technological progress was relegated, then, "the effects of diminishing returns would set in, and eventually cause economic

growth to stagnate in the long-run” (Bajo-Rubio, 2000; Solow's, 1956). This school of thought argues that “technological progress” is shaped an empirical research which is often far above the realms of economics. Solow believed that savings can be increased through massive investment in capital goods such as factories, machines, transportation, irrigation systems, and many other capital-intensive ventures that can spur industrial revolution. As the production increases, more labour will be employed, thereby leading to an increase in wages. However, this can be “sustained in the long run” through technological progress.

Some neoclassical theorists assert that for an economy to reach a steady growth rate, depends to a large extent, “on the role of technological progress and the growth rate of labor force”. However, this conception by neoclassical theory is contrary to the key tenets of power-balance theory - a sub-division of neoclassical theory. Scholars have argued that due to power imbalances, some countries are strategically positioned in global trade system and benefit at the expense of others. Nevertheless, previous studies have established contrary findings based on the application of neoclassical school of thought. As a consequence, some scholars have questioned the validity of the neoclassical school of thought in the analysis of long-run development outcomes. The critiques are rooted in the question that the neoclassical growth they glossed-over key underpinning issues such as entrepreneurial thinking – which is central to sustainable growth and development. It also overlooked the mechanisms underpinning technological advancement (Carree & Thurik, 2010; Wennekers & Thurik, 1999). The approach does not lend itself to practical application in different geopolitical settings.

2.1.4 Endogenous Growth Theory

The endogenous growth theory was originally developed by two Nobel prize winners – Garry S. Becker and Paul M. Romer in 1992 and 1996 respectively. The theory emerged following the dissatisfaction with the neoclassical growth theory or Solow model which placed too much “emphasis on savings and investment as well as how an exogenous factor influences technological advancement. The distinguishing feature of the endogenous growth theory is its emphasis that economic growth is an endogenous outcome of an economic system, not the result of forces that impinge

from outside” (Romer, 1994). To this end, its “theoretical prowess does not invoke exogenous technological change to explain why income per capita has increased by an order of magnitude since the industrial revolution” (Romer, 1994). Consequently, endogenous growth theorists aver that how economies develop in the long-run is predicated on the human capital formation such as skills and the education of the population (Baldwin, Braconier, & Forslid, 2005).

Previous studies on the neoclassical school is rooted in the idea “that a country’s growth rate” is expected to be more than 50% of physical capital and labor, leaving what was later christened as “*Solow residual*”. Scholars have posited that “it was not only the question as to whether” and how “economies could maintain rapid growth rates over the longer-term that poses a vexed question to many development economists, however, the slow growth rates in Latin America and sub-Saharan African countries triggered economists to question any growth model relied on savings and investments as a precondition for economic growth” (Plosser, 1993). Thus, the endogenous economists view it as a “vague axiom of most policy discussions of economic growth” on attempt to predict income convergence on condition of any fundamentals like savings or investments (Plosser, 1993).

The “endogenous growth theory is underpinned by the view that physical capital accumulation is not assumed to be the ultimate determinant of economic growth in any setting, or account for the disparities in income among countries” (Carlsson, Eliasson, & innovation, 2003; Cypher & Dietz, 2009). The theory abandoned the assumption of diminishing returns as argued by the neoclassical theorists for some inputs of production. Scholars have argued that at the end, per capita income is rooted in how exogenous factors like technology changes, but also, some internal factors also shape how some economies function. Hence, the endogenous school holds the view that even if countries are already developed, there is a likelihood that they will continue to growth from strength to strength. Some scholars (Baldwin et al., 2005; Peter Howitt, 2000) argued that the rate of “human capital formation is very for growth and development”.

Furthermore, some notable economists have been credited for the phenomenal work done on human capital in the 1960s. Specifically, he is well known for an extensive work on how agricultural sector could be enhanced by educational

development. He argued that the ability to educate a majority of the population is critical for increasing productivity of many countries. In 1975, Gary Becker provided a clearer picture on how the focus on the “endogenous factors such as human capital formation” could help spur development. Becker and Tomes (1986) posit that for the sustainable growth and development to be annexed, the investment in human capital development was the right thing to do if countries are to develop. He averred that critical areas such as job training and formal education are important ingredients for the advancement of human capital. Other researchers (Barro, Mankiw, & Sala-i-Martin, 1992; Mankiw, Romer, & Weil, 1992) agreed with these views and argued that sustained development is achieved when a majority of the population get education, suggesting that the importance of the endogenous factors cannot be overemphasized.

Nevertheless, the theory of endogenous growth is not without weaknesses despite the fact that it is an improvement on the earlier theories such as neoclassical and classical growth theories. It is argued that endogenous theory could not offer optimal explanation as why some countries are far developed than others. Also, the emphasis on the law of diminishing returns have been critiqued (Cypher & Dietz, 2009). Specifically, internal factors have accounted for why income disparities among societies as in the case of neoclassical and classical growth theories, especially, in developing and transitional economies (Parente & Policy, 2001). Some other critics have averred that the reliance on human capital is quite simplistic since that alone cannot explain the heterogeneity among countries. For example, some colonial societies such as the former Soviet Union remained underdeveloped despite its human endowment (Cypher & Dietz, 2009; William Easterly, 2001). Previous scholars have argued that there is somewhat slow transfer of technology-based knowledge from which means that it is difficult for any convergence theory to take place (Alesina & Rodrik, 1994; Barro et al., 1992).

2.1.4.1 New Institutional Theory

Scholars have generally agreed that economic performance is shaped by institutions and how they evolve. Nevertheless, “one thing is acknowledging that ‘institutions matter’, another is agreeing on what are institutions and which institutions matter for development” (North, 1992). The study of the institutional

arrangement has gained traction over several decades ago with the theory of institutions as the game changer of growth and development. The theory of institutions or what some scholars referred to as transaction cost theory represents a modification of the neoclassical growth theory and endogenous growth theory by attempting to incorporate the theory of institutions and good governance into the economic growth narratives. This is underscored by the view that the earlier “theories of economic growth” – “neoclassical and endogenous growth theories failed to recognize the role of institutions in the effort to account for the underlying sources development” (D. North, 1992).

Highlighting the strengths of the new institutional theory, North contends that “contrary to the many earlier attempts to replace neo-classical theory, the new institutional economics builds on, modifies and extends neo-classical theory to permit it to come to grips and deal with the entire range of issues heretofore beyond its ken” (1993, 2003:49). He continues - “What it retains and builds on is the fundamental assumption of scarcity and hence competition—the basis of the choice theoretic approach that underlies micro-economics”. However, the institutional theory tends to reject the assumption of rational instrumentality as advanced by some researchers. It modifies by viewing institutions as important part human interactions which has the propensity to constraints behaviour.

North laments that, indeed, the old institutionalism approach which is rooted in the theory of instrumental rationality and based on the strengths of human cognitive process has gained notorious popularity both in theory and practice. However, drawing insight from the Simon’s theory of bounded rationality, North argues that human beings are limited cognitively, and this imposes constraints on human interactions as well as how to structure exchange. Given the fact that the recent goal in the analyses of economic development is how to find the “right institutional mix” (Boettke & Fink, 2011), North contends that the first step of theorizing institutions is to restructure instrumental rationality, since cognitive sciences have made giant strides with individuals having the mental fortitude to comprehend the world in which they live. This can be “annexed through intergenerational transfer of knowledge, values and norms which vary radically among different ethnic groups and societies” (North, 1995). This is particularly

important because human beings evolved from a more complex and increasingly interdependent social milieu, which demands that a more intricate structures of institutions are created to capture the potential gains of trade and its consequential effect on social welfare. That said, the progress ensured the nurturing of some kind of institutional framework that is capable of facilitating economic exchanges among social actors. Furthermore, an institutional Development Economist like North posits that in situations where institutions function as rules that regulate the behaviour of actors, then, organizations can also function of players. This seeks to highlight the importance of institutions as the internal control mechanisms with critical focus on political institutions.

Another key strength of new institutional theory is that it debunks the widely held view among neoclassical theories that institutions do not matter on condition that market efficiency depends, to a very large extent on price mechanisms. He argued exasperatedly that earlier scholars have disregarded the potency of both economic and political institutions. In the contrary, some scholars believed that the state is not an external actor and ensuring that the market is stable demands some level of coercive mechanisms from the state to regulate the behaviour of economic agents (Boettke & Fink, 2011). It is argued that “although neoclassical theorists focused on the operation of efficient markets, the institutions required for the creation of these growth-oriented markets have been blatantly disregarded”.

Previous studies have built on the literature of the institutional theory in the bid to overcome weaknesses embedded in the earlier works (Campos & Nugent, 1998). In fact, some scholars have disregarded the potency of institutions as the main pillar of growth and development (Eicher & Leukert, 2009). In fact, there is no gainsaying that the views espoused by scholars who are not from the economic tradition are have some level if validity for the analysis of economic events. However, critics have it that “they tend to be relatively light in their ability to provide either reliable generalizations or a sound logical basis for policy choices” (Campos & Nugent, 1998).

Evidence abounds that “institutions have significant effect” on the “level of economic development”. Scholars have highlighted the predictive role of “property rights”, bureaucratic quality and the “rule of law” (Acemoglu, Johnson, & Robinson,

2001; Dani Rodrik, 2004). However, the notion that institutions will emerge internally is gradually becoming an outmoded idea, but what is gaining traction is that institutions are created by human organizations. Having expatiated on this on the crucial “nature of institutions” to development, the nature and the manifestations of “institutions” are discussed in the subsequent sections.

The new institutional theorists believed that development is predicated on not only on an investment in physical capital and human development but also dependent on the support of many legal and political institutions (Shirley, 2005). Thus, it thrives on an effective legal institution that can enforce contracts or investment – the rule of law framework to protect contacts and properties, else, doing business would be a difficult expedition. Similarly, farmers need to have their property rights protected and secured by law. Otherwise, it would be extremely difficult for the farmers to invest or adopt new technology to improve their business. New institutional theory relies on a “system of good governance” and quality of “institutions” particularly the government and the civil service system that is transparent and accountable (Shirley, 2005). Thus, a democratic political system that can protect political freedom and political rights.

2.1.4.2 Conceptualizing Institutions

Proponents of the institutional theory have shifted from a “theory of development free of institutions” to a “new theory of growth.” It also assumed that public policies and the institutional frameworks “were the most important factors accounting for differences in incomes between countries” (North, 1990). The key argument is the growing need for good governance and the quality of institutions. Some persuasive scholarly works have emerged in the quest to explain the behaviour of institutions, notably, – “*Rediscovery Institutions*” by James B. March and Johan P. Olsen (1989), *Institutions, Institutional Change and Economic Performance* by Douglass C. North (1990) and *Elinor Ostrom (1990) on Governing Commons*. The works of these scholars challenged, hitherto, paradigms in social science like *pluralism, Elitism and Marxism*. These intellectual traditions contended that “economic power configurations, systems of social stratifications or class divisions” (Holmberg & Rothstein, 2012) were underpinning factors for social and economic outcomes. However, the emergence of institution and governance scholars spurred a

new wave of thinking; thereby making institutions central in explaining social and economic processes.

North (1990, p. 3) conceptualized institution as the “humanly devised constraints that structure political, economic, and social interaction” or the “rules of the game in a society”. Thus, they are rules and regulations that set constraints on human behaviour. Institutions consist of both formal – “laws and regulations enacted by governments and informal rules - conventions, norms, and code of behaviours” (D. North, 1992). Informally, norms of reciprocity, that undergird market transactions are expected to shape economic performance and broader development outcomes (Knowles & Owen, 2010). As humanly induced rules and regulations, institutions have the capacity of to reduce harm and redirect social agents towards acceptable standards and behaviors (North, 1991). North lays much premium on legal regimes that can set-up and limit unethical behaviours. From this line of thinking, institutions are also a “set of rules, compliance, procedures and moral and ethical behavioral norms designed to constrain the behavior of individuals in the interests of maximizing the wealth or utility of principles” (Glaeser et al., 2004).

Hodgson (2006) thesis on institutions resonates with that of North. Thus, institutions are “systems of established social norms that structure social interactions” (Hodgson, 2006, p. 2). He points out that institutions matter for the structure of social life and can be underpinned in terms overt and covert rules. Put differently, Greif (2006, p. 14) conceptualized institutions as “a system of social factors that conjointly generate a regularity of behavior”. North, Hodgson, and Greif placed much emphasis on how social agents influence individual behaviour, which is contrary to the basing the argument on the endogenous factors (C. L. Davis, 2009). Contrary to North’s thesis, Schotter (1981) conceptualized institution as a function of the behaviour of social agents and the extent to which such behaviour is influenced by external actors.

It should be noted that institutions influence activities of humans and define how they interact and relate to each other. In some institution that are formal in nature, it has the potency of defining how transactions “take place in the human society”. It does not only regulate such transactions but determine the norms and values that are cherished by the society. Previous scholars seem to agree that for

future actions of social actors to be acceptable, individuals must conform to dictates of the law (Coase, 1960).

2.1.4.3 Approaches Underpinning the Choice of Policies and Institutions

The development economics and social scientists have submitted a sense in which differences in policies and institutions occasioned different economic and social successes of countries. However, we know much less about the mechanisms through which these transformations take place. In this section, I explore some approaches that explain why “societies choose different policies, institutions, and more broadly, different ways of organizing their lives” (Coase, 1960). First, **Political Coase Theorem (PCT)**: the PCT seeks to apply the logic of economic market transactions to what occurs in the political space. The theorem is attributed to Ronald Harry Coase when he became interested in the economics of public utilities in 1960s. It is posited that in societies “where property rights are allocated and there exists no transaction cost, an economic agent will ensure that efficient outcomes are achieved irrespective of claimants to property” (Anderlini & Felli, 2006; Stigler, 1989). Extending this logic to the political market, Acemoglu (2002, p. 2) contends that “economic and political transactions create a strong tendency towards policies and institutions that achieve the best outcomes given the varying needs and requirements of societies, irrespective of who, or which group, has political power”.

Second, **theories of Belief Differences**: it argues that because leaders express varied views “about what would be good for the society”, different policies are chosen with varied implications (Acemoglu, 2002). What is clear from this approach is that right policies and institutions are saddled with uncertainty because key political actors differ in several respects with regards to what is deemed appropriate for the society. As a result, there are forces that might prevent the emergence of bad policies and institutions or occasioned the creation of bad institutions. Third, **theories of social conflict**: the approach resonates with the key tenet of political choice theory. It places emphasis on the fact that politicians tend to behave like consumers in the market who seeks to maximize their own utility. Thus, some policies are chosen for societies, sometimes very disastrous policies because those decisions reflect the interest of political elites rather than the generality of the

population (Acemoglu, 2002). Usually, inefficient choices in the society are due to internal conflicts, which in turn results in inefficient policies and institutions being imposed from the external forces.

2.1.4.4 Nature of Institutions

This section explores some key features of institutions to be able to appreciate their theoretical linkage with sustainable development as well as inclusive human development outcome. It must be noted upfront that institutions are made up of “rules, enforcement characteristics of rules and norms of behaviour that structure human interactions” (North & Weingast, 1989). “Institutions are also the rule of the game” because of their ability to condition human interrelationships. The examples of institutions are families, regulatory agencies, political parties and actors and many more (North, 2003). Institutions also determine societal platforms based on human being’s progress and change over time (Li & Abiad, 1990). The key word that runs through all definitions of institution is constraints. This makes constitution and other “electoral rules good examples of institutions” (Glaeser, La Porta, Lopez-de-Silanes, & Shleifer, 2004).

However, another dimension of institutions that is gaining traction in the recent mainstream literature is the informality of institutions. Informal institutions encompass “norms, traditions and social conventions, interpersonal contacts, relationships, and informal networks” (Rodríguez-Pose & Storper, 2006). According to M. F. Fukuyama (2000) these informal institutions are essential for generating trust and norms of reciprocity in society. They evolve spontaneously as a result of iterative community engagements culminating into social capital due to this community interactions (M. F. Fukuyama, 2000). This makes institutions an enduring system of socially ingrained rules and cannot be limited to a specific organizational setting. Some scholars (Keefer & Shirley, 2000) argued that informal institutions are often insufficient for preventing crime and should only be proved useful for economic development in cases where there exist inadequate of formal institutions (Hayami, 2009).

What more, the notion of path dependency is a key feature of the institutional theory. It is underpinned by the view that history matters in the “long-term economic growth of countries” (Jakimowicz, 2015). Thus, the path and sphere of

how institutions change over time cannot depart from what earlier scholars theorized (North, 1993, 2003) corroborated this view by asserting that the “economies of scope, complementarities and network externalities of an institutional matrix make institutional change overwhelmingly incremental and path dependent”. contend that in the scheme of things, informal types of institutions tend to change gradually compared to formal institutions. Because of their path dependence nature, scholars (see David, 1994) has argued that institutions are the ‘carriers of history’ with enduring characteristics that are not limited by time or space.

Additionally, stability and durability are key manifestations of institutions. As and (Hodgson, 2006). asserted “...from the standpoint institutional change are their persistent, relative durability, and self-reinforcing”. According to Redmond (2005), established institutions tend to persist and endure. The stability and durability of “institutions are shaped by two conditions; thus, the institution must shape actions which tend to maintain it and overcome actions which tend to alter it” (Redmond, 2005). Scholars argued that the institutional change is slow because of their resilience in the institutional environment (North, 1991). “Institutional stability is a necessary condition for enabling complex transactions over time and space” (North, 1991). Even during the time of threatening environmental conditions like revolution as well as in the case of turnover of individuals as occurs in the political arena, and suddenly lead to changes in formal institutions, informal rules, which are often derived from formal institutions will exert influence, thereby engendering predictability of behaviour .

More so, hierarchy and collectivity are key features of Institutions. As humanly devised rules and regulations, institutions are interlinked and formalized in hierarchical manner. In case they institutions are analyzed in their task environment, they are often interlinked and embedded in each other (Ostrom, 1990). Highlighting the sequentially nested nature if rules, Ostrom (1990) explained that “collective-choice rules are derived from constitutional-choice rules and the operational-choice rules are also derived from the collective-choice rules” within the hierarchical system (Ostrom, 1990).

In another dimension, they are viewed as entities that are subjective. And some scholars assert that institutions appeal to our psychological senses and

thereby making them quite subjective model for analyzing individual and institutional change (North, 1993). Nevertheless, the subjectivity of an institutional framework does not in any means that they cannot be analyzed through an objective lens. As Saleth and Dinar (2004) argued, considering where institutions originated, they can be regarded as subjective, they are more objective when viewed in terms of how they affect human behaviour.

2.1.4.5 The Role of Institutions

Recent works on institutional development tend to focus on the “importance of a particular set of institutions, namely, those that protect property rights and ensure that contracts are enforced” (Rodrik, 2004). They are “market-creating institutions since, in their absence, markets either do not exist or perform very poorly” (Rodrik & Subramanian, 2003). However, “long-run economic development requires more than just a boost to investment and entrepreneurship” (Lin & Nugent, 1995). It calls for some kind of institutional frameworks that are impartial and resilient enough to be able to face threatening internal and external shocks. Lin and Nugent (1995) have argued that institutions exist to economize. Thus, the extent to which individuals get the opportunity to advance their standard of living without necessarily making anyone else worse off, or without necessarily limiting the ability of others to achieve their own welfare.

2.1.4.6 Governance/Institutions: Measurement

Although the extant literature (see Acemoglu, Johnson, Robinson, & Thaicharoen, 2003; Rodrik, 2000) have highlighted the difficulty involved in measuring institutions due to data availability, scholars have extensively used indicators collected through surveys on governance indicators or institutions by international institutions such as ICRG – “international Country Risk Guide”- (Acemoglu et al., 2001; Hall & Jones, 1999). It should be noted monthly data are produced by such organizations on the effectiveness of institutions in 140 countries. While the political risk consists of “12 variables, financial risks measures 5 variables, and economic risk also measures 5 variables” (Acemoglu et al., 2001). Thus, the “ICRG risk assessments ensures that political information and financial and economic data are collected and converted into risk points for each variable” (Acemoglu et al., 2001).

Moreover, the “World Bank Worldwide Governance Indicators” (B. E. Kaufman, 2003) provide a global framework for institutional measure. It consists of “six aggregate indicators based on over 30 underlying data sources reporting the perceptions of governance of a large number of survey respondents and expert assessments worldwide” (Kaufman, 2003). The WGI is a database that catalogues opinions of citizens on the effectiveness of governance systems. The dataset is collected from large of international and local organizations as well as all research institutions. The composite indices are “measured from – 2.5 (low score) to 2.5 (high score)” showing good and bad governance respectively (Kaufman, 2003). Currently, WGI is the only dataset that embraces many countries and time series and there is no reliable alternative yet.

2.1.4.7 Institution and Development: Theoretical Linkages

This section looks at how the extant discourse on the nexus between institutional quality, “the economic growth” and broader development outcomes produced inconsistent results. The nexus between institutions and development has been a major issue in both industrialized and least as well as transitional economies. Similarly, the scholarship of criticality of institutional framework “over the last three decades have received” “policy makers”, and scholars. However, it is argued that due to the diversities in the level of income between societies, it is suspicious to conclude based only on the explanatory power of institutions (Presbitero, 2006). The institutional economists have identified two approaches on the extent to which institutions exert impact on development. First, some strand of argument asserts that democracy and other countervailing powers should be created to serve as checks on power of government should be created to means to protect private property rights. It is “contended that this institutional arrangement in place, it would trigger massive investment in human and physical capital, and thereby resulting in economic development” (Glaeser et al., 2004). Other strand of literature argues that for the need to start with the human and capital accumulation before any other process would follow. Whichever comes first – “either democracy enhancing or accumulation of human capital”, both early and recent institutional scholars found to have a positive effect on the “institutional quality and economic growth” (Aron, 2000; Glaeser et al., 2004).

An active body of extant literature interrogated the relationship between institutions and economic growth, with “gross domestic product (GDP) as the measure of development”. Most of these papers examine institutions and economic performance by employing alternative measure of institutions in cross-country analysis. Knack and Keefer noted that earlier scholars (see Barro, 1991; Gastil, 1993) tended to focus on data such as political stability, press freedom, and civil liberties as measure to secure property rights. It is noted that these measures could not offer an explanation on the extent to which “institutions affect economic growth”. Knack and Keefer, however, introduced new measures from “ICRG - Expropriation Risk, Rule of Law Repudiation of Contracts” by “Government Corruption in Government Quality of Bureaucracy and Business Environmental Risk Intelligence (BERI)”, “quality of government, corruption, bureaucratic quality” and the quality of infrastructure. These institutional measures were aggregated into a single variable. These studies suggest that in societies where private property rights are safeguarded by the institutions created, development is bound to occur since people will be motivated to invest more. This is consistent with other findings that suggest that economic growth determined private “property rights”, efficiency of bureaucracy, “rule of law”, and predictable political system (De Haan, 2007).

Hall and Jones (1999) conducted an empirical study to ascertain income diversities between and among countries. Drawing insight from the work of institutional variables such as social infrastructure was employed as predictors. They found that institutions and government policies (social infrastructure) exert independent effect on capital accumulation, productivity, and therefore stimulates overall “output per worker” (Hall & Jones, 1999). Similarly, Acemoglu et al. (2001) conducted a disturbing study that exploited the “mortality rates” of early “European Colonialists to estimate the effect of institutions on economic growth”. This study by Acemoglu and his colleagues provided a compelling view on institution-economic growth literature that eventually resulted in phrases such as “institution rule” and “institution trumps”. They argued that Europeans created different institutions in their former colonies depending on whether the place was conducive for settlement or not. Countries that were exposed to extractive institutions have grieved for decades and have become and stay poor, and evidence abounds from large parts of Latin America,

Africa, and parts of Asia (Acemoglu, Johnson, & Robinson, 2002). Moreover, Rodrik, Subramanian, and Trebbi (2004) estimated the effects of “institutions, geography, and integration on economic growth”. In the said study, institution was proxied by rule of law index, geography was proxied by the distance from the equator, and integration was represented by log openness. Also, log “European settler mortality, fraction of the population speaking other European language, and the fraction of the population speaking English”, and constructed openness were used as the instrumental variables. Their findings suggest that institutions perform far beyond other predictors. They reported “that once institutions were controlled for, geography” represented by the distance from the equator had very weak direct effect on economic growth. They indicated that geography only had a strong indirect impact through institutions. It was also reported “that once institutions are controlled, integration had no effect on economic growth”. These findings are in sync with (Easterly & Levine, 2003) who found that geography affects development only through institutions. Thus, there is no evidence that geography affects development directly or do any policy affect development once institutions are controlled for. At best, geography only determines the quality of institutions. Drawing evidence from the European context (Seputiene & Skuncikiene, 2011), examined the nexus between institutions, geography, and integration on the economic performance. The author found a “significant positive relationship between institutions and the level of a country’s income” (Seputiene & Skuncikiene, 2011). This result is consistent with the governance or institutional hypothesis.

Additionally, institution-based predictors like the level of democracy has been noted to exert effect on economic growth. For example, using Bayesian model, Próchniak and Witkowski (2013) conclude that freedom in an economic predicts economic development in the European Union. Similarly, previous studies have found that institutional diversities accounted for about 75% of the diversities in growth among 153 between the period 1994-2009 (Próchniak & Witkowski, 2013). However, evidence abounds that “institutions tend to have perverse results on economic growth”. This strand of scholarship tends to oppose the linear “relationship between institutions and economic development”. It is argued exasperatedly that it is the growth that improves institutions and not the institutions causing growth. Glaeser

et al. (2004) contend that the widely held notion that institutions trigger economic growth is false. To prove this point, evidence from “1960-2000” found that “institutions” had no effect on “economic growth”. In another development, some scholars (Rivera-Batiz, 2002) observed that quality of governance exerts independent “effect on economic development”. These discussions suggest that institutions have mixed results on economic growth.

1) Theories of Institutions

Political scientist, Sociologists, historians and Economists have delineated three theories of “institutional development”. However, La Porta, Lopez-de-Silanes, Shleifer, Vishny, and Organization (1999) argue that scholars tend to pursue their own theories without paying much attention to the alternatives. These theories highlight different reasons why institutions behave the way they do. Thus, economic or social efficiency argument of institutions is rooted in economic theories, redistributive argument advanced is by political theories, and the social diversities and beliefs is put forth by the cultural theories (La Porta et al., 1999). These theories resonate with the basic assumptions of economics in the sense that political actors pursue their selfish interest in the light of their beliefs.

2) Economic Theories of Institutions

Economics theories of institutions agree that institutions are created when their social benefits exceed social cost (Demsetz, 1974). For example, a government protects property rights when the benefits set to accrue from such protection exceed the costs. Scholars of economics theories of institutions hold the assumption that economic growth depends largely on the extent to which private properties are protected by the state since such move is likely to erect the right platform investment to thrive (Acemoglu, 2002). The nuances of how private property influence development is rooted in the view that when private properties are safeguarded there is incentive for agents to do business which is likely to spur growth (Angeles, 2011). The nuances of what private property influences development in in the view that when private properties are safeguarded, there is an incentive for agents to do business where is likely to spur growth (Angeles, 2011). And they may refrain from investing in an environment where they are not too sure that their capital would be protected. The fear is that some sovereign actors may “alter property rights for

their own benefit”, and this would lower the “expected returns from investment, lower the incentive to invest”, and consequently lower the level of economic growth (Angeles, 2011). There is strong evidence to believe that studies have consistently focused on this economic angle of institutions in the view to protecting property rights as prerequisite to “achieving economic growth” (Acemoglu et al., 2001; William Easterly, 2001; Hall & Jones, 1999; Rodrik et al., 2004). Rodrik (2005) delineated several types of economic institutions: 1) those that support neoliberal market orientation - obedience to the tenets of rule of law, contract enforcement, and safeguarding individual properties; 2) market-regulating institutions (defines rules for the functioning of markets, e.g., regulatory institutions), 3) market-stabilizing institutions (ensure macroeconomic stability and crises prevention), and 3) institutions that legitimize the market interactions – those that ensure peoples’ social insurance and protection.

3) Cultural/Informal Theories of Institutions

Cultural theories of institutions assume that some “societies form beliefs and ideas” that can promote growth and development, while others do not (La Porta et al., 1999). Whereas some of these beliefs and ideas are not verifiable - beliefs that punishments are rewards after death, although others are verifiable, they are proven to be false – certain racist and anti-Semitic beliefs. Some other cultural beliefs that are deemed to be inimical to development is rooted in collective action problem where it is believed you don’t have to cooperate in a collective action if your neighbor refuses to do so. Recently, two famous scholars made seminal contribution to the cultural theories of institutions. Putnam (1990) theory argues that trust in strangers facilitate collective action, which he views as essential for the “provision of public goods”. For example, Catholic Church is viewed to have adverse effect on trust due to the characteristics of vertical bonds of authority. Similarly, (Landes, 1998) asserted that during the period of “economic take-off of protestant churches, Catholic and Muslim countries” had a culture of intolerance, xenophobia, and close-mindedness that retarded their development.

4) Political Theories of Institutions: From Political Economy Perspective

This group of institutions posits that institutions and policies are shaped by the ruling coalition who seek to satisfy themselves (La Porta et al., 1999). They are usually the rules which govern the political game (Persson & Tabellini, 2006). Modern societies are more complex and allow redistributive policies to be shaped by sovereigns, bureaucrats, ethnic groups and the religion (La Porta et al., 1999). Political institutions do not only set electoral rules to guide the behaviors of players in the political arena, they also establish procedures for decision-making. Although there would be turnovers of political actors, policies would generally reflect the interest of “political institutions that produced” them (Persson & Tabellini, 2006). Political institutions result in the distributive politics that is supposed to ensure that there is an even distribution of national wealth to all segments of the population. Vollmer and Ziegler (2009, p. 8) argue that the ability to match society’s and individual needs with an adequate redistribution scheme and an appropriate public provision of goods and services provides a more direct link between political institutions and human development than property rights protection. In the broad sense, political economy perspective opines that political actors behave like rational consumers in the market who seek to maximize their utility by taking rational political decisions that guarantee political optimality (North, 1990).

2.2 Defining the Term Governance

It is worthy of note that “promoting human development is not just a social, economic and technological challenge; it is also an institutional and political challenge” (United Nations Development Programme, 2014). The United Nations General Assembly reaffirmed “good governance as a foundation for sustainable development” (United Nations Development Programme, 2014). The resolution acknowledged thus: “democracy, good governance and rule of law at national and international levels, as well as an enabling environment, are essential for sustainable development including sustained and inclusive economic growth, social development, environmental protection and the eradication of poverty and hunger”(United Nations Development Programme, 2014). Nevertheless, there is lack of consensus both in theory and practice about the dimension of the governance system that is capable of

facilitating the desired development outcomes. Admittedly, Doornbos (2001) contends that ‘governance’ connotes different things by different researchers, leaving no end without controversy.

To this end, governance has been conceptualized variously by scholars and practitioners. It should be noted that governance was first conceptualized by the World Bank as the use of state power to stir the affairs of a polity. After several critiques based on the narrow view that the usage of the term in this case is merely the exercise of state power, the Bank further defined governance as “the manner in which power is exercised in the management of a country’s economic and social resources for development” World Bank (1992, p. 1). In a documentary survey of the World Bank’s annual reports on institutional effectiveness in developing countries, the conceptualization of governance remains almost unchanged thus: “the manner in which public officials and institutions acquire and exercise the authority to shape public policy and provide public goods and services”(Fares et al., 2007, p. 1). This conceptualization is essentially important because the meaning of governance has been broadened to reflect the resultant effect of the exercise of state power.

Kaufmann, Kraay, and Mastruzzi (2008, p. 7) provided an elaborate conceptualization of governance – “as the traditions and institutions by which authority in a country is exercised. It captures the process by which governments are selected, monitored and replaced; the capacity of the government to effectively formulate and implement sound policies; and the respect of citizens and the state for the institutions that govern economic and social interactions among them.” Other scholars (eg. Fukuyama, 2013, p. 8) conceived governance as “government’s ability to make and enforce rules, and to deliver services, regardless of whether that government is democratic or not”. It is important to note that Fukuyama’s conceptualization establishes a theoretical linkage between governance and institutions. However, the 2017 World Development Report put forward a more comprehensive view of governance – interaction between state and nonstate actors towards effective policy formulation and implementation process. The report asserts that the contemporary development challenges confronting third world countries *inter alia* poor delivery of public goods, protracted conflicts, bad governance, snail pace growth rate, corruption, poor environmental management etcetera.

The operationalization of ‘governance’ and ‘government’ has also become a contested issue in the extant discourse. However, B. C. Smith (2007) has argued that governance encompasses government plus other things like public policies, institutions, economic relations, and activities of non-state actors. For instance, the World Bank and the UNDP views governance as the “manner in which a country’s social and economic resources are managed and power is distributed. For donors, governance captures all institutions and organization in society from the family to the state” (B. C. Smith, 2007).

Governance was first used in 1989 by the World Bank in attempt to assess the economic condition of African countries. The World Bank delineated the term “crisis of governance” emphasizing the importance of “institutional reform and a more efficient public sector”. The era marked a paradigm shift towards ‘good’ governance practices where the public service is efficient, where an independent and reliable judicial system exist, and an administration that is responsible and accountable to its people. Although the Bank initially tried to avoid the frequent use of ‘good’ in connection with governance on condition of subjectivity, it inadvertently became a buzzword and a criterion used by most international donor agencies for remitting aid to develop economies. Although good governance is a term without boundaries, normatively, its menu consists of institutional reforms and the government’s capacity to implement sound policies to improve “schooling and public health, public security and national defense” as well as other development outcomes (Fukuyama, 2013).

2.2.1 Governance and Development: Theoretical Linkages

This section examines the theoretical basis on which governance can be linked to sustainable development. Scholars (Grindle, 2011; Khan, 2007) have established a strong relationship between good governance practices and improvement in GDP growth. Prevalent explanations have attributed an improvement in human development outcomes to good governance practices (Kwon & Kim, 2014; Makuta & O’Hare, 2015; Ortega, Sanjuán, & Casquero, 2017). In recent times, some emerging studies appear to show fidelity to the impact of governance on other broader development outcomes such as sustainable environmental norms and practices ((Bernauer & Koubi, 2009; Oyefara, 2013; Welsch, 2004). In effect, the independent

effect of good governance on sustainable growth – economic, social and environmental outcomes have been considered in the recent scholarship.

It is argued that good governance like improvements in regulatory quality tends to provide “firms with incentives to invest productive activities such as the accumulation of capital and the development of new goods and production technologies” (A. Sen, 2004). The idea is premised on the New Institutional Theory or transaction cost theory (North, 1995; Olson, 1971) that economic development is not only dependent on human development, but also inspired by many legal norms and good governance practices. It places much emphasis on rule of law that may promote rule-based stability and effective governance architecture. Thus, the practice of rule of law is to enforce contracts and property rights by a competent court of jurisdiction. Good governance increases trust and cooperation between the citizens, the firms, and the governance (Olson, 1971). It also takes root from the “endogenous growth theory” that attempts to incorporate the theory of institution and good governance “into the theory of economic growth” (Peter Howitt, 2010). In the contrary, some scholars (eg. Dani Rodrik, 2008) argued that countries such as Cambodia, Vietnam and China have had economic growth but have often perform poorly with regard to good governance practices.

Many empirical studies have examined the impact of good governance on social development. Dondeynaz, Moreno, and Lorente (2012) found that government effectiveness correlate with water supply access, basic sanitation access, and gross school enrolment. However, Wolf (2016) found that good governance had a limited “effect on access to water and sanitation” in Africa. Although the results are mixed, some scholars (Charron, Dijkstra, & Lapuente, 2015) assert that lack of effective governance system may result in the underperformance or inefficient provision of these services.

Woo (2018) examines the “effect of good governance or quality of governance on the happiness of the citizens to find out whether the quality of governance leads to happiness universally in both rich and poor countries”. With a multi-level analysis of “happiness data from the World Value Survey, the study concludes that good governance enhances the level of happiness only in the higher-income countries” (Woo, 2018). The finding challenges the conventional view that efficient government

are of important for both rich and poorer countries. Woo (2018) findings agree with Kwon and Kim (2014) who also concluded that “good governance assuages poverty only developing. This suggests that good governance only seem to work in high-income countries compared to least developed countries”. However, Ott (2010) concludes that “people tend to live happier in a more governed nation and this is partly due to the causal effect of good governance on happiness”. Ott (2010) conclusion seems to contradict that of Woo’s as the findings suggest that the nexus between “good governance and the level of happiness has nothing to do with income - either high income, middle-income or low income- but has more to do with the extent to which a country is committed to quality governance practices”. Ott’s study found that “good governance has effect on the level of citizens’ happiness in all regions of the world” (Ott, 2010). These striking observation needs further empirical analysis especially, in sub-Saharan Africa where the World Bank and IMF have made access to aid conditional on good governance practices.

Kwon and Kim (2014) examined the nexus between good governance and poverty reduction. It should be noted that existing studies have not established any support poverty can be minimized given a good governance environment. For Kwon and Kim, good governance tends to exert negative impact on poverty in middle-income countries. This means that good governance has no effect in least developed context. They recommended that policies that aimed at directly addressing poverty should be vigorously pursued rather than indirect instruments. Also, the need to urgently address social exclusion is essential for poverty reduction effort in transitional economies. This shows that good governance produces mixed results on poverty and inequality.

In a study conducted to examine the role of government effectiveness and the income inequality on health outcomes, Ortega et al. (2017) conclude that countries that are able to “bridge income disparity with a very good public bureaucracy may need little health inputs to achieve health-related outcomes than countries with higher inequality and worse government effectiveness”. Makuta and O’Hare (2015) also found that countries tend to invest more in health outcomes if high quality of governance exists compared to those with bad governance environments. This finding needs further empirical research to confirm the hypothesis. They added that in ‘countries with higher quality of governance – the overall elasticity of health spending

with regards to infant mortality is between -0.17 and -0.19 while in countries with low quality of governance, the infant mortality rate is about -0.09". Similarly, Rosenberg (2018) concludes that good governance is crucial for determining child mortality of neonatal and post-neonatal categories.

Farag et al. (2013) assessed the nexus between the health spending of a country and its effect on infant and child mortality with good governance as a mediating variable. They find that health expenditure has the potential to reduce "infant mortality with an elasticity of 0.13 to 0.33 and under-five mortality with an elasticity of 0.15 to 0.38". They concluded that although health spending has effect on child mortality rate, the "size of the coefficient" depends, to some extent, "on the level of good governance achieved by the country". This finding is penetrative because it suggests that good governance increases the effectiveness of health spending. However, further empirical studies are needed to appropriately gauge the effect of good governance on sustainable health outcomes.

2.2.2 Dimensions of Governance and Development: Empirical Evidence

One dimension of governance is that it is theoretically link to a democratically elected government. However, some scholars strike a difference between the two: thus, while democracy connotes the rightfulness and general acceptability of the government, the extent to which the government is effective, how the government respect the rights and freedoms of the people, and generally rules in accordance with the dictates of the constitution lies at the heart of good governance (Santiso, 2001). A more penetrative view is that the quality of governance or good governance is contingent on the depth of its democratic content. A democratic government draws its legitimacy from the people and may be concerned about policies that improve socio-economic development (Keping, 2018). For example, Sen (2001) has demonstrated in his work that under a democracy, famine could thrive compared to non-democracies. He concludes that the ability to hold the government accountable through electoral processes tends to make a "democratic government more responsive to the needs of a majority of the population". Democracy increases citizens' participation, protect rights and freedoms which is absent in the autocratic governments. As a consequence,

the principles of good governance can be practically institutionalized arguably within a democratic polity (Santiso, 2001).

Corruption is yet a common dimension by which good governance can be theorized (Wolf, 2016). Thus, corruption tends to impede efficient use of state resources and may hinder investment in critical sectors of the economy such as health (Knoll & Zloczynski, 2012). “Democratic institutions lacking in integrity weakens their credibility and accountability” (Knoll & Zloczynski, 2012), thereby resulting in poor delivery of public services. To this end, transparency, participation, and accountability are important dimension of good governance (González et al., 2017). A more transparent, accountable, and participatory governance in the absence of corruption is likely to have effect on sustainable health outcomes like infant mortality. Rajkumar and Swaroop (2008) found that “health spending reduces the child mortality rates in countries with good governance by using corruption perception and bureaucratic” indexes are proxy variables for good governance.

Political stability in the absence of violence is also an essential dimension of good governance (Ndikumana & Pickbourn, 2017). Political instability occurs when there are conflict and violence in the country. According to (B. O. Rothstein & Teorell, 2008), civil war, violent conflict are consequences of inefficient governance system. Thus, political instability hinders effectiveness of the government, resulting in low quality of public services. It is argued that politically-related instability as well as insecurity tend to destroy the fortunes of many developing. Such ‘conflict traps’ hinder poor countries from achieving broader development outcomes (Collier, 2007).

Another theoretical stream of scholarship examines government effectiveness or quality of government or institutional quality as essential dimension of good governance (Charron et al., 2015; Davis, 2017). It measures the ability of the government to improve the living conditions of the people through quality provision of services. Thus, government effectiveness is the output measure of how government improves the lives of the people through quality policy instruments (B. Rothstein, Charron, & Lapuente, 2013). It is argued that inefficiency in resources utilization and other forms of misallocation leading to inefficient delivery of health services could be explained by “institutional inefficiencies such as leakage in public spending and weak institutional capacity” (Hilaire, 2016). Using cancer mortality rate from the dataset of

26 Central and Eastern European countries between 1980-2003, Radin (2008) found that World Bank aid has no effect on cancer mortality, but only has impact when it serves as an interactive term with institutional effectiveness. Their findings corroborate the World Health Report stating that “effective governance is the key to improving efficiency and equity.

Scholars (eg. Gough, 2004) have argued that the non-existence of effective state institutions in developing countries tends to hinder development. They posit that the ability to spur the need development is predicated on the extent to which institutions are created to provide the right environment for development to take place. This stream of scholarship is well articulated by the international donor agencies and have devised their conception of good governance towards the development of sound policies (Kwon & Kim, 2014). The UNDP conceptualized “equity and the rule of law”, “transparency”, “accountability, and participation” as essential dimensions of “good governance” (United Nations Development Programme, 1995). The resolution 66/288 of the UN General Assembly posits that “democracy, good governance, and the rule of law at the national and international levels, as well as an enabling environment, are essential for sustainable development including sustained and inclusive economic growth, social development, environment protection and the eradication of poverty and hunger”(United Nations Development Programme, 1995).

2.3 Democracy: What is it?

The Universal Declaration on Democracy notes that democracy is the government by a majority of people despite their geographical location. It allows the people to “peacefully and regularly oust inept, inefficient, corrupt government administrations, while allowing people to keep more efficient, successful regimes, thus tending to make the quality of governance on average higher in the long run” (Rivera-Batiz, 2002, p. 226). Knutsen (2013) contends in an environment where a majority of people are allowed to “have a say in the decisions that affect their daily lives” enables democracy to thrive. Generally speaking, in a polity where elected politicians are responsive to the people, where people are given alternative choices

through competitive multiparty system in free, faire, credible, and transparent electoral process, and where a “majority of the people participate in the decision making processes” is regarded as a democracy (D. Acemoglu & Robinson, 2006). It should be noted that the constitutional limitation on the powers of the elected representatives is believed to be a distinguishing feature of a democratic society. However, in theory, extant scholarship views a democracy as a supra-structure or a foundation for nurturing and nursing other institutions that can guarantee a rule-based stability (D. Acemoglu & Robinson, 2006). For Knutsen (2013), discretionary powers are limited by the advent of democracy, which eventually channel their survival-oriented behaviour in favour of the growth-oriented economic policies that benefit broader population as well as the national economy. Eventually, this theoretically explains why a democracy is perceived as a political system or regime type that can be responsive to the needs of the people compared to autocracies or non-democracies where there exist little or no institutional constraints on the actions of leaders as often the case in some new democracies in Africa (Knutsen, 2013). In sum, these conceptualizations mean that democracy is rooted in two core beliefs: peoples’ participation and accountability.

2.3.1 Theoretical Arguments in Favor of Democracy

Advocates have put forward theoretical basis for which a democracy can be linked to development: 1) “protection of property rights, 2) capable of ensuring political stability, 3) accumulation of human capital, 4) promoting innovation and technological progress” (D. Acemoglu & Robinson, 2006). The first is that under a democracy, the property of individuals can be protected, and when people are guaranteed that their properties can be protected by the state and its institutions, they tend to work and invest more in an economy, “eventually leads to economic growth”. The right to own a property is the one enshrined in the constitution of the state and cannot be unjustifiably denied by state institutions (Ghardallou & Sridi, 2019). D. Acemoglu and Robinson (2006) assert that the ability to safeguard the private properties of individuals and businesses is key for achieving economic growth and ensure an “improvement in the standard of living of a majority of the population”. This means that protection of private property can be certain arguably in a political

system or a polity where the powers of the officialdom or political elites are restrained by a well-established institutional arrangement such as in a democracy. Political stability is, however, another means by which a democracy may influence the growth process (Apergis, 2017). Scholars contend that democracy reduces the risk of political instability by making avenues available within an established institutional framework for people to express their views unhindered. These inclusive platforms provide a window for people to get their issues resolved through the an impartial court system without conflict or violence (Ghardallou & Sridi, 2019). In fact, unstable political atmosphere tends to impede investment and reduces growth. It leads to a clouded environment where potential investors are discouraged due to an increased uncertainty and politically tensed atmosphere (Ghardallou & Sridi, 2019). Consequently, democratic institutions allow for better political stability due to a rule-based stability that engenders impartial and transparent application of rules. The third channel is the accumulation of human capital. Thus, because a democratic government is perceived to be responsive to the demands of a majority of the people through median voter, policies that advances human capital are likely to be pursued through an investment in education and health (Baum & Lake, 2003). The last channel is the ability to promote innovation and technological progress. Thus, organizations that encourage democratic style of leader or decentralization of power are receptive to new ideas and projects compared to centralized or autocratic leadership. The theoretical logic of this strand of argument is rooted in the “belief that popular participation in government empowers ordinary citizens, including the very poor – and should as result, lead governments to be more accountable” to the interest of a majority of the population (Gerring, Thacker, & Alfaro, 2012).

2.3.2 Theoretical Arguments Against Democracy

However, another School of thought holds the “belief that dictators are less open to pressure from self-interested pressure groups and so are better able, should they choose to focus on national welfare” (Rivera-Batiz, 2002). For instance, (Rivera-Batiz, 2002, p. 226) contends that the “proliferation of interest groups lobbying for power or for rents under democratic institutions may lead to policy gridlock, preventing the major decisions that are required in the development process”. The

“former Prime Minister of Singapore – Lee Kuan Yew” is most popular of this School of thought. He argued that the economic prosperity in Singapore today – one of the most outstanding over the last three decades, would not have been achieved if the political environment was not restricted in a manner that helped dealt with counter-productive dissenting views. Similarly, the unprecedented economic growth in the Communist China today through market reforms has been contrasted sharply from some democratic countries with distorted reforms as occurred in Russia. The issue is that elections can be manipulated to favour unpopular party or regime, and the political system can be captured by wealthy individuals or parties leading to what is commonly refer to as electoral autocracies as experienced in many developing societies (Rivera-Batiz, 2002). On the contrary, some scholars have argued that non-democracies are capable of promoting long-term economic prosperity through a more efficient policies that encourage optimal economic decisions (Wade, 2010). Thus, by dispelling dissenting views, leaders in non-democracies are able to plan and forecast long-term development priorities in a manner that build sustainable growth and create opportunities for the people as occurred in China in recent times. It is argued that democratic government tends to pursue policies that are short-term in outlook to increase their chances of re-election. In such circumstances, democratic governments tend to adopt populist policies to serve the interests of individuals and groups. Another argument advanced against democracy relates to distortionary effect of redistribution.

2.3.3 Economic Growth and Democracy

The nexus between democracy and economic growth has attracted large scholarly attention in recent years. The above theoretical arguments suggest that the question of whether a democracy promotes broad development outcomes or not remains an empirical one. Studies are divided into two positions. While the first strand of argument asserts that democracy is beneficial to growth, the second contends that democracy rather reduces growth or does not explain growth at all. Accordingly, while some “studies find positive effect of democracy on growth, some find a negative effect, and some find no effect” (Lake & Baum, 2001). There is, however, strong theoretical basis to conclude that democracy is both an impediment

and facilitator of growth (Baum & Lake, 2003). For example, (Leblang, 1997) assessed the effect of democracy and observed that GDP increases during the initial stage of democracy. In a sharp contrast to the study conducted by Rivera-Batiz (2002) and Leblang (1997) it is argued exasperatedly by (Feng, 2001) that democracy exerts both “direct and indirect impact on growth. Clearly, the impact of democracy seems to produce mixed reactions. Plümper *and* Martin (2003) examined how democracy impact growth within the period of 1965-1995 in eighty-three countries. Thus, a nonlinear relationship was observed with economic development within a study the interrogated a sample of 100 countries from 1965-1995. On the other hand, other institutional inputs like the quality of bureaucracy revealed a positive linear relationship on economic development. Employing a literature survey method on the nexus between democracy and economic growth, (Gasiorowski, 2000) reported that three empirical studies found a positive relation, three also found a negative relation, and ten empirical studies were inconclusive.

Barro (1996) observed that at a low “level of democracy, more democracy” tends to stimulate growth, however, democracy was deemed harmful to growth at high level of democracy. He explained that the connection between democracy and other determinant like human capital was critical for growth. In a related study where confounding factors were controlled for, “there does not seem to be a strong relationship between democracy and growth” (D Rodrik, 1997, p. 34). More recent studies also found conflicting facts. For example, (Baum & Lake, 2003) conducted a study involving “128 countries and find that democracy has no significant direct effect on growth”. However, Tavares and Wacziarg (2001) find that democracy increases the growth of an economy. Acemoglu, Naidu, Restrepo, and Robinson (2019) find that democracy increased “future GDP by encouraging investment, increasing schooling, improving public good provision, and reducing social unrest” (Baum & Lake, 2003). They, however, “find little support for the view that democracy is a constraint on economic growth for less developed economies” (Rodrik, 1997). Eberhardt (2019) revisited the study conducted by Acemoglu et al. (2019) and find a robust positive long-run effect of democracy, but only around half the magnitude of that found by Acemoglu and his colleagues. The empirical studies present very little consensus. Although the scholarship on democracy and economic

growth has reached an unexpected level, the results are sporadic and inconclusive. Therefore, more empirical studies are required to shed light on the democracy and development nexus given that the potential benefits of democracy have been much touted in developing countries.

2.3.4 Democracy and Human Development: Empirical evidence

The idea of assessing human well-being by exclusively using economic indices has been strongly opposed (Constanza et al., 2007). The trepidation on the use of economic measures is based on the reason that it is not possible to provide comprehensive “information about the situation of less advantaged people”, if non-monetary aspects of human well-being (education and health) are excluded in the “analysis of the relationship between democracy and economic growth” (A. Sen, 1991). The notion of Human Development as posited in the work of Sen – encapsulates multidimensionality of the aspects of human life and allows researchers and practitioners to overcome limits of ‘development’ as used in economic sense. The logic through which a democratic political regime leads to higher human development is intrinsic to the characteristics of democracy. The popular logic that democratic participation in governance “empowers ordinary citizens – including the poor” to push governments to be more accountable to their interest (Baum & Lake, 2003). Consequently, policymakers are pushed to adopt policies that would engender a more equal access to “public services and consequently lead” to an improvement in the quality of human life (A. Sen, 1991).

Many empirical studies claim that democracies improve human development (Przeworski, Alvarez, Alvarez, Cheibub, & Limongi, 2000; Lake & Baum, 2001). This claim resonates with the core belief of political economy model which posits that democracies produce more public goods, and more income redistribution, than non-democracies (Boix & Stokes, 2003). Some groups of scholars think that democracies tend to spend more on public goods because they are forced by the electoral process, whereas autocrats face no such constraint (Deacon, 2003). Another set of scholars contend that is because democratic governments have a wider range of supporters to appease, which induces them to expend more on public goods (see Ghobarah, Huth, & Russett, 2004)). Perhaps, a more influential view of this argument is the one posited

by Meltzer and Richard (1981) on median voter theorem. The “median voter model argues that democracy brings more people with below -average incomes to the polls, and they collectively force the government to redistribute income towards the poor and marginalized groups” (Meltzer & Richard, 1981). However, if democracies spend more money on public services than nondemocracies, why do they perform poor on human well-being?

Nonetheless, recent scholars have opposed this idea, and argued that democracy seems to produce mixed results on social welfare (Gauri & Khaleghian, 2002; Jacobsen, 2015). For instance, Ross (2006) argues that there is no evidence that the injection of huge financial resources under democracies actually reaches the poor or produces better social outcomes. Scholars contend that there is no positive relationship between regime type and various aspects of human development, and where it is found to exist, it is not robust (Ross, 2006; Shandra, Nobles, London, Williamson, & medicine, 2004). Gerring et al. (2012) “argue that improvements in human development over the twentieth century have occurred under the authoritarian rule – example, East Asian and Communist countries), whereas many democratic societies in developing countries have been characterized by persistent disparities in wealth and high levels of poverty as exemplified in India, sub-Saharan Africa, and many Latin American countries”. As a consequence, some scholars conclude that “autocratic regimes are more efficient systems to tackle market failures, stimulate economic growth and eventually improve human development” (Acemoglu et al., 2002; Acemoglu & Robinson, 2008). In line with argument, Ross (2006) finds that though “democracies spend more on health and education, it has little or no effect on human development (infant and child mortality rates) accrue to middle and upper-income groups”.

2.4 Meaning of Globalization

The term ‘*globalization*’ connotes “different things to different people”. According to Haque (2002) the extent of causes and the intensity of the consequences of various dimensions of globalization are not without controversy in extant literature. In one breath, it stands for interdependence and interconnectedness between and

among states (Choudhary, 2007). From this perspective, globalization connotes a gamut of issues whose consequences transcend national borders including financial crises, environmental problems and nuclear threats (Bakari, 2013). According to Caselli (2012) globalization is misconstrued by some scholars and analysts to be synonymous to concepts such as westernization, liberalization, internalization, and universalization. In another breadth, the term is used to describe the transmission of global cultures, norms, and values (McLaren & Nature, 2003). Very often, globalization is conceptualized entirely as an economic phenomenon that involves “free movement of people as well as goods and services” (Kroll & Robbins, 2008). Economically, it is regarded as a process which is underpinned by international trade liberalization, free market economy, and the activities of multinational corporations. Consequently, it is widely perceived that globalization is yet another ploy by developed countries to exert dominance over developing countries through international organizations such as “International Monetary Fund (IMF), the World Trade Organization (WTO)”, and “World Economic Forum (WEF)”. Nevertheless, the transmission of ideas through the growth of “Information and Communication Technology (ICT)”, the use of internet connectivity and telephony as well as its concomitant cultural influences also represent important part globalization (Byrne & Glover, 2002).

Despite these diversities, Norris (2000, p. 45) summarily defined globalization as the “process of creating networks of connections among actors at inter-or-intra-continental distances, mediated through a variety of flows including people, information and ideas, capital and goods. Globalization is a phenomenon that erodes national boundaries, integrates national economies, cultures, technologies and governance, and produces complex relations of mutual interdependence”. Haque (2002, p. 105) also defined globalization as a “process of integrating nations, societies, peoples, and institutions in the economic, political cultural, and intellectual domains through means such as capital, production, exchange, and information owned and controlled unequally by various states, classes, groups, and individuals”. The analysis of Norris (2000) and Haque (2002) definitions suggests several elements: globalization is more economic liberalization, it integrates nations, people and goods and services; and creates inequality between and among states, classes, groups, and

individuals. To this end, Axel Dreher (2006) defines “three dimensions of globalization: first, economic globalization (in terms of transmission of economic activities such as goods and services), second, social globalization (describes the dissemination of ideas, information, and people), and third, political globalization (refers to the diffusion of government policies)”.

2.4.1 Theories of Globalization and Environmental Quality

It must be emphasized that this study defines globalization following the works of Norris (2000) and Haque (2002). Specifically, the study follows the work of Axel Dreher (2006) and defines globalization with respect to three dimensions: economic, social and political globalization. Consequently, some theories explain the nexus between globalization and the environment.

2.4.2 The Theory of Neoliberalism

The theory of neoliberalism is underpinned by the principles of the invisible hand of demand and supply forces (market economy) and minimal state intervention (Bakari, 2013). The theory gained traction since 1970s and its proponents hold the belief that the world of international cooperation and an increased prosperity is what the globalization promises for which reason countries ought to remove barriers to free trade (Frawley, Finkbeiner, & Crowder, 2019). The globalization of neoliberal perspective rejects the idea of state protectionism and favors more premarket policies such as deregulation and liberalization (Haque, 2002). Neoliberal thinking is an obvious driver of economic globalization that places much emphasis on private property protection as well as the accumulation of capital far above other principles like social equity. The intensification of neoliberal ideas means that the state should be subsumed under global market economy and the natural resources should be exploited to advance economic activities (Byrne, Glover, & Alrøe, 2006). The underlying idea is that as the economy grows, cleaner technologies would be adopted through trade resulting in environmental quality. They argue that free trade provides the opportunities for the creation of private wealth and raises “government tax revenues which can then be invested in ensuring the quality of the environment” (Bhagwati & Panagariya, 1996; Reed, 2002). The neoliberal theory clearly resonates

very well with the “Environmental Kuznets Curve (EKC) hypothesis which posits an inverted-U-shape relationship between economic growth and different pollutants, evidencing that environmental pressure increases up to certain level as income goes up, and decreases afterwards” (Dinda, 2004). The underpinning idea of this hypothesis is that economic growth at the initial stage of development tends to correlate positively with environmental deterioration resulting in higher emissions of carbon dioxide (Alam, Murad, Noman, & Ozturk, 2016). Thus, the “rapid growth inevitably results in greater use of natural resources and emission of pollutants, which in turn put more pressure on environment”. However, as the economic grows, the pollution rate arguably reduces because people with high income prefer environmental quality, and the situation improves in the long run (Huang, Lee, & Wu, 2008).

More importantly, some scholars have raised legitimate questions with regards to the wisdom of neoliberalism in the development discourse of the 21st Century. In his recent work, *“the end of neoliberalism and rebirth of history”* - the Nobel Prize-winning economist, Joseph Stiglitz (2019a) argues that the underpinning assumption of neoliberal doctrines in the free market economy particularly as the “surest way to share prosperity is on life-support in the 21st development paradigm” (p. 1). Subsequently, he contends that neoliberal ideas are untenable and must be “pronounced dead and buried” (Joseph Stiglitz, 2019b). Stiglitz expresses the view that “there is no magic bullet that can reverse the damage done by decades of neoliberalism”. However, what is next for both developed and developing world is for policy makers and national leaders to remain “resolute in combating problems like excessive market power and inequality” that bring mistrust and discontent within and among countries and thereby threatening the attainment of the current United Nations Sustainable Development Goals (SDGs). What is next is for national leaders to invest in education and research as important antecedents of true wealth creation. He argued that public policies and programmes must be people-centred to ensure that no one is left behind as the nation progresses and no citizen is denied the basic requisites of a decent life. For him, access to work and living wage, adequate housing and healthcare, secured retirement, economic security, and a quality education for children should be the magic bullets and not merely free market economy as espoused by

neoliberalism. It must be emphasized that the arguments raised by Stiglitz are central for the achievement of SDGs by 2030 because the ideas seek to eliminate the causes of inequality, environmental degradation, and political acrimony, which have the potential of leading to undesirable outcomes. In his persuasive work, *“People, Power, and Profits: Progressive Capitalism for an Age of Discontent”*, Joseph Stiglitz (2019b) laments about the widening and deep-rooted inequality of all sorts engrained in American society. He points out how big companies and businesses or corporations with the help of the government have made wealth through exploitation of others and contributed significantly to widening inequality and slow economic growth. By distinguishing between wealth extraction and wealth creation, Stiglitz posits that process whereby one “individual takes wealth from others through one form of exploitation or another is wealth extraction whereas a true source of the wealth of a nation (wealth creation) lies in the creativity and productivity of the nation’s people and their productive interactions with each other, which are supported by inclusive institutions such as rule of law and systems of checks and balance” (Stiglitz, 2019c p. 24). Stiglitz, however, recommends what he calls “progressive capitalism”, which refers to a development paradigm that is adapted to American society, its culture and traditions (p. xiii -xiv). The thrust of Stiglitz’s argument is that the state should be rolled-back into the development debate for effective redistributive policies to take place rather than depending on free market economy. Consistent with this view, the empirical evidence from the recent work by Macharoenrungrueang (2018) has established in countries with the Asia-Pacific Economic Cooperation (APEC) that corruption tends to increase when governments encourage free market economy, suggesting that neoliberal policy is associated with higher levels of corruption. The author concludes that for corruption be curbed, neoliberal policy orientation should not be the magic bullet, but should entrench the development of “institutional quality in policy formulation and implementation along with peoples’ participation in institutional reforms”. It is, however, clear that people-centered development paradigm and state-led approach to development are key elements on Stiglitz and Macharoenrungrueang theses on neoliberalism.

2.4.3 The Theory of Ecological Modernization

The ecological modernization theory (EMT) is a variant of globalization theory which posits that the economic growth, technological development, industrialization, and capitalism are key stimulators of an environmental reform (York & Rosa, 2003). Contrary to the neoliberal theory, the EMT proposes the regulation of free trade (economic globalization) to safeguard ecosystem (Byrne & Glover, 2002). EMT rejects neoliberal ideas for several reasons: (1) free trade as an economic activity tend to compromise environment quality, (2) environmental improvement that may occur through free trade is due to the transfer of industries, pollution, destruction of natural resources to the extent that gains from economic growth cannot augment environmental damages, and (3) some ecosystems may be destroyed and cannot be replaced in the long-run either through technological innovation or institutional changes (Byrne & Glover, 2002). Thus, the theory assumes that policies meant for economic growth and environmental sustainability can be integrated to achieve a win-win situation (Berger, Flynn, Hines, & Johns, 2001). Thus, rather than seeing environment as a threat to economic development, the EMT views the implementation of environmental policies as essential ingredient that must be harnessed to achieve technological innovation. The EMT sees the environment and the economy as mutually reinforcing rather than opposing forces. The key features of EMT are: first, “ecological modernization as technological adjustment – which concerns employing technologies that yield beneficial environmental outcomes”. Second, EMT is seen as a “belief system that reflects an ideology that environmental quality is a precondition for long-term economic development”. Third, environmental protection should be framed within efficiency-oriented rather than as a cost in a monetary term.

2.4.4 Globalization and Economic Growth: Empirical Evidence

Axel Dreher (2006) examined the relationship between “globalization and economic growth”. The per capita GDP was used. The paper found “that globalization was positively correlated with economic growth around the world”. Villaverde and Maza (2011) also observed that “globalization as measured by the overall, economic, and social globalization has a positive relationship with economic growth”

(Villaverde & Maza, 2011). In a time-series analysis of the “effect of globalization on economic growth”, Rao, Tamazian, and Vadlamannati (2011) demonstrate that the “effect of globalization on economic growth differs across countries”. Employing a dynamic panel estimation to “investigate the impact of globalization on economic growth in the Organization of Islamic Countries (OIC)”, Samimi and Jenatabadi (2014) observe that “economic globalization exerts a positive influence on economic growth”. The result shows that the magnitude of the effect was strong in countries with better-educated workers as well as well-developed financial systems. The authors further show that economic globalization tends to benefit “middle-income countries compared to low-income countries”. Whilst social and “economic dimensions of globalization positively impacted economic growth in new member countries of the European Union”, Gurgul and Lach (2014) observe that “political globalization was found to be insignificant. Employing trade openness as a measure of globalization”, Zahonogo (2018) finds that the nexus “between globalization and economic” growth is nonlinear many countries in Africa.

2.4.5 Globalization and Inequality

Analyzing the effect of “globalization on life expectancy”, Andreas Bergh and Therese Nilsson (2010) found that whereas “economic globalization had a robust positive effect on life expectancy, political and social dimensions of globalization had no such effects”. A similar conclusion was drawn when the same authors “investigated the effect of globalization on inequality”. Thus, social and political globalization show no relationship with inequality (Andreas Bergh & Therese Nilsson, 2010). This means that social and political globalizations appear to show little or no relationship on the social dimension of sustainable development. Employing data on “industrial wage inequality and household income inequality”, Axel Dreher and Gaston (2008) reported that overall globalization worsens inequality in OECD countries. In contrast, the paper found no “robust effect of globalization on inequality in developing countries” (Dreher, 2006). These findings appear to refute the skeptical view that the current wave of globalization is the key driver of inequality in developing countries (Joseph Stiglitz, 2002). It further buttressed Bhagwati (1999) view that greater integration is opposed by developed countries, rather than

developing countries. According to Axel Dreher and Gaston (2008) developed countries opposed greater integration because of increased inequality and political costs on their societies. This may explain why citizens of the UK voted to leave the EU. With regards to gender equality, Cho (2013) concludes that whereas “trade openness, information flows, and personal contacts were positively correlated with women’s economic” and social rights, no relationship was established for the political rights of women. Goryakin, Lobstein, James, Suhrcke, and Medicine (2015) demonstrated that social and political globalizations had the most profound positive association with women’s propensity to be overweight and dominate the influence of economic and the overall index of globalization.

2.4.6 Globalization and the Environmental Quality

Figge, Oebels, and Offermans (2017) investigated the effect of various measures of globalization on ecological footprints. The authors observe that the combined index of globalization influenced human demands on ecological resources. However, the decomposition of globalization into different domains (political, economic, and social) revealed that with the exception of the political dimension, economic and social dimensions of globalization drive human demands which consequently lead to environmental deterioration. Twerefou, Danso-Mensah, and Bokpin (2017) examine how economic growth and globalization affect environmental quality in sub-Saharan Africa. Using trade openness as a measure of globalization, the paper finds that globalization had a worsening impact on environmental quality. However, Farazmand, Moradi, and Management (2015) found in Middle and North African (MENA) countries that trade openness (a measure of globalization) reduces the level of pollution and improves environmental quality. Although the findings of Farazmand et al. (2015) and Twerefou et al. (2017) are conflicting, the weakness of the two papers is that globalization is examined only from an economic perspective. Using Genuine savings (also known as adjusted-net savings) as the measure of sustainability, Costantini and Martini (2006) examined the linkages between higher welfare levels and natural resource consumption. The authors established that human development increases with an increase in Genuine savings. From the preceding

discussions, the effect of globalization on economic, social, and environmental outcomes remains a mystery.

2.5 Meaning and Approaches to Development

Development connotes different things to different people. There is, however, no consensus both in theory and practice what constitute development. Thus, diverse perceptions are held by both development experts and researchers. While some School of thought or traditional view, mostly economists examine development in terms of growth or personal income, other Schools of thought – the human development or well-being perspective views development from a complex and multi-faceted standpoint. The two perspectives are discussed in detail below.

2.5.1 The Traditional View of Development

Development has traditionally construed in economic sense placing monetary value on how people live their lives. Thus, development was traditionally conceived as an economic phenomenon in which “rapid gains in overall Gross Domestic Product (GDP) and per capita Gross National Income (GNI) would diffuse to the poor by creating income-generating activities in an economy” (Todaro & Smith, 2006). While the “GNI represents the total value of all incomes accruing to residents of a country, regardless of whether such incomes are coming from within or outside the country, the GDP measures the incomes of people irrespective of whether the ultimate recipient of that income resides in the domestic economy or not” (Cypher & Dietz, 2009). This is expected to “create the necessary conditions for the wider distribution of the economic and social benefits of growth”. The real GNI is predominantly used by economist to gauge national development because “it measures what is readily available for contributing to the current and future standard of living of the population”.

2.5.2 Limitations of GNI and GDP as Measures of Development

Since its inception, economists have maintained that GDP and GNI are “measures of economic activity” and not the well-being. The weaknesses of GDP

have been widely highlighted in the existing scholarship (Fioramonti, 2013; van den Bergh, 2017). They contend that GDP is not inherently bad, however, albeit, it measures what it intended to measure; rather it has been misconstrued as an indicator of something it doesn't measure and never meant to measure. Hence, economics and development partners have issued a caveat on any attempt to equate GDP growth with economic or social well-being. Other scholars (eg. Jones & Klenow, 2016) have argued that natural environment, mortality rate, morbidity, inequality, and leisure are some of the major social well-being outcomes that affect "living standards, but yet they are imperfectly captured in the measure of GDP".

Conversely, Todaro and Smith (2006) have argued wicked problems such as unemployment, social exclusion, poverty and inequality as well as income distribution were regarded as afterthought, except getting the growth business accomplished. Most scholars who hold this traditional view of development conceded that economic growth or individual incomes are not an end in itself, but a means to an end (A. Sen, 1991). The empirical evidence abounds that the trickle-down does not work since "many countries have since experienced economic growth without corresponding decrease in poverty and inequality levels" (Vandemoortele, 2013). In fact, trickle-down theory is derided as a "Horse and Sparrow" theory – indicating that if a horse is fed with oats, automatically, some will pass on to the Sparrows. For Stiglitz, Sen, and Fitoussi, should there be any grain of truth to trickle-down economics, it may not be so bad.

Not only the economic growth or individual incomes as measure of development does not trickle-down to the masses, they fail to capture new production and income that affect the "level of well-being of individuals on one hand, and rather add some production as income that does not contribute to human welfare" (Cypher & Dietz, 2009). Thus, a critical variable like home consumption has been disregarded in the computation of GNI and the GDP. According to Cypher and Dietz (2009), the efforts of women and children in the household chores, albeit, mostly "unpaid tasks in the production of non-traded goods and services for their families' own consumption", are not captured in the estimates for GNI and GDP. The value of home production, including food produced on subsistence farms, is not counted because they are not exchanged in the market.

Moreover, scholars have argued that GNI and GDP provide incomplete information on social welfare as well as the consequences of future generations. Since the second World war II, the pursuit of GDP growth rate has been the topmost priority on the national agendas at the expense of the environment (Costanza et al., 2014). It should be noted that the focus on GDP in industrialized societies has triggered concerns regarding social and environmental instability. It also affects how countries in the global south implement policies to engender sustainable development outcomes. In the resource-rich countries, however, countries will be able to increase economic growth, but empirical studies have argued that such growth comes at the expense environmental quality. Thus, the environment traded-off for high GDP. Though, this “undoubtedly has a positive effect on the economic activity for the current generation, but at the detriment of future generation”. GDP therefore fails. GDP is a “misleading measure of national success” as it fails to include the depletion of environment as well as the threatening climatic conditions (Costanza et al., 2014). Strictly speaking, GDP encourages the depletion of natural resources faster than they can renew themselves, and degrading the ecosystems, thereby reducing the services that, until now, have been provided to humans for free. Thus, Issues such as “biodiversity habitat, reducing flooding from severe storms, filtration to improve water quality in rivers and lakes, and the sequestration of carbon dioxide and manufacture of oxygen are all party of the market economy”, yet are dangerously disregarded in the measure of the GDP (Costanza et al., 2014).

Critics of GDP hinge their argument on the theory of ‘threshold effect’. Talberth, Cobb, and Slattery (2007) that overall quality of life often increases to a point as GDP increases. However, beyond a certain threshold, “increases in GDP are offset by the costs associated with increasing income inequality, loss of leisure time, and natural capital depletion” (Costanza et al., 2014, p. 9). Previous studies have observed that social welfare is likely to decline when material well-being increases above certain benchmark (McKibben, 2007). The surge in vices such as alcoholism, suicide, depression, poor health, crime, divorce, and other welfare-threatening vices, all point to an increase in material affluence (McKibben, 2007).

Central to the 2017 report on the “*Inclusive Growth and Development*” and published by the “World Economic Forum has noted some limitation in the use of

GDP as a measure of social and economic progress”. Thus, “GDP is unable to explain the distribution of growth – either for income, consumption, health, and education, suggesting that the use of GDP as a measure of prosperity fails to account for who is getting richer and who gets poorer” (McKibben, 2007). It should be noted that although GDP of many countries has skyrocketed in the past few decades, poverty continues to increase especially in low and middle-income countries as peoples’ average income only grew at a minimal percentage. Also, evidence abounds that “inequality breeds issues including more health problems in society, corruption, and lower productivity”.

2.5.3 The New Economic View of Development

Given the growing consensus among economists and development practitioners that GDP is not a feasible measure of broader development outcomes, development has been redefined to encompass the sustained elevation of an entire society and physical ecosystem towards a better or a more humane life (Todaro & Smith, 2006). Thus, development is all about creating economic opportunities for the population to live a dignified and ensures that as the economy grows, no one is left out of the development process (United Nations Development Programme, 2018). This paradigm shift is underpinned by the view that “people are the real wealth of nations”. The 2017 *World Development Report* conceptualizes development in terms of *security, growth* and *equity*. That said, it can be argued that the ability to maintain peace and security, ensure equitable distribution of national resources as well as reduce harm caused on the environment (for the benefit of the generations yet unborn) are the main preoccupation of sustainable development agenda. Capability and Basic needs approaches are discussed in the section that follows.

2.5.3.1 Capability Approach

A. Sen (1991) “capability approach has provided the basis of a new paradigm in economics and in the social science in general”. The “capability approach” was further exploited by Nussbaum (2002). In his book, “*Inequality Re-examined*”, Sen argues that a “person’s capability to achieve functionings that he or she has reason to value provides a general approach to the evaluation of social programs”, and this has implications on how equality and inequality are assessed. The

underpinning idea of the “capability approach is that social arrangements should aim to expand peoples’ capabilities – their freedom to promote or achieve what they value doing and being” (A. Sen, 1991). Sen expressed the view that an important litmus test for whether development has indeed taken place is assess whether citizens have greater freedoms. For inequality, it critical to examine whether the capabilities of the people can help them have a decent living. Capability in this sense is viewed as freedoms to enjoy various functionings. Thus, the various combinations that the person can achieve – the ability of every individual to realize their full potential

Robeyns (2005) asserts that the capability approach is somewhat a value-laden model that can assessment of the extent to which social programs produced desired results. It is useful in “evaluating several aspects of people’s well-being such as inequality, poverty as well as the well-being of an individual or the average well-being of the members of a group” (Robeyns, 2005). The “capability approach” emphasizes on functionings – are beings and doings. It connotes a situation where people are well fed, able to take part in the running of their own communities, being sheltered, actively working in “labour market, caring for others as well as being healthy” (Robeyns, 2005). Drawing insight from capability approach, it is argued that development that focuses on utilities, resources, and income or GDP is problematic.

Moreover, Capability approach varies in the debate about what constitute development because “it is not limited to the market but examines people’s beings and doings in both market and non-market” environments (Robeyns, 2005). The incorporation of non-market dimension of well-being in the analysis reveals some “complexities and ambiguities in the distribution of well-being that an analysis of income or welfare alone cannot capture”. This makes capability approach suitable for gender-based inequality research. The “strength of capability approach is the notion that it acknowledges human diversity in terms of race, age, ethnicity, gender, sexuality, and geographical location” (Stewart, 2013). It also crucial for vulnerable segment of the population such as handicapped and pregnant women. It criticizes development approaches that assume that all people have the same utility functions or are influenced in the same way and the same extent by the same personal, social, and the environment (Robeyns, 2005).

2.5.3.2 Basic Needs Approach

This approach seeks to redistribute the economic “benefits of development in favour of the poor”. It “aims at providing minimum levels of satisfaction of the needs of the poorest members of a society” (Todaro & Smith, 2006). Todaro and Smith (2006) delineated three components of the basic needs approach: “sustenance, self-esteem, and freedom”. Sustenance concerns the “ability to meet basic needs”. It operates on the view that the idea of any development thinking is how people can satisfy their basic necessities of life and these include ensuring security, food, and shelter. Nonetheless, it admits that the ability to develop an economy is a precondition to achieving the quality of life. Scholars have argued that increase in per capita income, reduction of “absolute poverty, greater employment opportunities, and lessening income inequalities only constitute necessary but not a sufficient condition for development” (Todaro & Smith, 2006). The next dimension is self-esteem or the pride of being a person is central in the basic needs debate. The “self-esteem is a sense of worth and self-respect of not being used as a tool by others for their own ends” (Todaro & Smith, 2006). It concerns “self-identity, dignity, respect, honor, and recognition. Freedom from servitude is a necessary condition for development” (ibid).

Allen and Anzalone (1981) assert that basic needs concern itself with “providing minimum levels of satisfaction of the needs of the poorest members of the society”. It is, however, grounded in the tradition eliminating deprivation should be key ingredient for development to take place. (Allen & Anzalone, 1981). Wong (2012) contends “that the purpose of development is to raise the sustainable level of living of the masses of poor people as rapidly as is feasible and to provide all human beings with the opportunity to develop their full potential”. It works. It works by pointing out a bundle of basic minimum requirements, and the bundle of consumption should be assessed at the individual level in terms of what people want. However, it is noteworthy that the philosophical foundation of basic needs and capability approaches are different. While as capability approach seeks to expand peoples’ capabilities by beings and doings for people to create value for themselves, the basic needs are underpinned view that development policies should target a segment of the population who needs basic materials to survive.

2.6 Inclusive Development: Conceptual Overview

There is widespread consensus amongst scholars and development practitioners that “economic growth” is a “necessary but not a sufficient condition” for measuring median standard of living. Although the difficulty partly stems from the politics of sustainable development, it is profound to state that any attempt to go beyond income constitute greater effort towards inclusive society. Thus, the quest to achieve strong sustainability means that none of the development outcomes such as sound environmental norms, improvement of incomes of the population, the human development outcomes should be sacrificed in pursuit of the other (s) (Gupta, Vegelin, & economics, 2016; Lorek & Spangenberg, 2014). The term ‘inclusive Development’ was first used in 1998 but gained traction in academic and development discourse in 2008 (Gupta, Pouw, & Ros-Tonen, 2015). However, I examine some few conceptualizations of inclusive development.

Kanbur and Rauniyar (2010) argue that two key issues must be taken into consideration when defining “inclusive Development: a) the difference between growth and development and b) the import of the term ‘inclusive’”. On one hand, growth often denotes economic prosperity or narrowly as an “increase in per capita income. Development on the other hand, can be used to refer to economic growth, changes in the economic structure of production, spatial distribution of population, and the improvements in social indicators such as education and health” (Kanbur & Rauniyar, 2010). More broadly, “development’ brings into play dimensions of well-being beyond simply income, while ‘inclusive’ focuses attention on the distribution of well-being in society” (Kanbur & Rauniyar, 2010). From this sense, “inclusive development is concerned with improving the well-being of the worst-off along no income dimensions like education and health”.

Ali and Son (2007) distinguish between “inclusive growth and ‘inclusive development’”. Thus, the growth is inclusive when it does not only generates new “economic opportunities but does more to ensure equal access to the opportunities created for segments of the society” Ali and Son (2007, p. 12). Although inclusive growth focuses on increasing per Capita income by ensuring economic prosperity, it

equally ensures greater access to non-income aspects of well-being enhanced by proactive policy making by the state and other non-state actors (Gupta et al., 2015). Growth is said to be inclusive when incomes of the poor are sustained through the creation of decent jobs and safety nets are made available to cushion vulnerable groups in the society – welfare approach to development (Abosede & Onakoya, 2013). It has two key pillars: the need for “high and sustainable growth to create productive and decent employment opportunities and ensure social inclusion to ensure equal access to opportunities by all” Ali and Zhuang (2007, p. 12). However, the ‘inclusive development’ is concerned about the notion that the focus on growth may lead to the exclusion of some people from access to wealth and labour markets (Sachs, 2004). Hence, inclusive development is underpinned by the view that instead of focusing on economic growth, it is important to roll in direct democracy – the exercise of civil, civil, and political rights – and the distribution of social amenities – health, education and infrastructure – as well as encourage participation by all groups (Sachs, 2004). This view of inclusive development resonates with Capability Approach – sense of freedoms to enjoy various functionings.

However, Hickey, Sen, and Bukenya (2015, p. 15) conceptualized ‘inclusive Development’ as a “process that occurs when social and material benefits are equitably distributed across divides within societies, across income groups, genders, ethnicities, regions, religious groups”, and others. In that regard, proper structures are put in place to ensure that the benefits of the growths trickle down to a majority of the population. It can be inferred from Hickey and others definition that ‘inclusive Development’ goes beyond the narrow understanding of development as mainly an economic process to one with an integral focus on the achievement of equity, rights, and status of citizenship (Hickey et al., 2015).

Scholars further delineated three dimensions of inclusive development: *social inclusiveness* – sets to enhance the living conditions of the marginalized groups, states, and people; *ecological inclusiveness* – “shows that the most marginalized groups are depended heavily on, and vulnerable to changes in their environment and ecosystem; and *relational inclusiveness* – addresses the structural causes, including power politics, of poverty and environmental externalization” (Bos & Gupta, 2016; Gupta et al., 2016). These three dimensions of inclusive development are applicable

to local, national and global or international levels (Bos & Gupta, 2016). The conceptualization by Gupta and Vegelin (2016) and Bos and Gupta (2016) is more elaborate because it shows that environment is a necessary part of inclusive development. Expatiating on this, scholars contend that inclusive development should not only be limited to the social aspect because it has a “strong ecological component as the poorest often depend upon local resources – soil, forests, fish, water – and are vulnerable to land, water, fish and carbon credit grabbing” (Bos & Gupta, 2016) . Thus, the welfare of “all people is closely related to continual investment in maintaining ecosystem services” (Fairhead, Leach, & Scoones, 2012).

2.7 The Theory of Sustainability

The theory of sustainability assumes that the amount of resources used for today’s needs should “not deprive future generations of their needs” (Güney, 2019). The theory is rooted in three key assumptions: to improve the living standard of the society (social dimension), “to realize the production critical for society” (economic dimension), “and to minimize the pollution” or degradation “of the resources” that are “used in these processes” (environmental dimension) (Ozturk & Acaravci, 2011). However, Sen (2013) argues that although the theory of sustainability is a great improvement, it is still incomplete when is it not understood in the context of sustainable human freedoms and capabilities. Neumayer (2012, p. 561) argues that human development is what sustainability proponents want to sustain, and without sustainability human development is not true human development. Consequently, sustainability is a “means to an end and not an end in itself” (Sen, 2013).

Some ostensible challenges may be impeding many countries from achieving the SDGs. Chiefly among them are “lack of political commitment and effective leadership, no coordinated partnerships for SDGs, and no readily available data to monitor progress. It must be emphasized that leadership is essential for progress in relation to policy change, legislation, investment, implementation, and advocacy that should drive home the global agenda. The success of the SDGs demands resilient institutional framework. Moreover, challenges relating to lack of social inclusion and widespread regional disparities and urban-rural gaps, widening inequality between

men and women. With respect to SD Goal 1 – “end poverty in all its forms everywhere and Goal 10 – “reduce inequality within and among nations”, the progress has been very slow. This is particularly so because according to the 2019 SDG report, an increasing share of income goes to the top 1% whereas the bottom 40% receives less than 25% of the entire national income in many countries. Thus, in many countries, a few are controlling major sectors of the economy, thereby contributing to widening income gaps.

2.7.1 Sustainable Growth – Beyond GDP

This section discusses among other things the roadmap to sustainable development (SD) agenda. Evidence abounds on the need to move beyond gross domestic product (GDP) as a measure of development (Fioramonti, 2013; Mushongera, 2017). This is underpinned by the notion that a wide range of indicators that determine human well-being are not factored into the calculation of the GDP, including health, education, governance and political violence, social networks, “social equity, environmental quality, decent job, leisure, and spiritual welfare” (Fioramonti, 2013). However, critics (eg. Daly & Posner, 2011) have questioned how GDP has come to play a leading role in public debate about “economic performance and social progress and ultimately in policy studies”. Scholars have called into question the “relationship between GDP and subjective measures of happiness and the quality of life” (Easterlin, 2015; Easterlin, Morgan, Switek, & Wang, 2012). Other stream of literature, “especially from the environment, well-being, and social equity perspectives have mounted a mountain of evidence on condition that GDP is at odds with the broader outcomes of sustainable development” (Kallis, 2011; van den Bergh, 2017).

However, as the debate on development-GDP nexus deepens, there seem to be a consensus on the dimensions of sustainable and inclusive development among researchers and practitioners. Scholars have made a clarion call for the development and further improvement of indicators that adjust, complement or replace GDP (Bleys, 2012) . To this end, the need to meet the welfare of the current generation without compromising that of the future has gained traction in recent times. Thus, “there is a push under the rubric ‘Beyond GDP Movement’ to coerce countries to

develop other measures of economic welfare that will complement the GDP measure” (Mushongera, 2017). This is in sync with the notion of sustainable development. The “recent global trend towards a ‘green economy’ has added renewed impetus to initiatives aimed at going ‘beyond GDP’” (Bleys, 2012). The “United Nations Environment Program (UNEP) defines a green economy as one that results in ‘improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities’” (UNEP, 2011). The Brundtland Report of World Commission on Environment and Development (WCED) provided the most widely cited definition of “sustainable development (SD)”: “to ensure that development meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987:8). Brundtland’s definition is the core of sustainable development – a form of growth that can reduce inequalities, reduce environmental threats and diffuse conflicts.

Aidt (2011) asserts that the sustainable trajectory of an economy is underpinned by the extent to which inter-temporal welfare – showing a “measure of the present discounted value of social welfare attained at each future date – does not decrease over time along the path chosen by policy makers”. In this definition, SD is narrowly conceived in terms of the progress made in an economy. However, SD is also conceptualized in terms of social dimension of development. Thus, the process of expanding the capacities and freedoms of the people (Sen, 2000). Sen further argued that placing emphasizes on the freedoms of humans is opposed to the minimalist view of development such replacing development with economic growth. Development in its sense calls for the need to remove “major sources of un-freedom: poverty as well as tyranny, poor economic opportunities as well as systematic social deprivation, neglect of public facilities as well as intolerance or over-activity of repressive states” (Sen, 2000). More so, SD is defined in terms of “inter-generational and intra-generational equity” – indicating a global commitment to fulfil “collective responsibilities to ensure safer, cleaner, healthier, and more inclusive world for current and future generations” (UNICEF, 2013). By extension, other global bodies define SD recognizing the need to uphold the principles of human rights and dignity as central tenets of development.

2.7.2 Measurement of Sustainable Growth

It is worthy of note that the measure of SD is a herculean task. However, scholars (eg. Aidt, 2011; Costanza et al., 2007) attempt to clear this hurdle by making adjustments to the GDP. For instance, Costanza, Hart, Talberth, and Posner (2009) contend that since “GDP measures economic quantity and not quality or welfare or social or environmental well-being, it is crucial to address these concerns towards a good measure of sustainable development” (Aidt, 2011). The new measures can be grouped under: *first*, “indexes that deal with issues described economic, social, and environmental concerns by making corrections to existing GDP and System of National Accounting (SNA); *second*, indexes that measures aspects of well-being directly; *third*, composite indexes that measure approaches; and four, indicators suites” (Costanza et al., 2007; Forson, 2016).

2.7.2.1 Indexes that “Correct” the Deficiencies of GDP

Economists have made frantic effort based on the work of Cobb and Daly (1989) to develop alternative national income accounting systems that will address the deficiencies shredded in the use of GDP. Scholars reiterate that these efforts are to provide a more accurate and robust measure of welfare and to establish whether or not an economy is on a sustainable path (Nick Hanley, 2000). These include index of Sustainable Economic Welfare (ISEW), the Genuine Progress indicators (GPI), the Green GDP, and Genuine wealth (GW). These measures are not without problems. It is argued that because the computation of these indicators are based on the same dataset often used in computing GDP, they are saddled with some challenges including: disagreement over how to value items that have no monetary value – volunteer labour or illegal activities, as well as the mechanism for the exact measurement of the constructs.

The “Index of Sustainable Economic Welfare (ISEW) is currently known as Genuine Progress Indicator (GPI) after consistent revision to reflect the national welfare” (Cobb & Daly, 1989). It uses GDP as the baseline. In the book “*For the Common Good*”, (Cobb & Daly, 1989) developed this indicator as a measure of the “economy that will give better guidance than the GNP to those interested in promoting economic welfare”. Drawing insight from the earlier work done by “Zolotas on the Index of Economic Aspect of welfare (EAW) as well as Tobin’s

Measure of Economic Wealth (MEW), Daly and Cobb sought for a measure that could account for the current environmental concern and long-term sustainable use of natural ecosystems and resources” (Daly and Cobb, 1989). The ISEW was later change to GPI in 1995 after a group dubbed Redefining Progress issued a revised method (Nick Hanley, 2000). The “stark difference between the GDP and GPI is that, while GDP is a measure of current income, GPI is seen to measure the extent to which such income is sustainable” (Nick & Hanley, 2000). Essentially, GPI measure “whether progress is a result of living off the interest of community capital or spending it down. It should be noted that both the ISEW and the GPI tend to use the same data as the GDP by making adjustments to reflect inequality in come pollution, and crime” (Costanza et al., 2009).

In the effect to achieve what is called the “Green GDP”, a single index is expected to be derived to reflect the depletion of various natural resources that are supposed to be computed into the national savings (Cobb & Daly, 1989). It is worthy of note that although “Australia, Canada, Indonesia, Costa Rica, China, Mexico, Papua New Guinea, and the US had developed Green GDP, none of these efforts have resulted in regular reporting of results” (ibid).

Genuine Savings (GS) is published annually in the “World Bank World Development indicators”. GS reflects the net national incomes after the depletion of natural resources has been deducted (K. Hamilton, Hamilton, & Atkinson, 2006; Neumayer, 2012). Conventionally, net saving is obtained by deducting only “depreciation of physical capital from gross savings” (Nick Hanley, Dupuy, & McLaughlin, 2015). It “assesses sustainability by looking at how much a nation is saving for the future and can thus be regarded as an implementation of the capital approach to sustainability” (Neumayer, 2012). “GS is also known as Adjusted Net savings – comprehensive investment and as the change in comprehensive wealth” (Hamilton & Hepburn, 2014). “GS is a measure of how a nation’s total capital stock changes year-on-year in real terms” (K. Hamilton & Hepburn, 2014). It “captures the value of damages from carbon emissions”. It measures the “built, natural, and intangible capital that is needed for human sustenance. Intangible wealth is related to the social and human capital of a nation and includes skills and know-how of the labor force, trust and cooperation/collaboration, efficient judicial systems, clear

property rights, and effective government". It is computed by subtracting the amount for environmental degradation and resource depletion plus the amount of investment in human capital. Scholars (Aidt, 2011; Arrow, Dasgupta, Goulder, Mumford, & Oleson, 2012) have transformed GS to Genuine wealth (GW) per capita and Genuine investment and used them as proxies for sustainable development.

The first correction is to deduct an estimate of fixed consumption capital to obtain net national savings. This helps to replenish the value of capital depleted during the production process. The second is the addition of current expenditures on education, signaling an investment in human capital development. Third, estimates of the depletion of a variety of natural resources such as forest, minerals, and energy are further deducted from net national savings. Finally, carbon dioxide emission as well as the financial deduction of an estimate of the health damages due to environmental pollution. After the adjustments from the gross national savings, the result gives the rough figure of genuine investment – “adjusted-net savings - as a percentage of gross national income (GNI)” (Hamilton & Clemens, 1999). When the ANS is positive, it shows an investment in future welling-being as a nation accumulates the assets needed to drive economic growth and at the same time be able to sustain current levels of consumption (Hamilton & Clemens, 1999).

However, scholars notably Dasgupta and Mäler (2000), Hamilton (2003) and Dietz and Neumayer (2007) highlighted some weaknesses in the use of adjusted-net savings. First, population growth rate is assumed as constant. Thus, in a situation where population is growing at a faster rate, the per capita rate is likely to decline. The second weakness relates to the fact that capital assets such as human and capital are missing in the national accounts. That said, Arrow et al. (2004) proposes that the computation process should convert the average adjusted-net savings or “genuine investment (ANS) on percentage of GNI into growth rate of genuine wealth per capita (gwp) by multiplying by a presumed GN-wealth ration (v)” (Arrow et al., 2004). “Ratio of 0.125 is suggested for low income countries, 0.15 for lower middle-income countries, 0.175 for upper middle-income countries, and 0.2 for high-income countries” (Arrow et al., 2004). The “population growth rate (n) is then discounted (ibid). Consequently, the empirical model for sustainability is given below.

2.7.2.2 Measures of Environmental and Social Well-Being: Without GDP

There exist alternative indicators that do not measure economic activity, but rather, the environmental and social well-being. Rees and Wackernagel (2008) developed the index of ecological footprint (EF) to measure the extent of the depletion of various natural resources. “As a resource management tool, EF intends to assess the extent to which an individual, city or nation is using available ecological assets faster than the supporting ecosystems can regenerate those assets” (Constanza, 2009a). It is often adopted by some scholars as an index of environmental quality. Talberth et al. (2007) asserts that about 23% to 40% of the humanity’s EF shows a larger renewable rate, but a greater number of this is due “to carbon emissions and not mismanagement of terrestrial or aquatic biomes”.

“Subjective well-being” (SWB) attempts “to measure satisfaction with quality of life or people’s moods and emotions” (Costanza et al., 2009). It also aims at measuring the how human needs are met. It is subjective because it is based on the judgment “of the survey respondents rather than on more easily quantifiable inputs of money and material goods” (Costanza et al., 2009). However, scholars have criticized SWB on condition that its subjectivity invalidates it as a measure of well-being. Some scholars have used objective measures like “life expectancy rates of disease, and GDP are only proxies for well-being that have been identified through that subjective judgement of decision makers” (Constanza et al., 2007). “Data related to happiness and satisfaction can be found in the world database of Happiness” (ibid). The “Gross National Happiness (GNH)” is an alternative indicator of progress. The government of Bhutan has sponsored several conferences on GNH since 2004. Zurick (2006p.657) argues that the development trajectory of Bhutan encapsulates the notion of “Gross National Happiness” as a philosophy underpinned by Buddhist tradition that places emphasizes on the pursuing “emotional and spiritual fulfillment and prosperity to meet essential material requirements, and a respect for the natural order”. This philosophical idea is exemplified in how Bhutanese Kingdom and government perceive development, which emphasizes on improving human developing by “enriching people’s lives by meeting basic needs, enlarging economic and social choices, preserving cultural traditions, and promoting environmental conservation”

(Zurick, 2006). Despite the fact that the theory behind Gross National Happiness is still yet to be clarified, Bhutan is ranked high in terms of Human development Index with a figure of 0.617 in 2018 (United Nations Development Programme, 2018). W. Bates (2009) has argued that though Bhutan's Gross National Happiness represents an "impressive contribution to measurement of human well-being, however, it is still not clear the extent to which such philosophy can be subjected to theoretical and empirical analysis since its elements are underpinned by moral values. Therefore, efforts are being made to decide on the method for computing GNH. Hence, GNH is not appropriate for cross-country comparisons.

2.7.2.3 Measures of Environmental and Social Well-Being: With GDP

The indicators that combined to compute GDP and non-GDP measures that address environmental and social well-being concern are manifold: Living Planet Index, Happy Planet index, and Indicator Suits. The Living Planet Index (LPI) seek to measure the depletion of biodiversity (Loh & Wackernagel, 2004). The GPI also takes stock of marine as well other ecological systems (Hails, Loh & Goldfinger, 2006). "The LPI tracks biodiversity trends by tracking the populations of 1,313 species of fish, amphibians, reptiles, birds, and mammals" (Hails, Loh & Goldfinger, 2006). "Happy Planet Index (HPI) captures a country's ecological efficiency in ensuring human well-being with three composite measures - life expectancy at birth, life satisfaction, and ecological footprint" (ibid). It compares the average change in abundance for each year with the preceding year. The Happy Planet Index is published by the New Economic Foundation (NEF).

In fine, despite the progress made in the adoption of GDP as a 'measure of standard living' in the literature, some visible challenges still exist – which makes a clarion call for the adoption of credible measures. It should be noted that some challenges do not lend themselves to so easily to be resolved. Following the literature (Aidt, 2011; Anielski, 2004; Forson, Buracom, Chen, & Baah-Ennumh, 2017) "Genuine wealth (GW) per capita is used as the measure of sustainable growth or development".

2.8 Human Development Index (HDI)

The motivation for the positioning of this inquiry in the sustainability and inclusive development paradigm is underpinned by the theoretical and practical implication that in the global “transition from the Millennium Development Goals (MDGs) to the Sustainable Development Goals (SDGs), all regions of the world have improved in Human Development with the exception of SSA”. The World Bank reports that “extreme poverty has been decreasing in all regions of the world except for SSA” (World Bank, 2018). It is argued exasperatedly that given that a greater number of countries in the SSA missed the MDGs targets on extreme poverty and human development shows “that the fruits of economic prosperity accruing from the recent economic growth have not been trickling down to the poorest segment of the population” (Tchamyou, 2018). It must be underscored that the sustainability is a main pillar in the current global development agenda.

2.8.1 Measurement of HDI

The HDI measures human capital development with respect to three key dimensions, namely, “life expectancy at birth; the mean years of schooling and expected years of schooling; and the ability to achieve a decent standard of living” (Cypher & Dietz, 2009). These measures are used as the representative indicators for development (Cypher & Dietz, 2009). The HDI measure of development is thus broader than the simple income per person (GDP), though income does enter into the computation of the HDI. The justification is that these measure – “especially education, help create opportunities for individuals to reach a higher and more fulfilling standard of living that may not be captured by the income measure alone” (United Nations Development Programme, 1995).

Since 1990, The UNDP makes available on yearly bases the human development Index. The UNDP tirelessly published indices indicating how countries perform with regards to how growth is distributed among all segments of the population. According to the UNDP report, human progress discusses how opportunities are created for people to live decent lives, get educated, and live long (United Nations Development Programme, 2014). The HDI values range from 0 – 1.

The “classification is based on HDI cut-off points, which are derived from the quartiles of distributions of the component indicators”. The cut-off points are HDI of less than “0.550 for low human development, 0.550-0.699 for medium human development, 0.700-0.799 for high human development, and 0.800 or greater for very high human development” (United Nations Development Programme, 1995).

Scholars assert that HDI could be a good measure of well-being because it brings in education and health alongside income and shows concern for distribution in education (Kanbur & Rauniyar, 2010). This is important because, it is argued, literacy is measured as the achievement of minimum levels of reading and writing – and education component in HDI focuses attention on the lowest levels of educational achievement (Kanbur & Rauniyar, 2010). Empirical evidence also suggest that education is highly profound for empowerment, reduction of inequality of all forms, and vulnerability among marginalized groups in society (Ahmed, Creanga, Gillespie, & Tsui, 2010; Malik & Courtney, 2011; Stromquist, 2002). However, HDI is not without criticisms. It is conceded that there is difficulty in the use of the three components of HDI – “longevity, knowledge, and decent living standards as proxies for people’s ability to live long and prosperous lives”(United Nations Development Programme, 2014).

2.8.2 Inequality-Adjusted Human Development Index (IHDI)

As a result of the weaknesses in the use of the conventional “HDI as a representative of people’s ability to live long and prosperous lives, the UNDP developed Inequality-Adjusted Human development” (ibid). The “Inequality-adjusted HDI discounts the HDI according to the extent of inequality” (Human Development Report, 2018). The “IHDI goes a step further by adjusting the HDI to prevalent levels of inequality in the three dimensions- longevity, knowledge, and decent standard of living”. Thus, it considers the extent to “which the three underlying achievements are distributed within the population” (ibid). The IHDI recognizes the gap in the conventional HDI with reflecting “unequal opportunity in access to education, health, employment, credit and natural resources due to gender, group identity and location” (Alkire & Foster, 2010; Seth, 2009). For instance, Kovacevic (2010) acknowledges

that “inequality is ignored by the traditional HDI although there are fundamental reasons for associating greater inequality with lower development levels”.

The UNDP argues that When HDI is adjusted for inequalities, the global HDI value falls by 20 percent. Inequality in all its dimensions has negative impact on HDI. Thus, inequality can fuel extremism and undermines support for inclusive and sustainable development (Alkire & Foster, 2010). It is argued exasperatedly that “high inequality can lead to adverse consequences for social cohesion and the quality of institutions and policies, which in turn can slow human development progress” (United Nations Development Programme, 2018). When equality is perfect, the HDI and the IHDI are equal. However, “when there is inequality in the distribution of health, education and income, the NDI in a society is less than the aggregate HDI” (United Nations Development Programme, 2018). Hence, many scholars have used IHDI as a proxy for inclusive development.

Summary of theoretical review

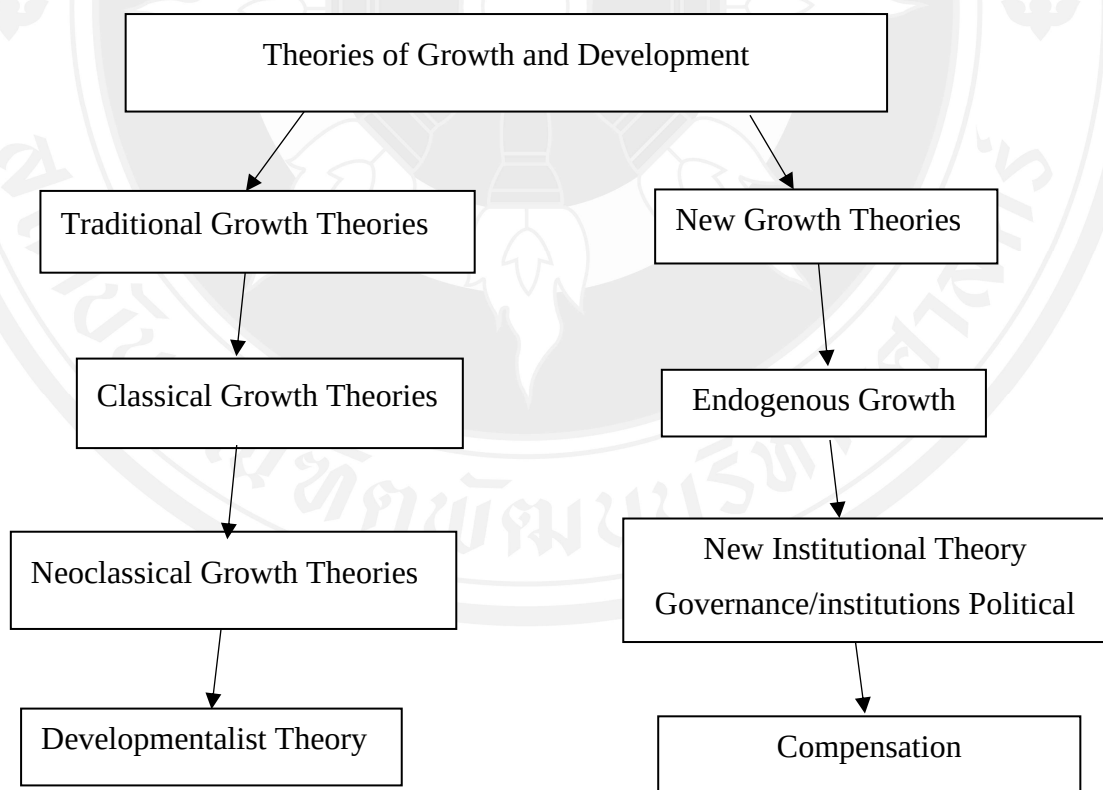


Figure 2.1 The Flow Chart of the Theoretical Literature Review

2.9 Conceptual Framework and the Formulation of Hypotheses

This framework examined the relationship between governance, globalization, sustainability, and human development. The caveat is that because of the difficulty in accessing dataset to measure the ‘sustainable development, the study relies on proxy variables. Nonetheless, it provides insight for subsequent researchers and practitioners in the field of development studies on the relationship between institutions, regime type, globalization, and sustainable development. This conceptual model operationalizes the variables in the study. According to Jabareen (2009, p. 51) a conceptual framework is a “network or a plan of interlinked concepts that together provide a comprehensive understanding of a phenomenon”. The concepts in the ‘conceptual framework’ tend to “support one another, articulate their respective phenomena, and establish philosophical ideas that is rooted in ontological, epistemological, and methodological research paradigms” (Jabareen (2009, p. 5). It defines concepts and map out the terrain or conceptual scope and systematize relations among concepts (Watson, 2007). Miles, Huberman, Huberman, and Huberman (1994, p. 440) contend that a “conceptual framework lays out the key factors, constructs, and variables, and presumes relationships among them” (ibid). To this end, the study extends Miles and Huberman’s view of conceptual framework. This conceptual model may offer a blueprint to scholars who seek to examine the complex relationship between national, regional, and the global level factors and how the influence the current sustainable development framework. It also “elucidates how this impact may differ depending on how development is conceptualized and applied in the field of development studies” (Watson, 2007). It should be noted that a model represents the theoretical view of the relationship between the constructs. The framework for this study (Figure 2.1) shows the dependent and independent variables based on the related literature.

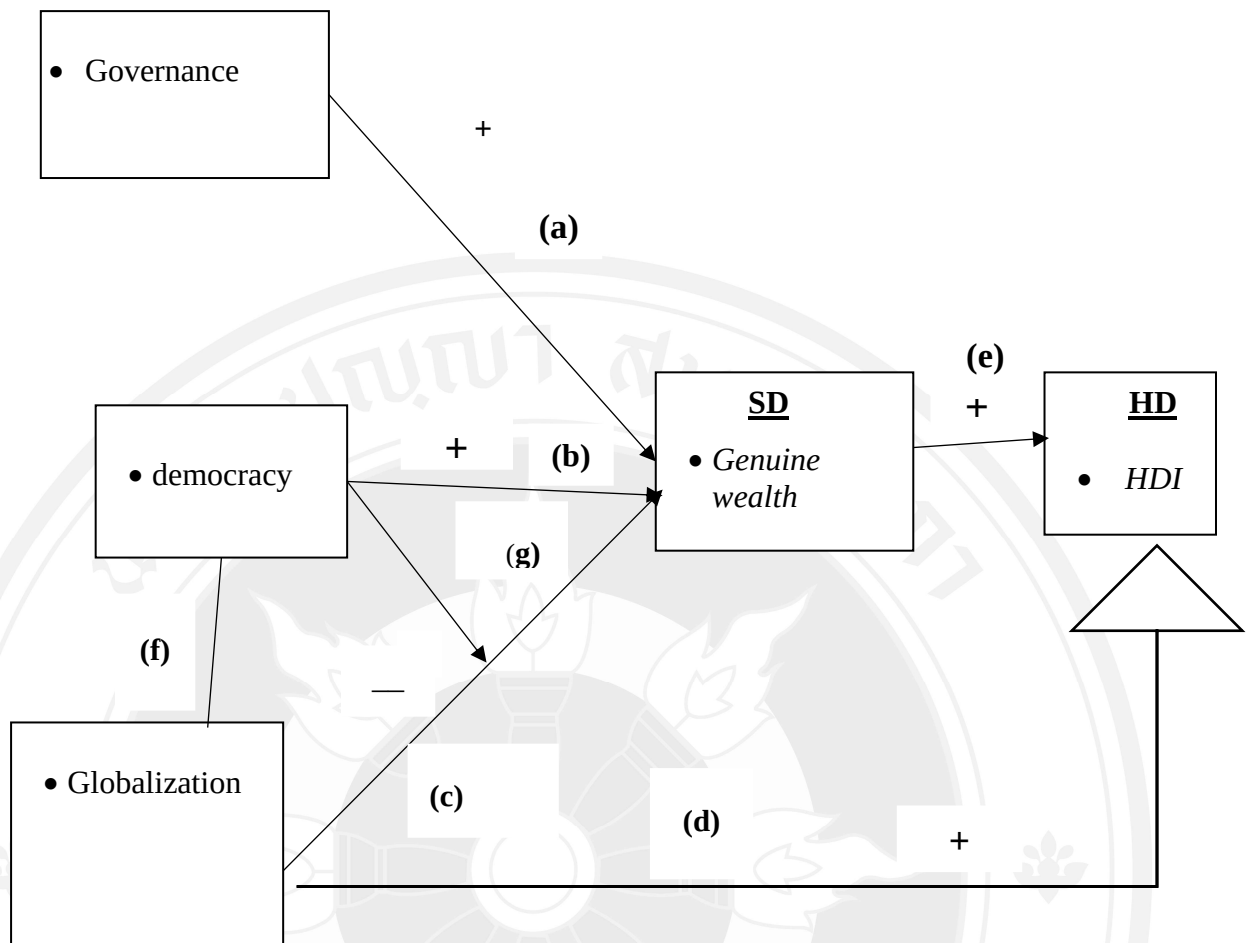


Figure 2.2 A Framework of the Relationship Between Governance/Institutions, Globalization, and Sustainable Human Development.

Source: Author's own construction based on the extensive literature review.

Note: SD and HD denote sustainable development and the Human Development Index respectively.

The conceptual framework in figure 2.1 depicts the nexus between governance, democracy, globalization and sustainable human development. The framework is divided into three components based on the extensive literature review on the deep determinants of economic development on one hand, and the economic growth-environment nexus on the other. Channels (a), (b), (c) and (d) show separate and direct associations between governance, democracy, globalization, and sustainable human development. Channel (d) relates to the direct effect of globalization

on human development index. Channel (f) indicates the interaction between the processes of democratization and globalization. And channel (g) refers to the extent to which the relationship between globalization and sustainable development is affected by the level of democracy. The first component of the framework examines the measures of governance, democracy and globalization. The second part deals with how governance, democracy and globalization affect sustainable human development outcomes. It also examines the complexity embedded in the sustainable development (SD) framework and how it was developed. The third part of the framework examines the nexus between SD and human development outcomes.

2.9.1 Governance and Sustainable Development

The debate on the effect of institutions/governance and globalization centers on the question to what extent and in what manner these factors influence development process. Scholars have investigated the role of institutions as fundamental factors accounting for cross-country differences in development (Acemoglu et al., 2001; Rodrik et al., 2004). Literature on institutional theory and governance hypothesis shows that governance or institutional factors such as rule of law, protection of property rights, regulatory quality have positive effect on the level of economic development (Rodrik et al., 2004). The weakness of these papers is that gross domestic product (GDP) is used as a measure of economic development. However, the computation of GDP does not take into consideration the environmental damages such as global warming, air pollution, forest depletion, carbon dioxide emission caused by economic activities (Ibrahims Dincer, 2000; Ibrahim Dincer & Rosen, 2011; Kaygusuz & Bilgen, 2009). Therefore, since economic development is about sustainable improvements in human welfare, and in line with the governance hypothesis, the study proposes that:

H1: There is a direct positive effect of governance on sustainable development (SD).

2.9.2 Globalization and Sustainable Development

There is a general consensus in the literature that globalization has both positive and negative consequences. Globalization promotes economic development for several reasons. It is argued that trade openness and integration of national economies allow for transfer of technology, innovation, and knowledge between and amongst countries which increases economic growth (Axel Dreher, 2006; Tsai, 2007). Globalization ensures that goods and services (which are not produced in the domestic economy) are made available (Byrne et al., 2006). However, another strand of literature asserts that globalization creates risk and uncertainty (Kaufman & Segura-Ubiergo, 2001). The intensification of neoliberal ideas (free trade) under globalization means that the state should be subsumed under global market economy and the natural resources should be exploited to advance economic activities (Byrne & Glover, 2002). However, some scholars, especially those from the hegemonic School of thought contend that the continues emphasis on capital accumulation tends to pay little or no attention to environmental justice as well as other ethical concerns and thereby posing serious threat to the survival of humans and the ecosystem (Petras & Veltmeyer, 2001). The anti-globalists have argued that globalization is a principal driver of carbon dioxide emissions (You & Lv, 2018). Thus, the emission of greenhouse gases and its resultant effect on climate change can be attributed to economic activities. The continues emphasis on economic growth and capital accumulation and disregard to environmental standards lead to environmental degradation and other unsustainable practices.

This view resonates very well with the Ecological Modernization theory (EMT) which proposes the regulation of free trade (economic globalization) to safeguard ecosystem (Byrne et al., 2006). Critics have argued that the high rate of poverty in developing countries, the frequency of financial crisis, increased in protests and riots, and the erosion of social as well as worsening environmental standards can be attributed to the phenomenon of globalization. Additionally, the decision by the US president (Donald Trump) to reintroduce tariffs which led to ‘trade/tariffs war’ with China through trade protectionism policies and the decision by the citizens of United Kingdom to vote against their integration with European Union (EU) through

BREXIT further raise a critical question of whether globalization is good for sustainable development. Consequently, the following hypothesis is proposed:

H2: The relationship between the measures of globalization (economic, social, political, total globalization) and sustainability is negative.

2.9.3 Globalization and Human Development

According to the compensation theory, globalization through greater exposure to international trade creates domestic instability such as income inequality and unemployment problems and propels the government to increase social spending (Kaufman & Segura-Ubiergo, 2001). Scholars assert that globalization creates risks and uncertainty in domestic economy which in turn, triggers domestic political demand for compensatory policies (Rudra & Haggard, 2005). This means that, theoretically, globalization compels governments to invest more in social services like education, health and social securities which is expected to lead to an improvement in human development. Hence, the following hypothesis is proposed:

H3: Globalization exerts a significantly positive effect on human development.

2.9.4 Democracy and Sustainable Development

Mak Arvin and Lew (2011) argue that “environmental quality” is a public good which is provided” by the government. Thus, “clean air, unpolluted rivers and lakes are provided by the government to improve the health condition of the society. There are many theoretical reasons why some scholars believe that a democracy is more likely to positively affect sustainable development than autocracies. *First*, in a democracy, the government or leaders are accountable to the people through elections which makes it difficult for them (elites) to unjustifiably benefit from the environmental degradation, *Second*, public involvement in decision-making is likely to ensure that serious environmental issues are ranked high on agenda of the government. Resultantly, the public can put pressure on the government and other policymakers through protests and demonstrations to ensure that environmental problems are resolved. *Third*, availability and access to information allow citizens to be more aware of environmental problems under a democracy. However, a non-

democracy (autocracies) is less likely to show concern to the environment due to lack of accountability of leaders, and few political elites tend to benefit from activities associated with high levels of environmental degradation, and no free flow of information (Winslow, 2005). From this discussion, the study proposes the following hypothesis:

H4: Democracy positively affect sustainable development.

2.9.5 Linkages between Democracy, Globalization and Sustainable Development

Although there are theoretical reasons to believe that globalization and the quality of democracy or political institutions exert independent effect on development outcomes (Welander, Lyttkens, & Nilsson, 2015), it is possible that both globalization and democracy interact, and that the impact of one varies with the strength of the other. The net effect of the two processes on sustainable development can be explained based on their key convergent features. One key assumption of democracy that resonates very well with globalization is the spread of information (Mak & Lew, 2011). Nevertheless, Welander et al. (2015) arguably posit that although globalization thrives on the spread of information, its net effect is contingent on the level of democracy. Thus, in an environment where the media is independent, civic activism is allowed, and the opposition parties can freely participate in the political discourse, public awareness will greatly increase, and the tendency for environmental concerns to be resolved will be very high. Even where the government's accountability is limited, but open and freer public participation are encouraged, and the flow of information is free, it will be difficult for political elites to disrespect human welfare (Sen, 1997) as well as environmental standards. It is often assumed that citizens in a well-developed democratic environment will likely have higher levels of trust in the government and societal functions, which will likely engender a positive interactive effect between globalization and democracy (Eichengreen & Leblang, 2008). From this theoretical underpinning, the quality of democracy is likely to dampen the negative effect of globalization on sustainable development. Consequently, the following conditional hypothesis is proposed:

H5: There is likely to be a positive relationship between globalization and sustainable development if a high level of democracy is present.

2.9.6 Sustainability and Human Development Index

The theory of sustainability assumes that the use of natural resources for today's needs should not damage its use by future generations (United Nations, 2015). It is anchored on three pillars: social dimension - to improve the living standards of the society, economic dimension – to achieve productive activities considered critical for the society, and environmental dimension – to minimize the pollution and the degradation of the ecological resources that are used in these processes. The link between sustainable development and human development is an emerging area in the literature. It is argued that sustainability should be understood as a means to an end and not an end in itself. Neumayer (2012, p. 561) argues that human development is what sustainability proponents want to sustain, and without sustainability human development is not true human development. Sen (2013) also argues that sustainable development is incomplete if it is not linked to an improvement in human development outcomes. For instance, the empirical evidence suggests that environmental pollution due to economic activities tends to affect the three dimensions of human development: health, education, and well-being (Clark et al., 2012; Currie, Hanushek, Kahn, Neidell, & Rivkin, 2009). From education perspective, atmospheric pollution negatively affects the ability of parents to send their children to school, and also affect students' ability to study effectively in class (Clark et al., 2012). From health standpoint, air pollution tends to harm peoples' health and shorten life expectancy (Boogaard et al., 2017), and overall well-being (Graff & Neidell, 2012). However, based on the theory of sustainability, when economic activities are conducted in a sustainable manner, it is likely to lead to improvement in human development outcomes. From this underpinning, the study proposes that:

H6: The relationship between sustainability and human development is positive

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

The Chapter details the methodology employed to explain the nexus between institutional quality, regime type (democracy) globalization, and sustainable human development. Specifically, the Chapter captures the philosophical assumptions or paradigms of the study, the research design, research method and the sample selection, data collection process and procedure, measurement of the constructs, and the empirical procedure for the derivation of the construct for sustainability, and the estimation techniques.

3.2 Philosophical Assumptions/Paradigms

Either knowingly or unknowingly, every researcher makes some basic assumptions and choices about certain elements of the research process. It is critical that researchers are not ambivalent in their thought concerning these assumptions and choices since they have consequences on the validity and reliability of researcher findings. A philosophical assumption relates to a wide range of issues including the nature of reality, theoretical justification of social knowledge as well as the logic of inquiry which is also known as methodology (Teddlie & Tashakkori, 2009). It further outlines the strategies required to investigate the reality and does so under the value-laden (axiology) social-political environment. According to Mertens and McLaughlin (2004), assumptions that as associated with complete worldviews can be classified as paradigms. Both assumptions and paradigms influence the extent to which a researcher decides on suitable research questions and methods for social inquiry.

The long-standing debate over philosophical issues which Teddlie and Tashakkori (2009) rightly described as ‘philosophical war’ is far from over. However, Crotty (1998) gives four keys to unlock any intractable social science research problem. First, what method do we propose to use? Second, what methodology underlies the choice and use of methods? Third, what philosophical assumption undergirds the methodology in question? And forth, what epistemology informs the selected theoretical framework. Crotty (1998, p. 2) further provides four interlinked schemata for these contested philosophical issues in social science research: methods, methodology, theoretical perspective, and epistemology/ontology. The methods discuss the techniques or procedures often use to collect information, process for analysis, based on the research questions or hypothesis. Methodology is the detailed plan of action underlying a particular method and links the choice as well as the use of methods to research findings. The theoretical perspective describes the philosophical grounds that informs the methodology as well as the context for scientific logic and criteria (Crotty, 1998). Epistemology is the theory of knowledge which is rooted in theoretical perspective and enables the explanation of research methodology. According to Grix (2018, p. 57), ontology and epistemology are the ‘core assumptions that underlie the choice of research questions and methodology’. Epistemology reflects our view of “what we can know about the world and how we can know it” (Marsh & Furlong, 2002, p. 19). Ontology relates to the “nature of being” (Marsh & Furlong, 2002). It looks at “whether there exists a real world ‘out there’ that is independent of our knowledge of it” (ibid). Grix (2018) posits that ontological positions concerning the nature of reality are divided between fundamentalism and anti-fundamentalism. These two contrasting views are presented in the following extract:

Central to a fundamentalists view is that reality is thought to exist independently of our knowledge of it... On the other hand, anti-funambulists do not believe that the world exists independently of our knowledge of it, but rather ‘reality’ is socially and discursively ‘constructed’ by human actors (Grix, 2018, p. 61).

The key assumption of fundamentalism forms the cornerstone of the positivists and the realist research traditions. This is in sharp contrast to the ontological anti-fundamentalism or interpretivist/constructivist research tradition. Against this backdrop, my ontological position is fundamentalism. Thus, I incline towards the realist philosophical view that the world is real and independent of our senses. Stemming from this, and in terms of epistemology, my study is situated within ‘positivist’ research paradigm. My position is however different from the alternative, thus, interpretivist/social constructionism who believe that social actors participate in the creation of the reality (Creswell, 2009). My study sought to investigate how the combine factors of institutions, regime type(democracy/autocracy), and globalization affect the sustainability of human development. Clearly, I hold an objectivist worldview that due to the complex relationships between human beings and the environment, there are multiplicity of factors that affect the sustainable development of human society. And these factors are independent of human consciousness.

3.3 The Positivist Research Paradigm

As mentioned earlier, a research paradigm is defined as “our understanding of what one can know about something and how one can gather knowledge about it”(Grix, 2018) . The positivist research paradigm is otherwise known as ‘empiricism’, ‘scientific method’ and ‘objectivism’ (Marsh & Furlong, 2002). According to (Guba & Lincoln, 1994), Positivism is rooted in the traditions of realism and ontological fundamentalism. Its worldview is founded on the belief that the world or reality “exists independently of our knowledge of it” (ibid). Positivists believe that there is an objective truth out there that social researchers can go discover. They espoused that social world behaves exactly like the natural world where there are “patterns” and “regularities”, “causes” and “consequences” of social actions (Denscombe, 2002, p. 14). This means that cause and effect relationships resonate very well with the positivist research tradition where scientific method is mostly employed. It should be emphasized that causes and effect relationships as espoused by positivism resonates very well with my study on how institutions, regime type, and globalization affect sustainable development. Thus, researchers have long argued that institutional quality,

the location of a society, and influence of external factors due to globalization tend to affect the prosperity of many countries. That said, my decision to investigate the causal relationships between these constructs dovetails with the positivists research tradition.

One major feature that distinguishes positivism from other research traditions is that it places primacy on ‘explanation’ and ‘prediction’ of social reality as opposed to ‘understanding’. Consequently, Marsh and Furlong (2002, p. 18) put forth a persuasive argument that positivists seek ‘objectivity’ in social inquiry. Another feature of social research that resonates with positivist thinking is the use of a theory to establish relationships in a manner that generate testable hypotheses to determine causal directions. Positivism depends largely on the empirical theory to generate knowledge but tends to relegate normative questions which are believed to be value-laden. That said, positivists like Grix (2018) opines that social science research can be value-free when objective or scientific method is employed to investigate social phenomenon.

Nevertheless, there are some notable weaknesses of positivism. Critics claim that positivists’ claim of objectivity of the nature of reality is untenable. Thus, it is argued that positivists claim to precision, exactitude and the ability to predict the occurrence of social phenomenon as in the natural science is misleading (Grix, 2018). The reason is that human beings are highly unpredictable and any investigation concerning people is hard to unravel. Hence, as far as social research cannot guarantee precision as in the natural sciences, it is misleading for the positivists to claim objectivism of the nature of reality. At best, social science research can only settle on probability rather than certainty or objectivity (Crotty, 1998). Positivists can only seek to approximate the truth instead of claiming totality or objectivity of truth. Nonetheless, positivism seeks to overcome these criticisms by devising “laws and rules with which to render the social world more understandable” (Grix, 2018, p. 82). Despite these criticisms, positivism inspires research tradition that pursues objectivity in social research compared to alternatives such as interpretivism or constructionism which is deeply rooted in participants’ values and beliefs.

3.4 Research Design

Creswell (2009) describes a research design as simply a plan or procedures to conduct a scientific research. It encompasses the intersection of philosophical assumption, strategies to conduct the research as well as the specific methods to use. According to Denzin and Lincoln (2008), four pillars determine “the design of a research: the paradigm or worldview”, the participants in the study, research strategy to adopt, and data collection instruments. From the foregoing discussion, it is evident that my ontological stance is fundamentalism and my epistemology or theoretical perspective is positivism research paradigm. Consistent with the basic assumptions of a positivist research paradigm, my study sinks very well with a purely *quantitative* research design. A quantitative research design can be defined as an empirical investigation that seeks to test a theory by measuring variables with numbers and analyze with statistics in order to explain or predict a social phenomenon (Creswell, 2009; Gay & Airasian, 2000). A quantitative research design is also known as objective or empirics research. Thus, the quantitative research design is underpinned by objectivist epistemology seeking to explain universal laws in a statistical manner to measure what it assumes to be a “static reality” (Yilmaz, 2013, p. 312). Thus, in a quantitative method the researcher and the subjects are viewed as separate entities and independent entities. To avoid researcher bias, the quantitative researchers hold the view that distance should be put between the researcher and the subjects being studied. Consequently, a quantitative method is preoccupied with concepts such as objectivity, prediction, replicability, and causality (Bryman, 1984). It places much emphasizes on how to measure and analyze causal relations between isolated constructs or variables in a form of a conceptual framework which is believed to be value-free, deterministic, deductive, and ultimately premised on prior theoretical perspective.

Researchers in a quantitative tradition endorses a worldview that posits that social phenomena are objective reality which is not depended on the subjects being studied. One major advantage for employing a quantitative research design is that it is objective because the “knower or the researcher and the known or the subjects are viewed as relatively separate and independent” (Yilmaz, 2013, p. 312). By doing so, a

quantitative study ensures that investigators achieve objectivity by distancing themselves from subjects under investigation. It should be emphasized that the key assumption of quantitative-positivism research tradition is that the reality exists independent of human knowledge and can only be discovered through investigation. Clearly, a quantitative approach is a *deductive method* where the investigator first determines a theory, generate testable hypotheses, and experiment the data through observation to help confirm or fail to confirm the set theory. Thus, the theory guides the conduct of a scientific analysis. This is contrary to an *inductive research* where the researcher begins with the observation by detecting some patterns and regularities leading to the development of a grounded theory (Creswell, 2009).

It should be noted that generalization is a key feature of a quantitative research method. Thus, large randomly selected representative samples are used to ensure that research findings can be generalized for the entire population. Most often, pre-constructed standardized survey instruments or pre-determined survey responses secondary data with varying experiences are used for the quantitative analysis. Although surveys are key data collection instruments, scholars have argued that experimental designs and secondary analyses of pre-collected data are also often used and regarded to exhibit the same underlying philosophical assumption (Gay & Airasian, 2007, p. 77). Undoubtedly, the point about the use of secondary data or pre-collected data further justifies why my study falls with a quantitative-positivist research tradition. Instead of using questionnaire, I seek to rely on existing databases that are tested and sanctioned by reputable organizations. The key assumption that quantitative-positivist researchers hold the worldview that the reality is independent of human knowledge is intrinsic to my study because my statistical analysis is based on a comparison between sub-Saharan countries and East and South-East Asian countries. Therefore, data were collected on these countries without having to visit individual country. This resonates very well with the view that in a quantitative study, there is a distance between the investigator and the subjects being investigated.

There are some notable advantages ascribed to quantitative research method. First, the responses of large participants can be measured based on a limited set of questions in a manner that facilitate comparison and statistical aggregation and analysis of the data. Second, it allows the generalization of research findings due to

the large sample and objectivity inherent in the process of the research. Third, according to (Creswell, 2009), quantitative research tradition based on its assumption of testing theories deductively, prevents biases, controls for confounding factors, and ensures that the findings can be generalized and replicated. In sum, based on deductive reasoning, quantitative-positivist researches, emphasize on generalization, cause-effect relationships, explanation and prediction. These notwithstanding, quantitative research method has some inherent weaknesses. It is argued that quantitative research fails to incorporate the experiences of participants due to “deductive approach and pre-determined sets of standardized responses based on theory” (Yilmaz, 2013). This means that quantitative-positivist research does not afford the opportunity for the respondents to describe in their own words their feelings, thoughts, frames of references, and experiences. Quantitative method ignores the meaning participants ascribe to a social phenomenon because of the insistence on neutral role of the investigator. Despite these weaknesses, quantitative method has gained traction in the scientific research community and has been extensively used by scientists, philosophers, and researchers.

3.5 Sample Selection

As mentioned in the introduction, several contemporary trends warrant the positioning of this study in policy circles and academic literature. *First*, the transition from MDGs to SDGs showed that all regions of the world have made progress, however, sub-Saharan Africa remains the region with the worst human development outcomes. *Second*, since most of the sub-Saharan African countries missed the MDGs targets on extreme poverty and human development, it shows that the fruits of economic development have not trickled down to the poorest segment of the population. *Third*, the environmental sustainability is one of the key themes that underpin the Post-2015 development agenda. It should be emphasized that the consequent of climate change and global warming are predicted to have devastating impact on sub-Saharan African countries. Against this backdrop, my study examined how governance, democracy, and globalization determinants affect post-2015 sustainable development agenda. The rationale is that although sub-Saharan African

countries are lagging behind other regions with regards to indicators of human development, it is important to examine whether their current development trajectory is on the sustainable path. By doing so, the study took the form of a comparative analysis with some selected countries in the East and South-East Asia for some reasons. First, the transition from MDGs to SDGs showed a general decline in the global extreme poverty and that was due to rapid advancement in most Asian countries, especially China, Indonesia, and India (World Bank, 2016). Second, it is instructive to note that some common historical, economic and institutional characteristics further justified my sample selection of sub-Saharan and some Asian countries for a comparative study.

According to Sartori (1991), one key basis for the use of a comparative method is that the entities to be compared must share some features in common and at the same time they should be different in some other respects. Although both sub-Saharan African countries and their Asian counterparts were originally poor and undeveloped especially in the 1960s, some countries in Africa were at the same footing with today's economic giants in Asia. For instance, in the mid-1960s, Ghana's per capita income matched that of South Korea and more than many Asian countries such as Malaysia, Singapore, Thailand, and many others. However, today, most Asian countries have transformed their economies and ranked higher on Human Development Index. The study examined the total of fifty-six (56) countries¹ from the two regions.

¹Angola, Ghana, Guinea, Madagascar, Seychelles, Gabon, Lesotho, Mauritania, Rwanda, Guinea Bissau, Kenya, Botswana, Cote d'Ivoire, Liberia, Comoros, Burundi, Malawi, Mauritius, Democratic Republic of Congo, Cameroon, Benin, Namibia, Burkina Faso, Sierra Leone, Mali, South Africa, Sudan, Senegal, Gambia, Nigeria, Niger, Mozambique, Burundi, Guinea Bissau, Uganda, Mauritius, Togo, Zambia, Nepal, Philippines, Cambodia, China, Hong Kong, Thailand, Singapore, Bhutan, South Korea, Bangladesh, Laos, Malaysia, Burma/Myanmar, Indonesia, Japan, , Sri Lanka, Brunei, and Vietnam.

3.6 Data Collection and Measurement of Variables

The study examined a panel of 56 countries based on secondary data between 1990 and 2015 from reputable sources. The periodicity was based purely on data availability. The dependent variable is Sustainable Development (SD) and the “independent variables” of interest are the measures of governance, democracy, and the measures of globalization.

There are two dependent variables in this study: sustainability (measured by the Genuine wealth per capita (GWP) and the human development Index. The Genuine wealth per capita is widely used and deemed to be consistent with the existing literature (Aidt, 2011; K. Hamilton & Clemens, 1999). While a positive figure shows an increase in the genuine wealth of a country, a negative estimate shows a decrease. The World Bank publishes annual data on its online database dubbed World Development Indicators. The WDI approved indices that are deemed to cover many countries and is often used by researchers and practitioners (K. Hamilton & Clemens, 1999).

The independent variables and the variables of interest were sourced variety of databases. The governance indicators were sourced from the “World Development Indicators published by the World Bank” Kaufman, 2011). The “WDI indices are based on a large number of individuals that assess the state of governance in many countries across the world” (ibid). These include expert survey institutes, “think tanks, non-governmental organizations, international organizations, and private sector firms” (ibid). The six indicators are: “*political governance* (voice and accountability and political stability/ absence of violence), *administrative/economic governance* (government effectiveness and regulatory quality), and *judicial/institutional governance* (rule of law and control of corruption)”. Currently, WGI is the only dataset that embraces many countries and time series and there is no reliable alternative yet. The “WGI report assigns each country a score (value) for the six indicators ranging from – 2.5 to 2.5. A rating of – 2.5 is a very low score, and + 2.5 is a very high score” (Kaufmann, Kraay, & Mastruzzi, 2011). “It also provides each country with a percentile rank, ranging from 0 to 100, where the higher the score, the better the national performance on that indicator” (ibid). To measure democracy, data

were extracted from two sources: the polity IV and Freedom House databases. Polity IV ranks countries from the scale of 1-10, where 10 (more democratic) and 1 (more autocratic). Freedom House provides annual data that captures three key features of democracy: civil right, political rights, and press freedom. In each of the three areas, countries are ranked from the scale of 1 to 7 – where 1 indicates freer and 7 shows that countries are least free. Freedom House also provides the aggregate score of these three democratic variables. – the aggregate score of 0 (least free) and 100 (most free).

The study used the KOF indices (overall, economic, social, and political dimensions) as measures of globalization. Data were taken from (Axel Dreher, 2006) and (Axel Dreher, Gaston, & Martens, 2008). The economic, social and political dimensions are further operationalized by different variables. It is measured on a scale of 1 (minimum globalization) to 100 (maximum globalization). Although KOF index has been criticized for being westernized and not taken into consideration the environmental aspect (see Martens et al., 2015), it is arguably the most reliable measure of globalization (Gygli, Haelg, Potrafke, & Sturm, 2019; Villaverde & Maza, 2011). Globalization was also measured by trade openness variable and the data was extracted from World Development indicator database of the World Bank. Trade openness as a proxy for globalization measures the extent to which a country is exposed to international trade. It is expected that greater openness to international should have a negative relationship with sustainable development. Thus, greater openness means that there will be increased in economic activities leading to economic growth. However, this growth in an economy comes with an environmental cost. The variables and their operational definitions are summarized below:

Table 3.1 Variables and their Measurements and Sources

Variable	Measurement/definition	Data source
Genuine wealth per capita	Measures the genuine wealth of country after environmental depletion, and population growth rate have been deducted from the national income/savings. When the value is positive, it shows the sustainability of the economy.	World Bank, WDI, 2018

Variable		Measurement/definition	Data source
Human Development Index	Development	Measures human development in three dimensions (health, education, and income. Below 0.5 (low human development) and above 0.5 (high human development).	UNDP, 2018
Life expectancy at birth		Measures how long a newborn is expected to live if the current mortality does not change over time.	UNDP, 2019
Government effectiveness		Measures the perception of the effectiveness of public bureaucracies and the extent to which they are not arbitrary influenced by the ruling elites. It shows how effect public policies are formulated and implemented. It ranges from -2.5 (low score) to 2.5 (high score).	World Bank, 2018 WGI
Regulatory quality		Perceptions of the ability of the state to regulate activities of individuals including businesses. Ranges from -2.5 (low score) to 2.5 (high score).	World Bank, 2018, WGI
Control of corruption		Measures the perceptions of the extent to which public resources are appropriated for selfish gains.	World Bank, 2018, WGI
Rule of law		It measures the degree of confidence repose in state institutions to enforce the protection of private properties including contract enforcement and to ensure peace and stability.	World Bank, 2018, WGI
Democracy		It measures competitiveness of political participation. From -10 (most autocratic) to 10 (most democratic).	Polity IV Marshall, Gurr, & Jaggers (2016)
Political rights		Measures violation of political rights. It is measured between the scale of 1-7. Where 7 (more violations of rights) and 1 (less violation of rights).	Freedom House database, 2018
Press freedom		Measure the extent to which the media (both print and electronic) are free. The extent to which the regime restricts the information flow. Total score from 0 (freer) to 100 (less free).	Freedom House, 2018
KOF Index		An aggregate of economic, social,	Dreher, 2006

Variable	Measurement/definition	Data source
	and political globalizations.	Dreher, 2008 Gygli et a., (2019) ETH Zurich KOF Economic Institute al (2001).
Economic globalization (kofe1)	Measure actual flows in goods and services including restrictions on trade and capital (such as import barriers, taxes on international trade, and capital accounts restrictions). Measured on a scale of 1(less globalized and 100(more globalized).	Dreher, 2006 Dreher, 2008 Gygli et a., (2019) ETH Zurich KOF Economic Institute al (2001).
Social globalization (kof2).	Measures integration with regards to personal contacts and linkages, internet connectivity, telephone services, international tourism services, immigration and emigration, daily newspapers, television stations, radios, and number of foreign restaurants particularly McDonald restaurants (cultural proximity). Measured on a scale of 1(less globalized and 100(more globalized).	Dreher, 2006 Dreher, 2008 Gygli et a., (2019) ETH Zurich KOF Economic Institute al (2001).
Political globalization (kof3)	Measures formal international linkages such as number in international organization like the UN, and other regional affiliations. Measured on a scale of 1(less globalized and 100(more globalized).	Dreher, 2006 Dreher, 2008 Gygli et a., (2019) ETH Zurich KOF Economic Institute al (2001).
	Measures annual population growth	World Bank, 2018 WDI
Foreign Aid	Net Development Assistance received (% of GNI)	World Bank, 2018 WDI
Gross National Income (PPP, constant, 2011)	GNI per capita based on purchasing power parity.	World Bank, 2018 WDI

Variable	Measurement/definition	Data source
CO ₂ emissions from electricity and heat.	CO2 emissions from electricity and heat production, total (% of total fuel combustion.	World Bank, 2018
Secondary education	Total enrollment in secondary education, regardless of age. A measure of human capital	WDI World Bank, 2018
Primary education	Total enrollment in primary education, regardless of age. A measure of human capital	WDI World Bank
British Colony	Measures countries that were colonized under the United Kingdom. It is usually a dummy construct	World Flag Database
Ethnic fractionalization	The possibility that each person a particular country belongs a at least one ethnic group or speak one local language.	Alesina et al. (2003)

Source: Author's own construction

3.7 Calculating the Index of Sustainability (Genuine Wealth per Capita)

The study relied on the extant literature to derive the proxy for sustainable development. The paper assumes that “society is populated by many identical individuals who live forever in an environment where time (t) is continues” (Arrow, Dasgupta, Goulder, Mumford, & Oleson, 2013). It is further assumed that “the population is constant and does not change over time” (ibid). And that the “society engages in all the production variety of goods (Y_t) from labour (L_t), capital (K_t) and the natural resources (R_t)” (ibid). Hence, the production technology is denoted as:

$$Y_t = F(L_t, K_t, R_t) \quad (1)$$

According to Arrow et al. (2013), in each of the cases, “F is supposed to increase. It must be stressed that the production function should not be concave –

allowing the results to be applicable to a wide-range of economies. This suggests that capital will change in consonance with the model below” (ibid):

$$\frac{dK_t}{dt} = F(L_t, K_t, R_t) - C_t \equiv I_t^k \quad (2)$$

“where C shows the composite index of consumption, I_t^k is the extent to which the capital is believed to be without depreciation. Hence, a countries resource rent (S_t) is expected to change in line with the model below”:

$$\frac{dS_t}{dt} = M(S_t) - r_t \equiv I_t^s \quad (3)$$

“where $M(S_t)$ shows the renewal of natural resources and I_t^s depicts the extent of investment in an economy”. It must be noted that the “regeneration rate of non-renewable resource is assumed to be zero for all S_t whereas the regeneration rate is positive for renewable resources”. Hence, “people get satisfaction from consumption and supply”. This idea shows the “concave nature of the function based on the utility derived $U(C_t, L_t)$. Consequently, human welfare” is denoted as follows:

$$V_t = \int_t^\infty U(C_t, L_t) e^{\delta(\tau-t)} d \quad (4)$$

While $\delta > 0$ shows the satisfaction or the utility. P_τ is the indicates the capacity to take policy decision in an economy, beginning from period τ and the forecast what happens in the future based on the quantities of goods produced in an economy” (i.e. $P_t \equiv \{C_t, L_t, R_t, K_t, S_t\}_{\tau=t}^\infty$). Essentially, “the economic, political and social structures established in the country as defined with respect to a , thus, based on the health of an economy over a period of time t , $\{K_t, S_t\}$, to be able to implement

policy decisions (P_t) from other alternative policies”. In this case, “sustainable human welfare function can be denoted as follow with respect to institutions and the stock in capital”.

$$V_t = V(a, K_t, S_t) \quad (5)$$

From here, Dasgupta and Mäler (2000) put forth two criteria for defining sustainability. Thus, the shadow prices of assets in capital are measured as follows:

$$\begin{aligned} p_t(a) &\equiv \frac{\partial v(a, k_t, s_t)}{\partial k_t} \\ q_t(a) &\equiv \frac{\partial v(a, k_t, s_t)}{\partial s_t} \end{aligned} \quad (6)$$

“While prices that show the shadow indicate the measure of sustainable human welfare, which also functions with respect to institutions created in the society as well as the stocks in capital” (i.e. $V_t = V(a, k_t, s_t)$). This is mathematically represented below:

$$\frac{dV_t}{dt} = \frac{\partial v}{\partial K_t} \frac{dK_t}{dt} + \frac{\partial v}{\partial S_t} \frac{dS_t}{dt} \quad (7)$$

“Based on models (5) and (6) and with respect to equation (2) and (3), The function for the adjusted-Net savings” (as published monthly by the world Bank) is indicated below:

$$\frac{dv_t}{dt} = p_t(a)I_t^k + q_t(a)I_t^s \equiv GI \quad (8)$$

“where GI stands for genuine investment/savings or adjusted-net savings”. “Adjusted-net savings measure a change in the value of a nation’s assets with regards to manufactured capital as well as natural and human capital” (K. Hamilton &

Clemens, 1999). According to Arrow et al. (2012), “genuine investment or adjusted-net savings can be converted to an estimate of growth in genuine wealth per capita”. The “World Bank publishes a measure of genuine investment or adjustment-net savings on yearly basis”. Arrow et al. (2012) argue that the “adjusted-net savings can be derived from standard national accounting measure of gross national savings by making four adjustments reflecting genuine investment in the productive base of an economy”.

The first correction is to deduct an “estimate of fixed consumption capital to obtain net national savings”. This helps to ‘replenish the value of capital depleted during the production process. The second is the addition of current expenditures on education, signaling an investment in human capital development”. Third, “estimates of the depletion of a variety of natural resources such as forest, minerals, and energy are further deducted from net national savings”. Finally, “carbon dioxide emission as well as the financial deduction of the damages done to human health due to pollution from economic activities”. After the “adjustments from the gross national savings, the result gives the rough figure of genuine investment (adjusted-net savings) as a percentage of gross national income (GNI)”. When the “ANS is positive, it shows an investment in future welling-being as a nation accumulates the assets needed to drive economic growth and at the same time be able to sustain current levels of consumption” (K. Hamilton & Clemens, 1999).

However, scholars notably Dasgupta and Mäler (2000), J. Hamilton (2003) and Dietz and Neumayer (2007) highlighted some weaknesses in the use of adjusted-net savings. First, “population growth rate is assumed as constant. Thus, in a situation where population is growing at a faster rate, the per capita rate is likely to decline”. The second weakness relates to the fact that “capital assets such as human and capital are missing in the national accounts”. That said, Arrow et al. (2004) proposes that the “computation process should convert the average adjusted-net savings or genuine investment (ANS) on percentage of GNI into growth rate of genuine wealth per capita (*gwp*) by multiplying by a presumed GN-wealth ration (v)”. “Ratio of 0.125 is suggested for low income countries, 0.15 for lower middle-income countries, 0.175 for upper middle-income countries, and 0.2 for high-income countries” (Arrow et al.,

2012). The population growth rate (n) is then discounted. Consequently, the empirical model for sustainability is given below:

$$\frac{\frac{dgw}{dt}}{gw} = \frac{GI}{GNI} v - n \quad (9)$$

“From here, the Genuine wealth per capita, the proxy for sustainability is gw , v is the presumed wealth ratio, and n stands for population growth rate”. Thus, “Genuine wealth can be derived by multiplying the adjusted-Net savings by the wealth ratio and deduct population growth rate”.

3.8 Estimation Techniques and the Model Specification

Three estimation techniques were used to control for specific characteristics: Panel Ordinary Least Squares (OLS), Random-effects (RE), Fixed-Effects (FE), and the Instrumental variable estimations such as the two-stage least square (IV(2SLS)) and the system Generalized Method of Moments (system-GMM). Since the data involved both time series and cross-section observations, these panel data estimations were most suitable. Panel data estimation has several advantages. First, panel analysis helps to account for how governance, democracy, and globalization variables within each country affect sustainable development over time. Thus, it allows taking into account the heterogeneity or individuality of each country with regard to the relationship between the dependent and independent variables. Second, with the combination of time series and cross-section observation, panel data provides more information, more variability, less collinearity among variables, more degrees of freedom, and more efficiency. Third, it helps to detect and measure the effects of unobserved country-specific effects and thereby reduce bias in the estimated coefficients.

It should be noted that where there are serious issues regarding endogeneity and serial correlation, Ordinary Least Squares (OLS) may offer misleading results. Also, any attempt to ignore time-specific or country-specific unobserved effects that exist among countries in the conventional time-series and cross-sectional studies may

lead to a bias. Hence, fixed-effect (FE) estimation is efficient in controlling for unobserved country-level heterogeneities and time-invariant factors. Hausman-Taylor and Breusch and Pagan Lagrangian Multiplier (LM) tests were performed to determine the appropriateness between the fixed-effects and random-effects estimations. The fixed-effect, however, loses its credibility and becomes inconsistent in the wake of time-varying omitted variables that are correlated with the independent variables resulting in the problem of endogeneity or reverse causality (Phillips & Sul, 2007). Consequently, instrumental variable in two stage least squares (IV(2SLS)) was employed to deal with the problem of endogeneity that is likely to persist despite the use of OLS and fixed-effect estimations. It should be noted that the efficiency of IV(2SLS) depends on the validity of the instruments. Nevertheless, the appropriate instruments often used in the literature includes but not limited to ethno-linguistic fractionalization (elf), common law, latitude, and corruption. These instruments have been extensively used as policy variables in the growth literature (Alesina, Devleeschauwer, Easterly, Kurlat, & Wacziarg, 2003).

The IV-2SLS and system-GMM estimations both make use of instrumental variable approach. However, the difference is that whilst IV-2SLS estimation uses external instruments, system-GMM uses part of independent variables as instruments (Arellano & Bond, 1991). The consistency of system-GMM estimator is assessed through the Hansen test of over-identifying restrictions for the overall validity of the instruments and the test for the null hypothesis that the error term is not serially correlated. In the situation where you fail to reject the two hypotheses, it lends support to the model (Arellano & Bond, 1991; Arellano & Bover, 1995; Blundell & Bond, 1998; Roodman, 2009). Two-step system-GMM by Arellano and Bond (1991) as modified by Roodman (2009) was used to estimate the model because it is the most optimal. Therefore, the difficulty of looking for valid instrumental variables has been reduced with the use of system GMM estimation. To address the problem of endogeneity, system-GMM estimator uses lagged values of dependent variables as part of independent variables.

The basic panel model is represented below:

$$SDgwp_{it} = \delta_0 + \delta_1 GOVERNANCE_{it} + \sum_{h=1}^{12} w_h W_{h,i,t-t} + \eta_i + \varepsilon_{it} \quad (1)$$

$$SDgwp_{it} = \delta_0 + \delta_3 GLOBALIZATION_{it} + \sum_{h=1}^{12} w_h W_{h,i,t-t} + \eta_i + \varepsilon_{it} \quad (2)$$

$$SDgwp_{it} = \delta_0 + \delta_3 DEMOCRACY_{it} + \sum_{h=1}^{12} w_h W_{h,i,t-t} + \eta_i + \varepsilon_{it} \quad (3)$$

$$SDgwp_{it} = \delta_0 + \delta_4 DEMOCRACY \times GLOBALIZATION_{it} + \sum_{h=1}^{12} w_h W_{h,i,t-t} + \eta_i + \varepsilon_{it} \quad (4)$$

$$HDI_{it} = \delta_0 + \delta_5 SDgwp_{it} + \sum_{h=1}^{12} w_h W_{h,i,t-t} + \eta_i + \varepsilon_{it} \quad (5)$$

However, the dynamic Panel model is shown below:

$$SDgwp_{it} = SDgwp_{it-1} + \delta_1 GOVERNANCE_{it} + \sum_{h=1}^{12} w_h W_{h,i,t-t} + \eta_i + \varepsilon_{it} \quad (6)$$

$$SDgwp_{it} = SDgwp_{it-1} + \delta_1 GLOBALIZATION_{it} + \sum_{h=1}^{12} w_h W_{h,i,t-t} + \eta_i + \varepsilon_{it} \quad (7)$$

$$SDgwp_{it} = SDgwp_{it-1} + \delta_1 DEMOCRACY_{it} + \sum_{h=1}^{12} w_h W_{h,i,t-t} + \eta_i + \varepsilon_{it} \quad (8)$$

$$SDgwp_{it} = SDgwp_{it-1} + \delta_1 DEMOCRACY \times GLOBALIZATION_{it} + \sum_{h=1}^{12} w_h W_{h,i,t-t} + \eta_i + \varepsilon_{it} \quad (9)$$

$$HDI_{it} = HDI_{it-1} + \delta_1 GOVERNANCE_{it} + \sum_{h=1}^{12} w_h W_{h,i,t-t} + \eta_i + \varepsilon_{it} \quad (10)$$

Where $SDgwp_{i,t}$, is the Genuine wealth per capita as the measure of sustainable development for country i at period t , $SDgwp_{it-1}$ is the lag of $SDgwp_{i,t}$, δ_0 is constant, $GOVERNANCE$ is the measures of governance such as the effectiveness of the governance, the corruption control, “regulatory quality, and the rule of law”. $GLOBALIZATION$ stands for the measures of globalization (overall, economic, social, and political globalization), $DEMOCRACY$ is the variables of democracy (democracy index, political rights, and press freedom), $DEMOCRACY \times GLOBALIZATION$ is the interactive term involving democracy and globalization, HDI stands for human development index, HDI_{it-1} is the lag of HDI , W is the vector of control variables, η_i is the country-specific effect and $\varepsilon_{i,t}$ is the error term.

CHAPTER 4

CONTEMPORARY ISSUES AND THE CONTEXT OF THE STUDY

4.1 Introduction

This chapter discusses the background and development trajectory of the two geographical regions of the study sub-Saharan Africa and some selected countries Asia. It further examines and compares their respective progress and challenges.

4.2 Sub-Saharan Africa

Geographically, “sub-Saharan Africa denotes an area of the African continent that lies South of the Sahara Desert”. This contrasts sharply from those countries in “North Africa, which are part of the Arab world”. As at 2018, the total population of sub-Saharan Africa was over 1 billion. The UN projects that the total population is expected to hit 2.5 billion by 2050, with the population density of 80 per km², suggesting that the region is densely populated. The region is also a home of over 1,000 languages, which cover around 1/6 of the total languages in the world.



Figure 4.1 Shows the Map of Sub-Sharan Africa. The Green Portion Shows the Countries Included in the Study.

4.3 Governance Environment in Sub-Saharan Africa

However, after the ‘third wave’ of democratization, there has been a renewed interest in the development project in Africa due to persistent poverty and lack of economic transformation in the midst of abundant natural resources (Edigheji, 2010; Routley, 2014). Analysts adduced structural, political, and historical reasons for Africa’s economic morass: first, African countries’ overreliance on primary products and the inability to foster an environment for high value-added economic activities and to facilitate private sector growth. Second, ineffective leadership, corruption, and weak institutions. Third, colonialism, neo-colonialism, and an unjust world economic order (Ayee, 2013, p. 260).

The region comprises of 48 states at various stages of social, economic and political development. Although sub-Sahara African countries have made notable

democratic progress, there are visible governance deficits that pose greater threat to economic and human development (Fosu, 2017). Electoral democracy appears to have gained traction in the region as citizens are increasingly being given the opportunity to choose their leaders in multiparty elections. However, countries such as Uganda, Cameroon, and Togo are still being ruled by authoritarian dynasties (Freedom House, 2018). There is also democratic relapse in countries such as Zimbabwe, Tanzania, Eritrea, Ethiopia, Democratic Republic of Congo, Congo Republic, Guinea, Gabon, and others. On average, political rights and civil liberties have improved remarkably in the region in the past few years. With respect to governance dimension such as “political stability, effectiveness of government, quality regulation, rule of law and control of corruption”, most countries are lagging behind (Antonio, 2001). Fosu (2017) has argued that corruption is the major weakness of governance in the region.

As illustrated in figure 4.1 below, governance dimensions with respect to voice and accountability, political stability in the absence of violence, government effectiveness, regulatory quality (RQ), control of corruption, and the rule of law have all been negative since 1996 when the World Bank under the “world development indicators” started publishing data regarding countries performance on good governance. The data shows clearly that bad governance is pervasive in the region given that governance estimates have consistently been negative over the years. The world Bank rates countries from -2.5 (very low score) to +2.5 (very high score). As can be seen, the graph below shows that on average the region is performing worst with regards to the effectiveness of the government (-0.8) and the rule of law (-0.7). Although the region seems to be doing well with respect to “voice and accountability and political stability”, there is no doubt that the performance on such indicators are also bad since the average estimate scores have consistently been negative from 1996 to 2012.

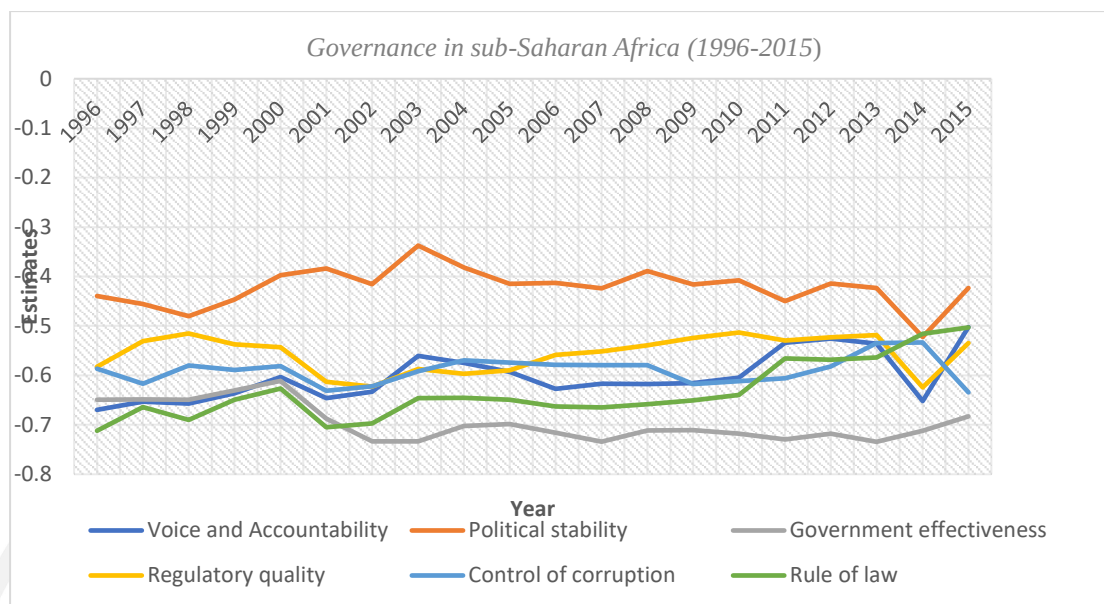


Figure 4.2 The State of Governance in Sub-Saharan Africa

Source: World Governance Indicators, World Bank, 2018.

It should be noted that the bad governance of most countries in the region with regards to governance effectiveness - which measures the quality of public services, the quality of the civil service, the extent to which the public sector is free from political interference, and the extent to which the government is committed to public policies – will also reflect in poor delivery of public services such as health and education, which will further lead to poverty as well as overall poor human development. Nevertheless, in some isolated cases, countries such as Benin, Botswana, Ghana, Mauritius, and Namibia appear to be doing well by ensuring practical institutionalization of good governance practices. This notwithstanding, high level of corruption among political elites is posing a great threat to institutional resilience across the region (Gossel, 2018).

4.4 Performance on Some other Qualitative Development Outcomes in Africa

The government deficits are likely to hinder progress in several sectors with the region hosting about 416 million extremely poor people in the world (World Bank, 2019). The 2019 WHO's report on the state of food security and nutrition in the world shows that about 239 million people in sub-Saharan Africa are malnourished. The UN Habitat report shows that 238 people in the region are either homeless or dwell in slums. With regards to youth unemployment, the International Labor Organization (ILO) Global Employment Trends, 2019 states that sub-Saharan Africa records about 11.2% of unemployed youth. Similarly, African Development Bank's report highlights that 1/3 of youth in the region between the ages of 15 and 35 is unemployed and discouraged, and another 1/3 is employed in vulnerable conditions with low wages. These staggering figures place Africa as the region with the highest youth unemployment rate in the world, a fact that, therefore, impairs a whole generation of the youth in Africa. Youth unemployment has become cancerous and the primary cause relates to systemic corruption and unfettered elite capture of state resources. The youth unemployment has triggered upheavals and uprisings in many countries including South Africa, Nigeria, Burkina Faso, and several others in a manner that undermines the stability of democracy in most countries and governments. The net effect is that many disadvantaged youths are unwittingly recruited into criminal gangs such as armed groups, rebel forces, and suicide bombing networks. They are also exposed to delinquencies such as drug trafficking, money laundering, cybercrime, and other risky behaviours.

The "United Nations Development Programme (UNDP) under its human development index measures the population's ability to live a long and healthy life, be knowledgeable, and have access to resources required for better standard of living" (Neumayer, 2012). From figure 4.2, it is obvious that sub-Saharan African countries have a long way to go with regards to human development and income inequality. The data shows that the human development index of most countries in the region is below 0.5, which indicates poor performance based on the UNDP standard. Although

the progress is very slow, on average, the graph suggests that human development in the region has been improving since 1990.

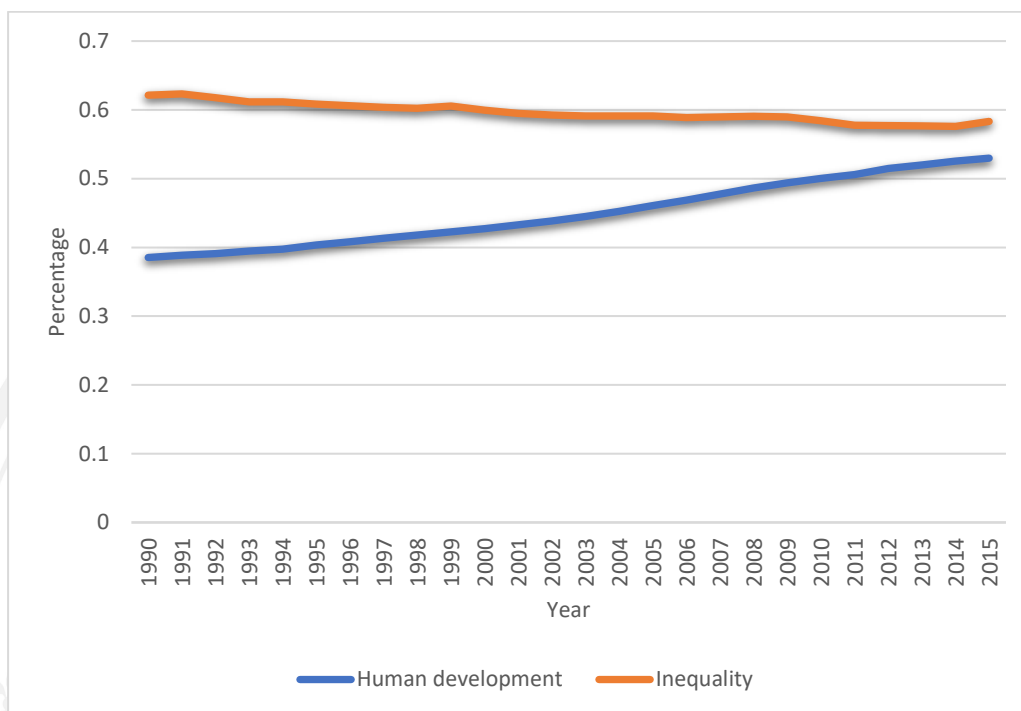


Figure 4.3 Human Development and Inequality Status in Sub-Saharan Africa (1990-2015)

Source: UNDP, 2018, World Bank, 2018.

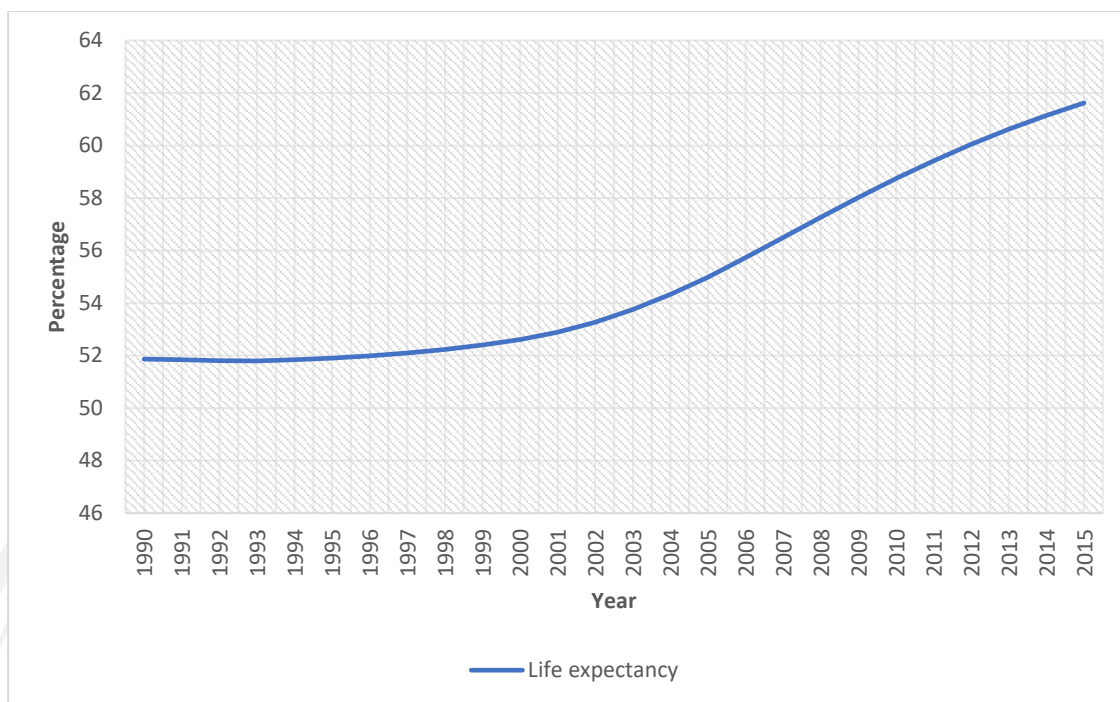


Figure 4.4 Life Expectancy in Sub-Saharan Africa (1990-2015)

Source: UNDP, 2018 and World Bank, 2018.

With respect to inequality (see figure 4.2), the average Gini index of 0.6 shows that inequality is pervasive in the region. However, it is interesting to note that inequality has been moderately reducing, albeit, very slow in the region since 1990. This is consistent with the 2018 report on World Inequality, which suggests that 55% of the total income accrues from recent economic growth in the sub-Saharan Africa region, is controlled by the top 10% (Alvaredo, Chancel, Piketty, Saez, & Zucman, 2018). The yawning income inequality gap seems to be a pervasive challenge for countries in sub-Saharan Africa and Asia. Franklin Obeng-Odoom (2020) argues that sub-Saharan Africa is the most unequal region in the World. With the exception of Middle East countries, as the gini index stands at about 0.58, sub-Saharan Africa is a home of ten out of nineteen most unequal countries in the World (Adams & Klobodu, 2019; Cornia, 2017). Franklin Obeng-Odoom (2020) further posits that income inequality in Africa is a function of wealth and power. For instance, Ghana is endowed with natural resources including cocoa, gold, timber, uranium, Bauxite, diamond and recent discovery of oil and gas in commercial quantities, and these

sectors are key contributors to Ghana's economy. Ayelazuno (2014) argues that the natural resource extraction industry is dominated by political elites and individuals who control the wealth in the sector at the expense of the entire Ghanaian population. The politicians and few economic or business elites who form the 1% of the population also control majority of businesses and the overall national resources, thereby widening income inequality in the country.

Turning to Asia, with the exception of sub-Saharan African and Latin American and Caribbean countries, scholars have argued that with the current gini index hovering around 0.536, income inequality in Thailand is among the highest in the world (Phongpaichit, 2016; Vanitcharearnthum, 2017). This is consistent with the cross-country empirical study conducted by Balakrishnan, Steinberg, and Syed (2013), which established that income inequality in Thailand is scary and only exceeded by countries in Africa and Latin America. Within South-East Asian region, Jenmana and Gethin (2019) contends that Thailand is the most unequal country. With the top 1% holding about 56% of the total Thai wealth, Credit Suisse (2017) ranks Thailand as the most unequal country with respect to wealth inequality ratio along with Russia (56%) and India (45%). Accounting for the factors that contribute to this worrying trend, Motonishi (2006) has argued that the military has entrenched themselves within the corridors of power and built personal ties with the economic elites, which enabled them (the military) to wantonly own commercial banks and lucrative businesses, and eventually amassed wealth to the detriment of the entire Thai population. Consistent with this view, Laovakul (2016) argues that the top 10% of Thais own 61% of all titled land whereas the bottom 10% own only 0.1%. The issue regarding how Thai political economy allows the military and other technocrats to grab-power and dominate commercial banking and real estate businesses has also been documented extensively by Jenmana, Alvaredo, and Piketty (2018). Like in sub-Saharan Africa, spatial inequality is predominant in Thailand. Phongpaichit (2016) has argued that "the population of Bangkok and Central Region control almost 70% of Thailand's public expenditure and continue to reap benefits of development whereas the rural provinces are left behind.

Figure 4.3 shows that the average life expectancy in sub-Saharan Africa is about 60 years. Then again, the graph suggests that life expectancy has been

improving slightly in the region since 1990. It should be noted that the poor performance of most countries with respect to human development may be due to bad governance practices in the region. According to Johanson and Adams (2004), contextual issues such as diseases, wars and weak institutions in sub-Saharan Africa have debilitating impacts on labour markets and other development outcomes.

Undoubtedly, sub-Saharan African countries are endowed with large amounts of natural resources such as oil, gold, and diamond, and other mineral deposits, yet, they have not experienced sustained economic growth, poverty reduction, and overall human development. For example, Beny and Cook (2009) have shown that the “endowment of natural resources in sub-Saharan Africa has had a negative impact on the economic growth of the region”. The authors have further shown that countries in South East Asia particularly Singapore, Taiwan, South Korea, and a host of others in Europe, with few or no natural resources have experienced dramatic transformations in the structure of their economies that resultantly increase the standards of living of their populations. This suggests that having natural resources is good, but the extent to which the resources are well-managed to the benefit of the population is the most important thing to think about. In fact, a large number of empirical studies seem to suggest that weak governance, corruption, and lack of rule of law are the major threats to development and poverty reduction (Acemoglu, Johnson, Robinson, & Yared, 2009).

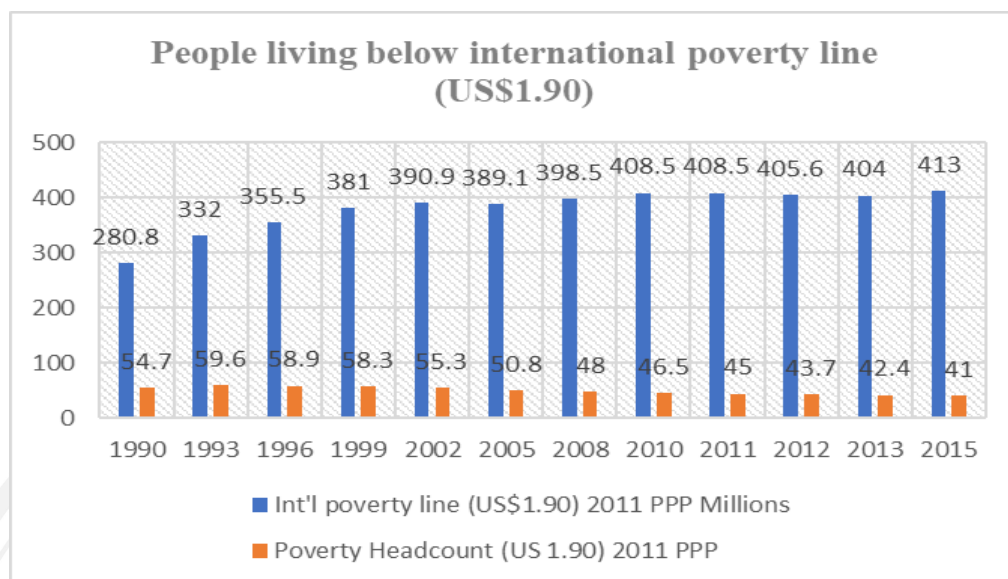


Figure 4.5 Poverty Trends in Sub-Saharan Africa (1990-2015)

Source: PovaNet, World Bank,

Note: Poverty Trends sub-Saharan Africa (1990-2015).

Of the “world’s 28% poorest countries, 27% are in sub-Saharan Africa, all with poverty rates above 30%. In short, extreme poverty is increasingly becoming a sub-Saharan African problem”. Sub-Saharan African countries have “struggled partly because of their high reliance on extractive industries that have weaker ties to the consumption and income levels of the poor, the prevalence of conflict, and their vulnerability to natural disasters such as droughts” (Beny & Cook, 2009). Despite faster growth in some “sub-Saharan African economies, such as Ghana, Burkina Faso, and Rwanda, the region has also struggled to improve shared prosperity”. Clearly, “extreme poverty is far from over—and in some ways it is becoming more severe”. The number of the “poor worldwide remains unacceptably high, and it is increasingly clear that the benefits of economic growth have been shared unevenly across regions and countries”. Even though a “greater part of the world is striving to leave extreme poverty behind, poverty is becoming more entrenched and harder to root out in certain areas, particularly in countries burdened by violent conflict and weak institutions”. “Poor households are overwhelmingly located in rural areas, have large numbers of children, and suffer from a lack of education”. They are “ill-served in essential

elements of well-being such as healthcare and sanitation and are often exposed to natural hazards and physical insecurity”.

4.5 East and South-East Asia

It should be noted that based on the objectives of this study, East and South-East Asian countries are the main target based on some historical characteristics they share with their counterparts in Africa. However, to get more observations for panel data analysis, South Asian countries such as *Sri Lanka, Bhutan, Nepal, India, and Bangladesh* were added to the sample. Geopolitically, they cover about 12,000,000 km² (4,600,000 sq ml). It is estimated that the region hosts the total of approximately 1.5 billion people. The region is also culturally and ethnically diverse, with hundreds of languages spoken by different ethnic groups.



Figure 4.6 Map of Some East and South-East/South Asian Countries Included in the Study

4.6 Governance Environment in Asia

As noted earlier, the regions of South, South-East, and East Asia are geographically diverse – with cultural, religious, and ethnic peculiarities (Jamil, Aminuzzaman, & Haque, 2013). These diversities do not only exist in geographical cultural domains but also reflect in political and constitutional make-ups, which translate into different development trajectories. With respect to governance, South, South-East and East Asian countries are still distinct due to their unique political landscapes, demographics, and histories (Jamil et al., 2013). Most countries, especially, the South-East and East Asia adopt a developmental state model because of the state-centric nature of their governance system. Nevertheless, the 1997 financial crisis in the region has brought the centralized or state-led approach to development to question (C. Cheung, Baum, & Wong, 2012). The financial crisis has indeed called for new institutional arrangements, perhaps, an opportunity to try a liberalized or neoliberal economic policy. Governance environment in South Asia, however, is varied – whereas some have maintained steady economic growth, political stability, human security and general safety, others are far behind despite the fact that democracy has been adopted by most of these countries as the form of governance (Cheung, 2013).

Generally, South, South-East and East Asian countries are governed under different political regimes ranging from democracy to autocratic or authoritarian regimes as well as totalitarianism or communism. While countries such as India, South Korea, Japan, Philippines and Indonesia are governed under democratic regimes, Malaysia, Singapore, Cambodia, Sri Lanka operate under controlled democracies, whilst Thailand and Myanmar/Burma are governed under unstable political systems, thus, alternating between autocracy and so-called democracy. However, Laos, Vietnam, Brunei, China, and Hong Kong are under autocracies or Communist regimes (Laiprakobsup, 2019). The most challenge to countries in Asia is the restriction on political rights and press censorship (Jamil et al., 2013). Despite the record of effective governance in most countries in Asia, several other countries, particularly those in South Asia, have poor governance structures with widespread

corrupt practices, non-accountable governance, and non-transparency in national affairs (Wang & Liu, 2018), as do their sub-Saharan counterparts.

As illustrated in the graph below (see figure 4.4), countries in South, South-East, and East Asia appear to be performing very well with regards to government effectiveness, which measures the extent to which the quality of public services, the quality of the civil services, the extent to which the public sector is free from political interference, and the extent to which the government is committed to the implementation of public policies. The raw data from the World Bank suggest the effectiveness of their governance has been consistently positive from 1996 to 2015, with an average score of almost 0.4. The performance on government effectiveness, however, is in direct contrast to their counterparts in sub-Saharan Africa for whom governance effectiveness has consistently been negative from 1996-2015. The graph also depicts that, although there has been a rise and fall in the rule of law index, it has been positive over the years. Interestingly, voice and accountability has been negative in the region, suggesting that their governance environment is not opened-up for popular participation by citizens, civil society organizations, the media, and other non-state actors. It should be noted that whilst voice and accountability is shown to be the worst performance for countries in Asia, it is rather shown to be somewhat best performance for countries in sub-Saharan Africa. The difference could be that most sub-Saharan Africa countries allow for popular participation in multiparty democracy compared to their Asian counterparts. For instance, countries such as China, Laos, Vietnam, and other undemocratic or limited democratic regimes such as Thailand, Singapore, and many others have a high level of media censorship, and also restrict the number of political parties at the national levels. As a consequence, press freedom and political rights have been grossly limited. Figure 4.4 also shows that political stability and the ability to control corruption is still a challenge in the region.

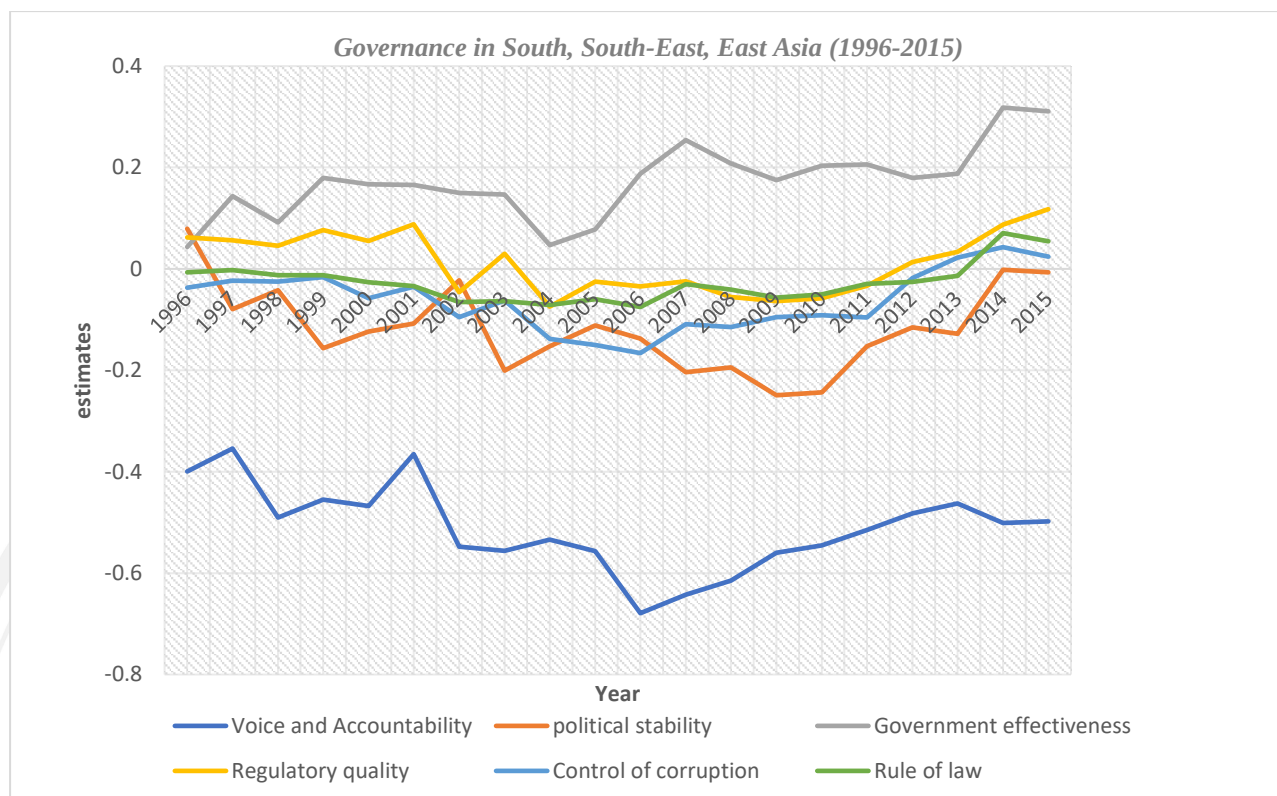


Figure 4.7 Governance in Asia

Source: World Governance Indicators, (World Bank, 2018)

4.7 Performance on other Development Outcomes in Asia

Most Asian countries particularly East, South-East, and India (South Asia) have made significant progress with respect to economic and human development outcomes in the last few years. According to the 2018 World Bank poverty and shared prosperity report, there was tremendous global poverty reduction in 2015, and the milestone was driven by strong global growth and the rising wealth of many developing countries, particularly in the world's most populous regions of East Asia and Pacific and South Asian countries. This unprecedented growth brought the world closer to achieving the World Bank's target of reducing extreme poverty to less than 3% of the world's population by 2030. In East and Pacific, China's economic rise has helped lift millions of people out of extreme poverty (World Bank, 2018). Thus, countries in this region went from an average poverty rate of 62% in 1990 to less than

3% in 2015. More recently, South Asia has made impressive inroads against extreme poverty, helping to reduce the global rate further. The number of poor people in South Asia dropped to 216 million people in 2015, compared to half a billion in 1990. These two regions have fared well on the World Bank's core goal—to increase shared prosperity to ensure that the relatively poor societies are participating in and benefiting from economic growth success.

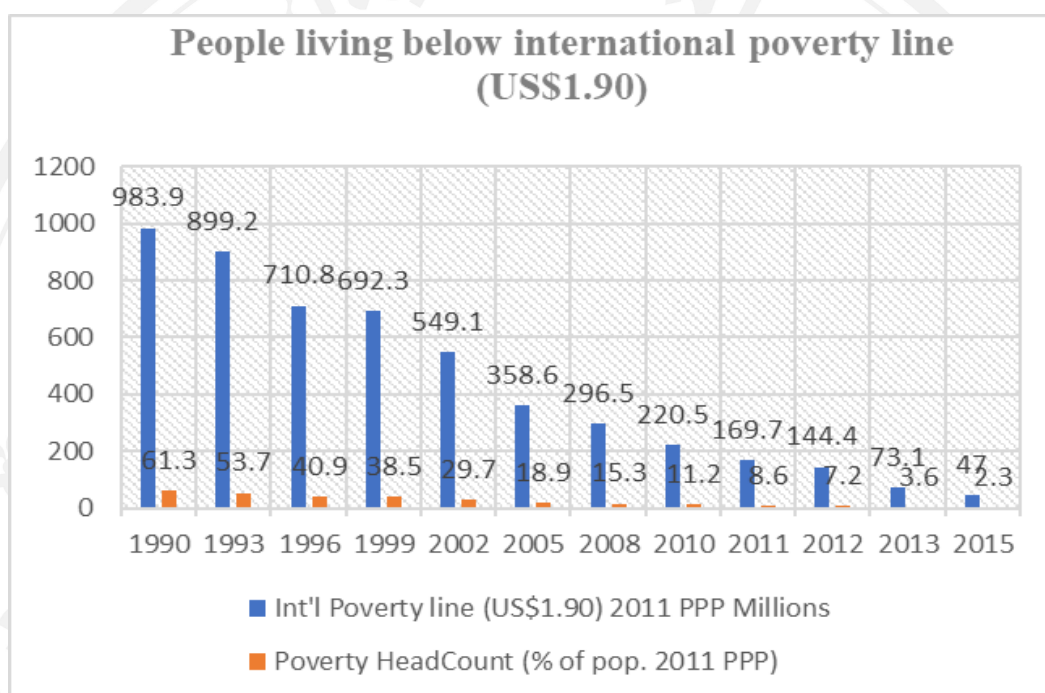


Figure 4.8 Poverty Reduction Effort in East Asia

Source: PovalNET, World Bank,

Note: Poverty Trend in East Asia and the Pacific (1990-2015).

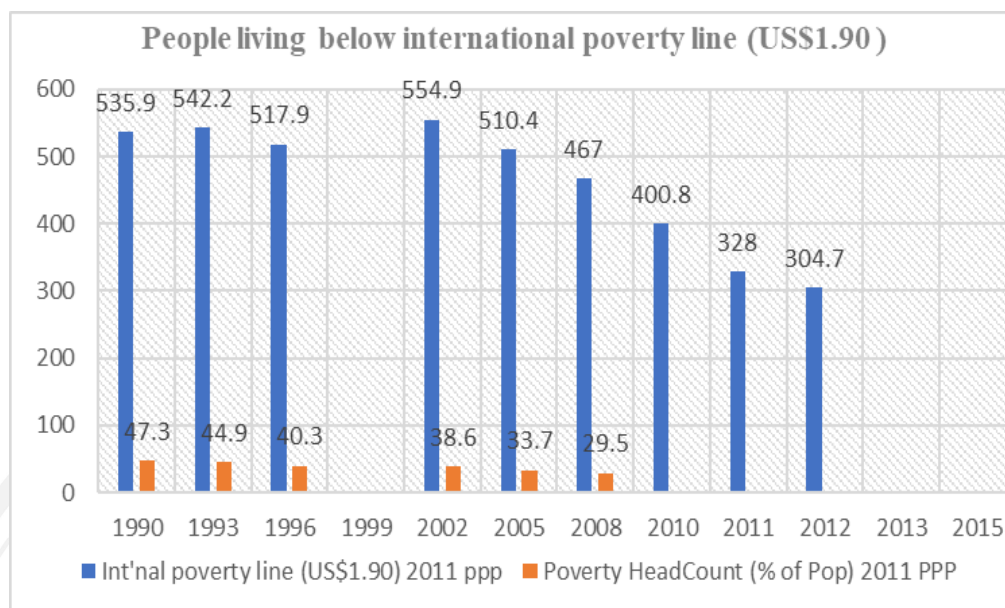


Figure 4.9 Poverty Reduction Effort in South Asia

Source: PovalNET, World Bank,

Note: Poverty Trend in South Asia (1990-2015).

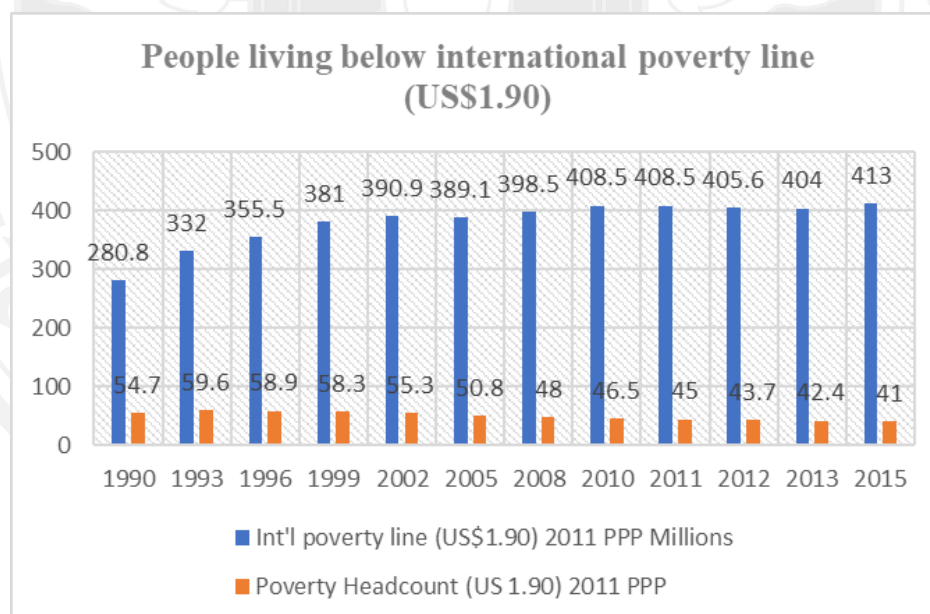


Figure 4.10 Poverty Reduction Effort in sub-Saharan Africa

Source: PovaNet, World Bank,

Note: Poverty Trends sub-Saharan Africa (1990-2015).

This progress against poverty across the Asian countries contrasts sharply from the much slower pace of poverty reduction in sub-Saharan Africa (see figure 4.6 above) where poverty seems to be on the ascendency since 1990. Extreme poverty is becoming more concentrated in sub-Saharan Africa because of the region's perceived slower rates of growth, problems caused by conflict and weak institutions, and a lack of success in channeling growth into poverty reduction (World Bank, 2018). Sub-Saharan Africa now accounts for most of the world's poor, and—unlike most in Asia and across the world—the total number of poor people has been increasing. The number of people living in extreme poverty in the region has grown from an estimated 278 million in 1990 to 413 million in 2015, whereas the average poverty rate for other regions, including Asia, is below 13% as of 2015, but it stood at about 41% in sub-Saharan Africa (World Bank, 2018).

The 2019 human development report released by the United Nations Development Programme (UNDP) revealed that Asian countries have recorded unprecedented progress in human development. For instance, South Asian countries experienced 46% progress in human development, which was far above the progress made from 1999-2018. The report states that Thailand had the second-highest increase after Ireland and moved up 12 ranks between 2013-2018. In recent years, though tertiary education in most Asian countries lagged behind Western countries, it is far above that of sub-Saharan African countries. As illustrated in figure 4.7 below, the Human Development Index in selected Asian countries is above 0.7, which is more than 0.5 in sub-Saharan Africa. With respect to inequality, the graph shows that this is high among Asian countries, which is almost the same as in African countries. However, whilst the Gini coefficient (inequality index) for Asian countries is below 0.5, that of African countries is 0.6, suggesting that inequality is higher in Africa compared to their Asian counterparts. Nevertheless, the common denominator, that is the fruit of economic growth in the two regions, is controlled by few individuals.

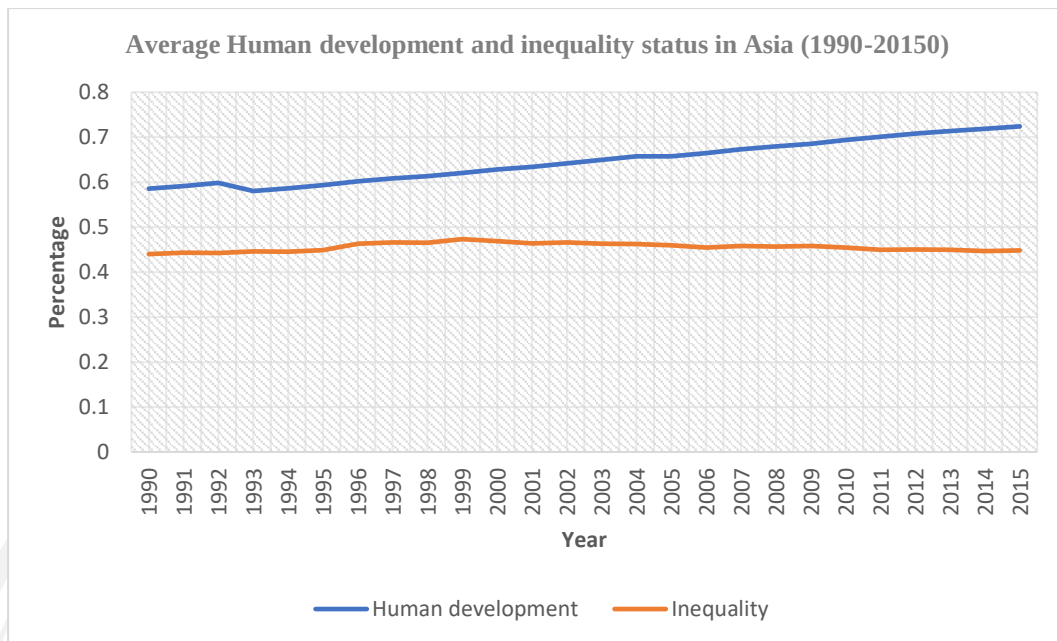


Figure 4.11 Human Development and Inequality in Asia

Source: UNDP, 2018 and World Bank, 2018.

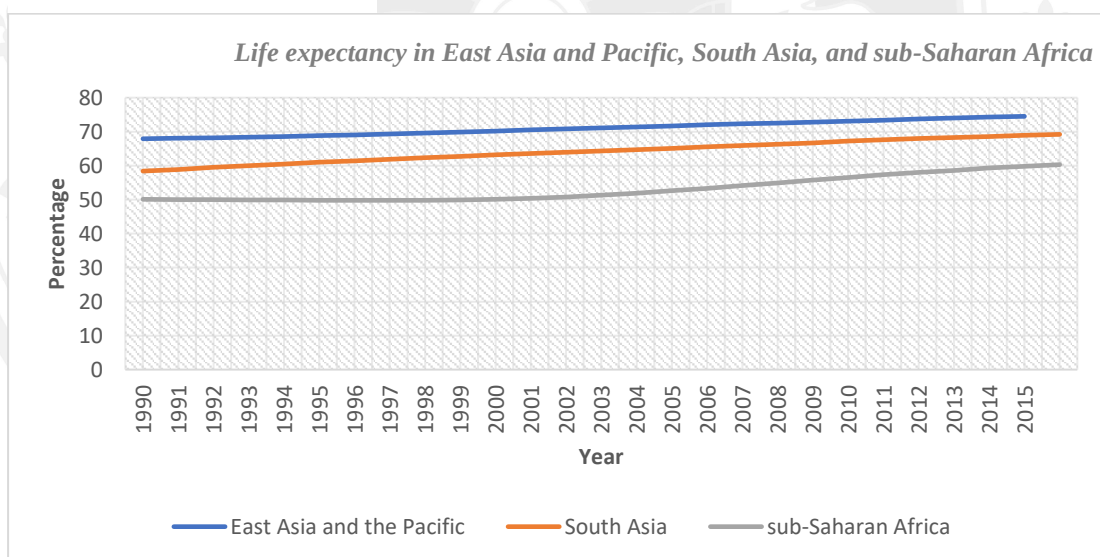


Figure 4.12 Life Expectancy in Asia and Sub-Saharan Africa

Figure 4.8 above shows the progress with respect to life expectancy in East Asia and the Pacific, South Asia, and sub-Saharan Africa. Clearly, it can be seen that the average age until which people live is at least 70 years in East Asia and the

Pacific, 60 years in South Asia, and 50 years in sub-Saharan Africa. This suggests that people tend to live longer in most Asian countries compared to sub-Saharan African countries. The gaps with respect to development outcomes of the two regions provide the bases for subsequent empirical analyses and discussions.

As the world is now just 10 years away from the end of the 2030 sustainable development agenda, it is critical to empirically verify whether the current development trajectory of the two regions is on a sustainable path. Whereas national level factors such as governance/institutions and regime type (democracy/autocracy) are likely to drive the differences, the current wave of globalization is also expected to have some implications for sustainable development. Given the global events that are likely to affect the achievement of the sustainable development agenda, the timing of this study is more crucial than ever. For instance, the citizens of the United Kingdom have voted and exited the European Union, and China and the United States have vigorously implemented protectionist policies to limit across boarder trade systems.

Besides, the recent outbreak of COVID-2019 in China and its subsequent transmission to other countries, raise a key question about the implications of the current wave of globalization to the sustainability of emerging and transitional economies where social, economic, and political institutions are deemed inept and weak.

CHAPTER 5

PRESENTATION OF EMPIRICAL FINDINGS, AND THE ANALYSES

5.1 Introduction

This Chapter presents the empirical findings, analysis, and the discussions. Specifically, the analysis and discussions were conducted in accordance with the objectives of the study: 1) to examine the effect of governance on sustainable development, 2) to investigate the relationship between globalization and sustainable development, 3) to examine the linkages between globalization, democracy, and sustainable development, and 4) to interrogate the relationship between sustainability and human development outcomes. In light of the comparative nature of the study, this Chapter is further divided into three (3) parts: the first part consists of the analysis of the findings on sub-Saharan Africa, the second part encapsulates data analysis on East and South-East Asia, and the third part deals with the comparison of the two regions based on the objectives of the study.

5.2 Sub-Saharan Africa in Perspective

5.2.1 Descriptive Statistics (sub-Saharan Africa)

The descriptive statistics afford the researcher an opportunity to casually examine the data based on the raw facts. These diagnostic checks are to ensure that the data meet the various statistical assumptions such as multicollinearity, serial correlation/autocorrelation, heteroscedasticity, normality, and a host of others. It should be noted that where these challenges are present in the data series, the results turn out to be quite spurious. Therefore, three techniques were employed to ensure that our data met various assumptions for regression analysis. First, the measures of

central tendency, such as the mean, standard deviation, and minimum and maximum, were used to check the normality and linearity of the dataset. Second, pairwise correlation matrix and Variance Inflation Factor (VIF) were used to check whether the variables were strongly correlated. Third, Wooldridge (2002) test, LaGrange multiplier test, and the Hausman test were performed to check issues regarding serial correlation and heteroscedasticity. It should be emphasized that whereas measures of central tendency and the pairwise correlation matrix were conducted before the various regression analyses were performed, the above-mentioned tests (Wooldridge test, LaGrange Multiplier test, Hausman test etc.) were performed in the course of the analysis. The study considered a sample of 37 countries in sub-Saharan Africa with several gaps due to missing data. However, we employed linear interpolation technique to fill in some missing data. According to Axel Dreher et al. (2008) and Gerring et al. (2012), a few missing data can be estimated using linear interpolation and extrapolation methods. We ensured that no missing data was extrapolated far above the first and last data points for each country. Nevertheless, some constructs still recorded missing data.

From Table 5.1 below, variables such as GDP growth, foreign aid, and GDP per capita were transformed into natural logs to enhance their elasticity for the purposes of interpretation. The genuine wealth per capita showed the dispersion of -2.982%, and the deviation of 6.776%. Also, a cursory look at the raw data shows that whilst Burundi recorded the minimum genuine wealth per capita (sustainable development) figure of 62.011%, Lesotho had the maximum of 8.046%. The GDP growth and GDP per capita growth rates recorded the means of 3.984% and 1.407% as well as the standard deviations of 5.15% and 4.991% respectively for the 37 countries sampled. Trade openness recorded the mean of 70.929% and standard deviation of 36.822%, foreign aid had the mean of 10.911% and the deviation of 11.098%, and life expectancy recorded the mean of 55.134% and the dispersion of 962%.

Table 5.1 The Descriptive Statistics for 37 Countries in Sub-Saharan Africa

Variable	Obs	Mean	Std.Dev.	Min	Max
Genuine wealth per capita/Sustainable Dev't (gwp)	962	-2.892	6.776	-62.011	8.046
Log GDP growth rate (gdpgr)	951	3.984	5.15	-50.248	35.224
Log GDP per capita growth rate (gdppcgr)	951	1.407	4.991	-47.503	37.536
Human development Index (hdi)	962	.45	.13	.133	.791
Life Expectance (lexp)	962	55.134	7.287	27.6	74.6
Human capital (primary enrollment) (hcprm)	911	88.398	27.759	-78.04	156.404
Human capital (secondary enrollment) (hcsec)	936	37.389	24.53	-9.766	115.957
Urbanization (urb)	832	1880000	1970000	139000	1.22e+07
Log Foreign Aid (faid)	945	10.911	11.098	-.251	94.946
KOF globalization Index (kof)	960	43.488	9.625	21.269	72.576
KOF economic globalization index (kofe1)	962	43.467	11.46	15.746	85.185
KOF social globalization index (kofs2)	962	34.873	15.323	6.535	78.609
KOF political globalization index (kop3)	962	36.863	17.302	7.356	81.641
Ethnic Fractionalization (elf)	962	.65	.214	.01	.908
Trade openness (opness)	962	70.929	36.811	3.749	311.354
Population growth rate (popgr)	962	2.535	1.087	-6.766	8.118
Democracy (demo)	936	-2.662	23.367	-88	10
Democracy square (demo2)	962	537.607	1816.937	0	7744
Corruption Control (cc)	629	-.594	.573	-1.723	1.217
Government Effectiveness (ge)	629	-.66	.599	-1.885	1.057
Regulatory quality (rq)	629	-.563	.562	-2.298	1.127
Average index of Institutional quality (avgiq)	632	-.608	.553	-2.007	.867
Gini inequality index (gini)	946	.597	.051	.441	.868
Carbon Dioxide emissions (co2elh)	877	14.805	19.125	.036	96.296
Press freedom	829	55.198	17.559	17	94
Political rights (porit)	962	4.333	1.778	1	7
Rule of law (rl)	612	-.628	.617	-2.13	1.077
British colonial origin (bcolony)	962	.431	.496	0	1

Source: Author's computation

An overview of the proxies of globalization shows that economic globalization recorded the mean of 43.467% and the dispersion of 11.46%, the social globalization had the mean of 34.467% and the standard deviation of 15.323%, and the political globalization recorded the highest mean of 36.863 percent and the standard deviation of 17.302%. It should be noted that Dreher (2006) combined economic, social and political dimensions of globalization to form an aggregate index which is often known as the KOF index. Therefore, the KOF index recorded the total mean of 43.488% and the standard deviation of 9.625%. The raw data reveals that Mauritius has the maximum value of 72.576% with regards to the KOF index, the maximum economic globalization index of 85.185%, and the maximum social globalization index of

78.609. However, Ethiopia recorded the lowest or minimum KOF index of 21.269 percent, economic globalization index of 15.746%, and the social globalization index of 6.535. With regards to political globalization, Botswana recorded the highest or the maximum index of 81.641%, and the Democratic Republic of Congo had the maximum value of 7.356%.

From the governance or institutional perspective, it should be noted that although the periodicity of other variables is from 1990-2015, the institutional variables are only available from 1996. Hence, the periodicity of institutional variables is 1996-2015. Control of corruption recorded a mean of -.594% and the deviation of -.573%, the government effectiveness recorded -.66% and -.599%, the regulatory quality recorded the mean of -.563% and the dispersion of .562%, and the rule of law recorded the mean of -.628% and the standard deviation of -.617%. Additionally, we took the averages of control of corruption, government effectiveness, regulatory quality, and rule of law indexes to form a single index called an 'institutional quality' index. Therefore, the institutional quality index recorded a mean of -.608% and the dispersion of -.553%. The democracy index had the mean of -2.662% and the standard deviation of 23.637%, ethnic conflict recorded the mean of -.256% and the deviation of 1.077%.

It must be emphasized that the standard deviation provides information on the extent to which a particular variable has deviated or has moved far away from the mean. Hence, the gap or the distance between the mean and the standard deviation can be used to detect the presence of outliers or the normality of the dataset. The descriptive statistics show the possibility of the presence of outliers with regards to a few variables such as primary school enrollment: mean (88.398) and the standard deviation (27.759), KOF index: mean (43.4880) and the low variability of (9.625), KOFe1 index: mean (43.467) and the low dispersion of (11.46), KOFs2 index: mean (34.467) and the low dispersion of (15. 323), and KOFp3 index: mean (36.863) and the standard deviation of (17.302). It shows that some countries are performing far higher on these variables than others. Nevertheless, given the large data observation of 962, the presence of outliers might not significantly violate the normality and outlier assumptions.

5.2.2 Pairwise Correlation Matrix (sub-Saharan Africa)

Apart from the descriptive statistics, another critical assumption for doing regression analysis either in time series, cross-section, or panel data is to perform a diagnostic check for multicollinearity. The idea is to ensure that the variables are not highly correlated among themselves. To ensure that the constructs are devoid of multicollinearity, correlation (groupwise) was used. We ensured that variables that were highly correlated were estimated in individual models. there is no consensus in the literature. Whereas (Pallant, 2013) recommends a correlation not more than 0.7, other scholars suggest a correlation matrix not exceeding 0.8 and 0.9 (Babbie, 2015).

The pairwise correlation matrix (Table 5.2 below) shows that with the exception of the correlation between the rule of law (rl) and the institutional quality (avegiq) which recorded the correlation of 0.96, most of the variables recorded the correlation coefficients of not more than 0.7. More especially, the association between the sustainable development indicator (genuine wealth per capita) and the measures of globalization is statistically significant with very strong magnitudes (-0.20, -0.15, -0.17, and 0.18). Also, the correlation between governance/institutional variables (rule of law, institutional quality - the average of rule of law, corruption control, government effectiveness, and the regulatory quality) and the sustainable development is significant at a 5% level and shows the possibility of the relationship between them. Democracy also shows a significant correlation with sustainable development. Another stream of correlation that should be flagged is the correlation between democracy and the measures of globalization. Thus, the correlation between democracy and globalization has a strong magnitude of 0.01, 0.18, and 0.13, suggesting their linkages and the possibility of its concomitant association with sustainable human development outcomes.

From Table 5.3, it can be seen that the governance variables seem to be somewhat correlated. For instance, the association between variables such as corruption control and regulatory quality, government effectiveness and corruption control, regulatory quality and rule of law recorded coefficients of 0.87, 0.85, and 0.87 respectively, which is somewhat higher than the acceptable rule of thumb as indicated in the extant literature. It should be noted that despite the high correlation between these variables, they are statistically significant at a 5% level, and signal the

possibility of the relationship with the dependent variable. As indicated in the methodology chapter, two sources of data were employed to measure the level of democracy. These are data from the Freedom House and data from Polity IV project. It should be noted that whereas Polity IV project uses civil rights, political rights, and press freedom as a measure of democracy, Freedom House data uses the democracy index. In Table 5.4 below, the correlation between press freedom and civil rights is 0.809 and deemed to be higher than the 0.7. Also, the correlation between civil rights and political rights is 0.86. Therefore, there was a good reason to drop the civil right index from the regression analysis. Nevertheless, some pragmatic steps were also taken to deal with the issue of multicollinearity among the institutional or governance variables. First, we ensured that variables that were seen to be highly correlated were either dropped from being included in the model or separated in the estimation model and the collinearity was assessed with the use of the Variance Inflation Factor (VIF) technique. Second, we combined the institutional variables (such as corruption control, government effectiveness, rule of law, and regulatory quality) which were found to be highly correlated to form an aggregate index known as institutional quality index. These techniques enabled us to deal with the problem of multicollinearity among the institutional variables.

Table 5.2 Pairwise Correlations

Variables	(X ₁)	(X ₂)	(X ₃)	(X ₄)	(X ₅)	(X ₆)	(X ₇)	(X ₈)	(X ₉)	(X ₁₀)	(X ₁₁)	(X ₁₂)	(X ₁₃)	(X ₁₄)	(X ₁₅)	(X ₁₆)	(X ₁₇)
gwp (X ₁)	1.00																
Prim (X ₂)	0.05	1.00															
Sec (X ₃)	0.24*	0.44*	1.00														
life ex. (X ₄)	0.11*	0.38*	0.51*	1.00													
gdpg (X ₅)	0.04	0.13*	0.05	0.12*	1.00												
gdppcgr (X ₆)	0.09*	0.14*	0.11*	0.14*	0.97*	1.00											
urb (X ₇)	0.15*	0.08*	0.26*	0.08*	0.08*	0.08*	1.00										
KOF1(X ₈)	-0.20*	0.28*	0.41*	0.33*	0.05	0.10*	-0.03	1.00									
KOF2 (X ₉)	-0.15*	0.43*	0.60*	0.64*	0.05	0.12*	-0.08*	0.69*	1.00								
KOF3 (X ₁₀)	-0.17*	0.34*	0.51*	0.57*	0.01	0.08*	-0.20*	0.67*	0.96*	1.00							
opness (X ₁₁)	0.18*	0.05	0.20*	0.30*	0.05	0.10*	-0.07	0.54*	0.34*	0.37*	1.00						
Popgr (X ₁₂)	-0.21*	0.02	-0.24*	-0.02	0.19*	-0.01	0.05	-0.24*	-0.30*	-0.30*	-0.24*	1.00					
demo (X ₁₃)	0.19*	0.28*	0.20*	0.26*	0.24*	0.25*	-0.07	0.01	0.18*	0.13*	-0.06	0.05	1.00				
CO ₂ elh (X ₁₄)	-0.08*	0.04	0.33*	0.20*	-0.00	0.03	0.33*	0.32*	0.39*	0.33*	0.08*	-0.13*	0.05	1.00			
faid (X ₁₅)	-0.29*	-0.15*	-0.37*	-0.38*	-0.07*	-0.09*	-0.33*	-0.12*	-0.29*	-0.23*	-0.09*	0.07*	-0.08*	-0.29*	1.00		
rl (X ₁₆)	0.32*	0.24*	0.51*	0.45*	0.05	0.12*	-0.32*	0.39*	0.57*	0.50*	0.25*	-0.43*	0.36*	0.26*	-0.22*	1.00	
avegiq (X ₁₇)	0.37*	0.22*	0.49*	0.38*	0.06	0.15*	-0.29*	0.39*	0.55*	0.48*	0.26*	-0.44*	0.31*	0.30*	-0.24*	0.96*	1.00

Note: * shows significance at the 0.05 level

Table 5.3 Pairwise Correlations

Variables	(X ₁)	(X ₂)	(X ₃)	(X ₄)	(X ₅)	(X ₆)	(X ₇)	(X ₈)	(X ₉)	(X ₁₀)	(X ₁₁)	(X ₁₂)	(X ₁₃)	(X ₁₄)	(X ₁₅)	(X ₁₆)	(X ₁₇)
gwp (X ₁)	1.00																
gdpgr (X ₂)	0.04	1.00															
gdpcgr (X ₃)	0.09*	0.97*	1.00														
kop3 (X ₄)	-0.17*	0.01	0.08*	1.00													
opness (X ₅)	0.18*	0.05	0.10*	0.37*	1.00												
popgr (X ₆)	-0.21*	0.19*	-0.01	-0.30*	-0.24*	1.00											
rl (X ₇)	0.32*	0.05	0.12*	0.50*	0.25*	-0.43*	1.00										
cc (X ₈)	0.37*	0.05	0.14*	0.47*	0.32*	-0.47*	0.87*	1.00									
ge (X ₉)	0.35*	0.08	0.16*	0.43*	0.27*	-0.44*	0.88*	0.85*	1.00								
rq (X ₁₀)	0.34*	0.08	0.13*	0.41*	0.13*	-0.34*	0.87*	0.78*	0.88*	1.00							
gini (X ₁₁)	0.14*	-0.07*	-0.05	0.02	-0.13*	-0.08*	0.23*	0.34*	0.22*	0.30*	1.00						
Civrit (X ₁₂)	-0.27*	-0.13*	-0.16*	-0.39*	-0.22*	0.17*	-0.72*	-0.64*	-0.64*	-0.69*	-0.16*	1.00					
porit (X ₁₃)	-0.19*	-0.12*	-0.16*	-0.37*	-0.23*	0.17*	-0.69*	-0.62*	-0.62*	-0.62*	-0.11*	0.86*	1.00				
ethwar (X ₁₄)	-0.26*	-0.17*	-0.14*	-0.05	-0.14*	-0.14*	-0.25*	-0.15*	-0.17*	-0.26*	-0.10*	0.32*	0.25*	1.00			
civtot (X ₁₅)	-0.22*	-0.14*	-0.14*	-0.22*	0.03	-0.07*	-0.46*	-0.37*	-0.32*	-0.42*	-0.19*	0.45*	0.39*	0.62*	1.00		
avgiq (X ₁₆)	0.37*	0.06	0.15*	0.48*	0.26*	-0.44*	0.96*	0.93*	0.96*	0.93*	0.29*	-0.71*	-0.68*	-0.22*	-0.41*	1.00	
bcolony(X ₁₇)	0.26*	0.09*	0.14*	0.24*	0.16*	-0.25*	0.54*	0.45*	0.54*	0.52*	0.15*	-0.40*	-0.45*	-0.15*	-0.15*	0.54*	1.00

Note: * shows significance at the 0.05 level

Table 5.4 Pairwise Correlations: Institutional/Governance Variables

Variables	(X ₁)	(X ₂)	(X ₃)	(X ₄)	(X ₅)	(X ₆)	(X ₇)	(X ₈)	(X ₉)	(X ₁₀)	(X ₁₁)	(X ₁₂)
Genuine Wealth (X ₁)	1.000											
Ethnic Conflict (X ₂)	-0.256*	1.000										
All conflict (X ₃)	-0.221*	0.617*	1.000									
Press Freedom (X ₄)	-0.308*	0.251*	0.352*	1.000								
Democracy (X ₅)	0.194*	-0.096*	-0.275*	-0.336*	1.000							
Civil rights (X ₆)	-0.268*	0.323*	0.455*	0.809*	-0.325*	1.000						
Political rights X ₇)	-0.186*	0.253*	0.388*	0.775*	-0.328*	0.860*	1.000					
Gov't effect. (X ₈)	0.355*	-0.168*	-0.315*	-0.596*	0.285*	-0.643*	-0.625*	1.000				
Regu. Quality (X ₉)	0.342*	-0.256*	-0.417*	-0.663*	0.316*	-0.693*	-0.615*	0.882*	1.000			
Rule of law (X ₁₀)	0.324*	-0.255*	-0.456*	-0.683*	0.361*	-0.720*	-0.694*	0.885*	0.867*	1.000		
Corruption c. (X ₁₁)	0.368*	-0.152*	-0.375*	-0.582*	0.256*	-0.639*	-0.621*	0.850*	0.782*	0.870*	1.000	
Inst. Quality (X ₁₂)	0.370*	-0.220*	-0.414*	-0.668*	0.314*	-0.713*	-0.676*	0.958*	0.933*	0.959*	0.926*	1.000

Note: * shows significance at the 0.05 level

5.3 Empirical Results, Analysis and the Discussion

This study used four estimation techniques to control for specific characteristics as indicated in Chapter 3: Pooled/Ordinary Least Squares (OLS), Random-Effects/Fixed-Effects, and instrumental variables in Two Staged-Least Squares (2SLS) and Generalized Method of Moments (GMM) estimations. These estimation techniques have been used in the literature to deal with challenges regarding heteroscedasticity, serial correlation, and endogeneity that often characterize panel data analysis. It should be noted that this study examined how governance/institutions, democracy, and globalization affect sustainable development as operationalized in the conceptual framework. Therefore, the uniqueness of this study is that, unlike other papers that made use of only one or two estimation techniques, the current study examined governance/institutions, democracy and globalization in different models. This means that different control variables were used to estimate each of the models as indicated in the literature. It should be emphasized that the OLS estimation was used as the baseline model. After various estimations, system Generalized Method of Moments (system-GMM) was used to check the robustness of the findings. The analyses were conducted in accordance with the objectives of the study.

5.3.1 Governance and Sustainable Development

This section examined the hypothesis or the assumption of the institutional theory that governance or institutional quality exerts a positive relationship on development outcomes. To test this hypothesis across estimations, government effectiveness, corruption, and regulatory quality were used as measures of governance. However, we further took the averages of the various measures of governance to form a single indicator which we termed as 'institutional quality'. Other control variables were added to the model based on the existing literature.

Pooled OLS Estimation

The pooled/OLS results are shown in Table 5.5 below. The OLS approach pools the cross-sections and estimates the model based on weighted least squares. This estimation allows for panel heterogeneity and spatial correlation between the

error terms across the sampled countries with robust standard errors reported. It should be noted that because the measures of governance or institutional quality were found to be highly correlated among themselves as shown in the pairwise correlation matrix (Table 5.3) above (thus, correlation more than 0.7), they were examined in separate models. In model (1), government effectiveness was estimated with control variables, corruption was estimated in model (2), regulatory quality in model (3), and the institutional quality in model (4). The analysis, interpretations, and discussions were limited to the significant variables. From models (1) to (4), the findings show that government effectiveness, corruption control, regulatory quality, and overall institutional quality appear to be positively associated with sustainable development. The variables are significant at 1% level respectively. Whilst the independent variables explained 48% ($R^2 = 48$) of total variants in the dependent variable in column (1), 59%, 65%, and 59% of total variations in the dependent variable were explained by independent variables in models (2), (3), and (4) respectively. To forecast the impact of governance on sustainable development, it implies that a 1% change in the value of governance with regards to government effectiveness, ability to control corruption, regulatory quality, and overall institutional quality, all other things being equal, will be associated respectively with 4.306, 4.590, 3.043, and 5.431 points increase in sustainable development in sub-Saharan Africa.

Table 5.5 Dependent variable: Sustainable Development (wealth per capita): OLS Estimations

Variables	(1)	(2)	(3)	(4)
LogGDP growth	0.0277 (0.0436)	0.0402 (0.0428)	0.0664 (0.0444)	0.0315 (0.0429)
GDP growth square	-0.00247 (0.00236)	-0.00282 (0.00233)	-0.00141 (0.00243)	-0.00179 (0.00233)
Human capital (primary enrollment)	-0.0539*** (0.00814)	-0.0496*** (0.00791)	-0.0511*** (0.00828)	-0.0537*** (0.00788)
Human capital (secondary enrollment)	0.0242** (0.0102)	0.0211** (0.0101)	0.0152 (0.0108)	0.0164 (0.0101)
Life expectancy	0.0119 (0.0385)	-0.00411 (0.0380)	0.0304 (0.0397)	-0.00998 (0.0383)
Urbanization	6.04e-07*** (1.27e-07)	5.49e-07*** (1.23e-07)	4.93e-07*** (1.30e-07)	6.41e-07*** (1.26e-07)
Foreign aid (log)	-1.446*** (0.222)	-1.799*** (0.217)	-1.758*** (0.227)	-1.621*** (0.217)
Population growth rate	-1.529*** (0.319)	-1.458*** (0.315)	-1.774*** (0.327)	-1.598*** (0.314)

Variables	(1)	(2)	(3)	(4)
Inequality Index (Gini)	-9.113* (4.987)	-14.98*** (5.071)	-5.973 (5.107)	-12.89** (5.009)
Trade openness	-0.00772 (0.00616)	-0.0153** (0.00600)	-0.0120* (0.00630)	-0.00879 (0.00606)
CO ₂ Emissions	-0.194*** (0.0110)	-0.182*** (0.0105)	-0.178*** (0.0110)	-0.190*** (0.0107)
Government effectiveness	4.306*** (0.559)			
Press freedom	-0.00395 (0.0128)	-0.0105 (0.0121)	-0.00750 (0.0144)	0.0135 (0.0135)
Corruption control		4.590*** (0.543)		
Regulatory Quality			3.043*** (0.596)	
Institutional quality				5.431*** (0.654)
Constant	18.20*** (4.401)	23.56*** (4.518)	15.96*** (4.559)	21.89*** (4.455)
Observations	492	493	493	495
R-squared	0.480	0.591	0.646	0.589

Note: Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1 indicate significance at 1%, 5% and 10% respectively.

Focusing on other variables that are included in the models, foreign aid, inequality, carbon dioxide emissions, population growth rate, trade openness, and primary school enrollment seem to hinder the progress of a sustainable development agenda in the sub-region since they consistently show negative signs. With regards to inequality, it must be emphasized that for countries in sub-Saharan Africa to improve upon their sustainable development path, inequality of all forms (income and gender inequalities) should be addressed. This is particularly important because the 2018 report on World inequality suggests that 55% of the total income accrued from the recent economic growth in the region is controlled by the top 10% (Alvaredo et al., 2018). Hence, it is not surprising that inequality shows a negative influence on sustainability. Although the negative impact of other variables makes theoretical sense, it is not clear under what condition human capital development through primary school enrolment will exert a negative impact on sustainable development. The plausible reason could be that primary education level is where a large number of children are found, and the government investment at that level entails a huge cost which will not bring returns in the short-term. Therefore, given the limited resources in most African countries, the huge investment at the primary level means that the

government may not get resources for other sectors including environmental sustainability. Hence, this may explain why primary school enrollment shows a negative association with sustainable development.

Fixed-Effect Estimation

As discussed in chapter 3, the OLS does not take into consideration unobserved country-specific heterogeneities such as historical differences and structural peculiarities as well as time-invariant shocks. The OLS rather treats all countries as a single entity. To deal with these issues, the fixed-effect model was used to control for country-specific factors by ensuring that each entity or country has its own intercept. These unobserved historical differences or structural peculiarities that could be omitted could be factors such as colonial origin, religious differences, and the cultural attitudes towards other human beings and the environment. Therefore, fixed-effect technique is useful.

Table 5.6 Dependent variable: Sustainable Development (wealth per capita): Fixed-Effect

Variables	(1)	(2)	(3)	(4)
Log GDP growth rate	0.0103 (0.0215)	0.00974 (0.0216)	0.00622 (0.0216)	0.00939 (0.0215)
GDP growth rate square	-0.000595 (0.00112)	-0.000590 (0.00112)	-0.000368 (0.00113)	-0.000480 (0.00112)
Human Capital (primary)	0.00516 (0.00975)	0.00507 (0.00979)	0.00352 (0.00978)	0.00533 (0.00975)
Human Capital (secondary)	-0.00990 (0.0189)	-0.0104 (0.0191)	-0.00597 (0.0192)	-0.00576 (0.0192)
Life expectancy	0.0853** (0.0431)	0.0857* (0.0454)	0.0771* (0.0452)	0.0671 (0.0451)
Urbanization	-5.55e-07*** (2.00e-07)	-5.54e-07*** (2.02e-07)	-6.07e-07*** (2.02e-07)	-5.85e-07*** (2.01e-07)
Log foreign aid	0.0188 (0.168)	0.00459 (0.170)	-0.0299 (0.171)	-0.0192 (0.170)
Population growth rate	-0.706*** (0.177)	-0.677*** (0.180)	-0.687*** (0.177)	-0.670*** (0.179)
Inequality (GINI)	1.490 (2.798)	1.436 (2.810)	1.308 (2.801)	1.321 (2.798)
Trade Openness	-0.00278 (0.00480)	-0.00294 (0.00483)	-0.00168 (0.00483)	-0.00259 (0.00480)
CO ₂ Emissions	-0.0640*** (0.0197)	-0.0651*** (0.0198)	-0.0664*** (0.0197)	-0.0657*** (0.0197)
Government Effectiveness	-0.853* (0.476)	-1.138** (0.573)	-1.309** (0.532)	-1.734** (0.807)
Corruption Control		0.481 (0.595)		
Press Freedom	-0.0309** (0.0131)	-0.0307** (0.0132)	-0.0287** (0.0132)	-0.0284** (0.0132)
Regulatory quality			1.003*	

Variables	(1)	(2)	(3)	(4)
			(0.552)	
Institutional quality				1.459 (1.078)
Constant	-3.596 (2.974)	-3.449 (3.093)	-2.732 (3.092)	-2.387 (3.102)
Year dummy	YES	YES	YES	YES
Country dummy	NO	NO	NO	NO
Observations	492	490	490	492
R-squared	0.490	0.592	0.698	0.594

Note: Standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$ indicate significance at 1%, 5% and 10% respectively. Hausman test suggests that fixed-effect is more appropriate.

In Table 5.6 above, the results are quite surprising. After controlling for country-specific heterogeneities, it was interesting to note that government effectiveness has suddenly assumed a negative relationship with sustainable development across the four models. This finding indicates that government effectiveness appears to dampen the achievement of sustainable development in SSA. This could be due to bad governance in the region as a result of the poor delivery of public services and the persistent manipulation and interference in public sector institutions by politicians (Forson et al., 2017). Nevertheless, regulatory quality is very relevant for the sustainable development in SSA as it remains positive in both OLS and fixed-effect models. It means that a 1 unit change in the value of regulatory quality is likely to be associated with 1.003 points increase in sustainable development if all things remain constant. Therefore, the ability of the government to formulate, implement, and enforce sound environmental policies to regulate activities of businesses and corporations will likely promote sustainable development practices. The findings further show that press freedom has a negative impact on sustainability as it consistently had a negative sign from model (1) to (4). It should be noted that the media is supposed to serve as a watch-dog institution which will ensure that the activities of the government and other non-state actors such as multinational corporations (MNCs) are conducted in an environmentally friendly manner, such that whilst we meet the needs of today, we do not jeopardize the needs of future generations. It means that the media ought to report and bring to the public domain some bad practices of the government and companies that are likely to lead to

unsustainability. However, due to political patronage in Africa, the media freedom has been grossly violated, and the media now face serious threats in both democracies and repressive regimes or autocracies in Africa (Freedom House, 2018). Apart from that, lots of media outlets have aligned themselves to political parties and their activities seek to defend the actions and inactions of the party in power and the ruling government.

Overall, our findings are contrary to recent literature (Davis, 2017; Güney, 2019) that showed unflinching support to the governance hypothesis. Although governance appears to have a positive effect on sustainability based on the OLS estimation, the same conclusion cannot be inferred from the fixed-effect estimation. And due to the weaknesses of OLS, we got to accept those results with utmost caution. Hence, two points should be flagged. First, we argue that the relationship between governance and sustainable development is mixed. Second, the sustainable development agenda in SSA is likely to be hindered by bad governance practices. Several other variables were included with the intention of controlling for confounding factors. It shows that population growth, carbon dioxide emissions, and urbanization have the potential to hinder the attainment of sustainable development in SSA as they are negative and statistically significant at 1% levels. The implication is that as population grows and cities and towns become urbanized, pressure is likely brought to bear on limited social amenities. Also, high population in cities and towns means that environmental pollution or degradation is going to increase and will likely pose serious health threats to humans and ecosystems. Nevertheless, life expectancy is positive and significant at 10% level, suggesting that longevity or the ability of people to live long has the potential of increasing sustainable development. To forecast, a 1% change in the value of life expectancy has the potential of increasing sustainable development by 0.0853, 0.0857, and 0.077 points in models (1), (2), and (3) respectively.

5.3.2 Globalization and Sustainable Development

In this section, the relationship between globalization and sustainable development is examined. The phenomenon of globalization has been a controversial issue among scholars in international development. Proponents of the theory of

globalization have consistently maintained that globalization through trade openness allows countries to trade between and among themselves and such trade integration and linkages of national economies foster the transfer of technology, innovation, and knowledge amongst countries which ultimately promote economic growth. They further claim that globalization allows goods and services (which are not produced in the domestic economy) to be made available especially in developing countries, thereby promoting sustainable human development. However, critics have argued that the high rate of poverty and inequality in developing countries, the frequency of financial crisis, increase in protests and riots, and the erosion of social standards as well as worsening environmental conditions can be attributed to the phenomenon of globalization. Additionally, the decision by the US president (Donald Trump) to reintroduce tariffs which led to the ‘trade/tariffs war’ with China through trade protectionism policies and the decision by the citizens of United Kingdom to vote against their integration with the European Union (EU) through BREXIT further raises a critical question of whether globalization is good for sustainable development. Contrary to the existing studies that used only a single indicator such as trade openness as a measure of globalization, the current study followed the works of Axel Dreher (2006), Tsai (2007) and Gygli et al. (2019) and measured globalization from four perspectives: economic, social, political, and overall globalization (the aggregate of economic, social, and political dimensions).

Pooled OLS Estimations

In table 5.7 below, the findings of economic, social, and political globalizations are presented from models (1) to (3). Model (4) shows the combined model of all dimensions of globalization including the overall globalization. Model (5) shows the relationship between the measures of globalization and human development. The idea is to test whether globalization exerts varied implications on sustainability and human development outcomes. As can be seen, economic globalization in model (1), whose measurement focuses on integration regarding actual flows (trade, foreign direct investments, and portfolio investments) and restrictions on trade and capital (such as import barriers, taxes on international trade, and capital accounts restrictions) with other countries, is negatively associated with sustainable development and is significant at a 1% level. Also, social globalization in

model (2), whose measurement discusses integration with regards to personal contacts and linkages, internet connectivity, telephone services, international tourism services, immigration and emigration, daily newspapers, television stations, and number of foreign restaurants particularly McDonald restaurants (cultural proximity) with other countries, is negatively associated with sustainable development and is significant at a 1% level. This means that a 1% change in the value of social globalization will be associated with 0.301 points reduction in sustainability.

Table 5.7 Dependent variable – (genuine wealth (gwp) and HDI): OLS Estimations

Variables	(1) GWP	(2) GWP	(3) GWP	(4) GWP	(5) HDI
Log GDP growth	-2.388** (1.056)	-5.658*** (1.668)	-5.700*** (1.650)	-3.238*** (1.183)	-0.00384 (0.00362)
GDP growth square	0.00448 (0.00513)	0.0122* (0.00697)	0.0110 (0.00688)	0.0114** (0.00489)	
Rule of law index	4.544*** (0.550)	5.626*** (0.667)	4.513*** (0.658)	1.348** (0.584)	
Trade openness	0.0176** (0.00798)	-0.0119* (0.00691)	-0.0131* (0.00685)	-0.00878 (0.00574)	0.000996*** (8.91e-05)
Log GDP per capita	0.979** (0.388)	1.760*** (0.538)	1.801*** (0.530)	0.903** (0.381)	0.00286 (0.00367)
Secondary enrollment	0.0502*** (0.0115)	0.0601*** (0.0115)	0.0482*** (0.0112)	0.0236*** (0.00858)	
Primary enrolment			-0.0199** (0.00985)	0.00881 (0.00782)	
Log Life expectancy	-0.935 (2.343)	10.12*** (2.702)	6.764*** (2.605)	-0.293 (2.108)	
Urbanization	1.09e-06*** (1.27e-07)	9.64e-07*** (1.33e-07)	8.56e-07*** (1.36e-07)	-6.44e-08 (1.19e-07)	3.15e-09** (1.35e-09)
CO ₂ emissions	-0.122*** (0.0130)	-0.0841*** (0.0143)	-0.104*** (0.0140)	-0.0487*** (0.0108)	
KOF index				0.652*** (0.0387)	0.00499*** (0.000380)
Economic globalization	-0.265*** (0.0301)			-0.269*** (0.0279)	-0.00140*** (0.000331)
Social globalization		-0.301*** (0.0278)		-0.399*** (0.0621)	0.00552*** (0.000709)
Political globalization			-0.245*** (0.0243)	0.00197 (0.0482)	-0.00163*** (0.000602)
Constant	14.36 (9.430)	-25.18** (10.55)	-11.36 (10.28)	-2.893 (8.404)	0.0698*** (0.0155)
Observations	395	345	339	339	819
R-squared	0.458	0.560	0.585	0.793	0.641

Note: Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1 indicate significance at 1%, 5% and 10% respectively.

From the perspective of political globalization which reflects the formal international linkages such as number of foreign embassies in the country, membership of international organizations, and participation in UN Security Council Meetings, the value is significant and shows a negative relationship with the index of sustainability. Thus, a 1% change in the value of political globalization is associated with 0.245 points reduction in the sustainability index. Interestingly, the overall globalization index in model (4) is significant and shows a strong positive relationship with sustainable development. Thus, a 1% change in the value of the overall globalization index is strongly associated with 0.652 points increase in sustainable development. It can be seen that the explanatory variables account for 46%, 56%, 59%, 79%, and 64% of the total variants in the dependent variable from models (1), (2), (3), (4), and (5) respectively.

However, when the measures of globalization were regressed on the human development index (column 5), that is the social component of sustainability, some minor differences were discernible. Although the overall index of globalization is positive and shows a significant relationship with human development, the impact on sustainability is stronger (0.652) compared to human development (0.00499). However, economic and political globalizations exert a negative impact on human development as does sustainable development. However, the coefficients show that the magnitude of the negative impact is greater on sustainable development compared to human development. Strangely, the social globalization is significant and shows a positive association with human development.

Fixed-effect Estimation

The results from the fixed effects (table 5.8) are not very different from the OLS results. It should be noted that Hausman test was performed and it turns out that the fixed-effect estimation is more appropriate compared to the random-effect one. As can be seen, economic globalization is negative and still significant at a 1% level in model (4). The coefficient indicates that a 1% change in the value of economic globalization is likely to be associated with 0.0994 points reduction in sustainable development if other factors are held constant. This is not surprising because economic globalization is driven largely by neoliberal ideas which place much emphasis on economic growth and grossly disrespect environmental standards and

practices. Consequently, air pollution and the depletion of natural resources as well as the ecosystem means that whilst SSA countries strive to meet the needs of the current generation, the needs of the future generation are being traded-off.

Table 5.8 Dependent variable – Genuine wealth and HDI: Fixed Effect Estimations

Variables	(1) GWP	(2) GWP	(3) GWP	(4) GWP	(5) HDI
Log GDP growth	0.0619 (0.584)	0.0909 (0.573)	0.0318 (0.582)	-0.383 (0.603)	-0.00681 (0.00493)
GDP growth Square	-0.00133 (0.00246)	-0.00179 (0.00241)	-0.00167 (0.00245)	0.000751 (0.00257)	0.00129 (0.00200)
Rule of Law index	0.0678 (0.632)	-0.105 (0.626)	-0.0116 (0.637)	-0.105 (0.645)	
Trade openness	-0.00626 (0.00595)	-0.00272 (0.00557)	-0.00390 (0.00562)	-0.00450 (0.00617)	3.77e-05 (6.73e-05)
Log GDP per capita	0.0853 (0.205)	0.128 (0.202)	0.129 (0.205)	0.169 (0.212)	
Secondary enrollment	0.0175 (0.0184)	0.0473** (0.0200)	0.0391* (0.0218)	0.0158 (0.0218)	
Primary enrollment			0.00588 (0.0115)	0.0144 (0.0112)	
life expectancy	-0.144 (2.462)	4.897* (2.848)	2.787 (2.770)	2.437 (3.122)	
Urbanization	4.28e-09 (2.21e-07)	2.36e-07 (2.33e-07)	2.23e-07 (2.32e-07)	9.22e-09 (2.34e-07)	1.44e-08*** (2.05e-09)
Population growth rate	-0.628*** (0.235)	-0.620*** (0.229)	-0.640*** (0.234)	-0.320 (0.240)	
CO ₂ emissions	-0.105*** (0.0204)	0.0980*** (0.0202)	0.0973*** (0.0206)		
KOF Index				0.301*** (0.0592)	0.00165*** (0.000425)
Economic globalization	0.0299 (0.0277)			- 0.0994*** (0.0383)	2.30e-05 (0.000315)
Social globalization		-0.100*** (0.0314)		-0.194*** (0.0697)	0.00354*** (0.000558)
Political globalization			- 0.0882*** (0.0287)	-0.0404 (0.0585)	0.000480 (0.000529)
Constant	-1.431 (9.629)	-19.08* (10.99)	-10.96 (10.54)	-15.40 (11.96)	0.191*** (0.0163)
Year dummy	YES	YES	YES	YES	YES
Country dummy	NO	NO	NO	NO	NO
Observations	395	395	389	393	571

Note: Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1 indicate

significance at 1%, 5% and 10% respectively. Fixed effect is more appropriate based on Hausman test.

Furthermore, social globalization remains negative and significant at 0.100 and 0.194 at a 1% level in models (2) and (4) respectively. This is possible because most tourism centers in SSA are not environmentally friendly and tourists tend to pollute the environment which exposes the destination communities to a high risk of environmental hazards. Also, most telecommunication industries whose businesses facilitate internet connectivity and make the world a global village do not incorporate sustainability practices into their business models. This situation may be exacerbated in SSA where institutions are weak, coupled with weak enforcement of environmental regulations. Political globalization is negative and significant at 1% in model (3). The plausible reason why political globalization appears to dampen the progress of sustainable development in SSA may be linked to the unequal international political system that advances the interest of developed countries to the detriment of developing societies, who are weak in international negotiations. Hence, the emissions of greenhouse gases from the industrialized economies has a ripple effect across the world including developing countries where governments have limited resources to resist deteriorating environmental conditions.

The above view resonates very well with the Ecological Exchange Theory (EET) which asserts that developed economies emit their environmental costs to the developing countries leading to environmental degradation and pollution (Hornborg, 2009; Jorgenson & Clark, 2012). Generally, the global economy is structured in such a way that the industrialized countries are strategically positioned and enjoy favorable terms of trade compared to middle and low-income countries. This unequal relationship, according to the EET allows developed countries to shift their environmental costs and pollutants to developing economies, and thereby leading to domestic environmental damages and the destruction of the ecosystem (Hornborg, 2009). Hence, our prior hypothesis that globalization has a negative relationship with sustainable development is partially confirmed based on the OLS and fixed-effect estimations. These findings contradict some literature (Axel Dreher, 2006; Gygli et al., 2019; Tsai, 2007) that found significant and positive effects of globalization on development outcomes. The difference is that most of these studies used economic growth as a dependent variable. However, with the exception of the overall globalization index that shows a positive association with sustainability in both OLS

and fixed-effect estimations, all others including economic, social, and political globalizations consistently show negative relationships.

Furthermore, the negative effect of economic, social, and political globalization on sustainable development is consistent with the hegemonic school of thought which always maintained that globalization is a new world order which orchestrates and perpetuates injustice on developing countries through multinational corporations (MNCs) and the global financial institutions such as the World Bank (WB) and International Monetary Fund (IMF) (Petras & Veltmeyer, 2001). These institutions (WB and IMF) only seek to facilitate capitalist accumulation in an environment of unconstrained market forces and under a very limited state capacity. However, the positive effect of the overall index of globalization on both sustainability and human development is consistent with the neoliberal school of thought which posits that globalization is a creative destruction in that global trade promotes cross-border investment and technological innovation which further enhance productive efficiency and generate extraordinary prosperity (Greenes, 2002; Tsai, 2007). The same neoliberal school of thought explains the positive effect of social and political globalization on human development. Thus, it is often argued that through globalization, inflows in the form of trade and capital tend to afford the government an opportunity to raise more revenue to be able to compensate for the negative effect of globalization by increasing investment in areas such as health care, education, public safety, and leisure that are vital for human development (Sirgy, Lee, Miller, & Littlefield, 2004). Nevertheless, the mixture of positive and negative associations of globalization is due to the complex nature of the concept of sustainability. According to (Martens & Raza, 2010), the nexus between globalization and sustainability is a complex one since it can be positive in one domain and negative in another.

In the model (5), the overall index of globalization (KOF index) and social globalization show a positive impact on human development. The result is consistent with that of the OLS estimation. However, the economic and political globalization show no relationship with human development in SSA, and this result is contrary to that of the OLS estimation where they show a negative relationship. The positive effect of social globalization on human development is in line with the works of Cho

(2013) and Goryakin et al. (2015) but contradicts that of Andreas Bergh and Therese Nilsson (2010), who observed that social globalization had no effect on inequality and poverty respectively. The result on economic globalization based on a fixed-effect estimation tends to contradict the work of Andreas Bergh and Therese Nilsson (2010) who found a robust positive relationship on life expectancy. The existence of no relationship between political globalization and human development in a fixed-effect estimation is consistent with the works of Figge et al. (2017) and Gurgul and Lach (2014), who established that political globalization has no impact on ecological footprints and economic growth respectively. Overall, the effect of globalization on human development in SSA is mixed.

5.3.3 Linkages between Democracy, Globalization, and Sustainable Development

This section examines three hypotheses. The first investigates the relationship between democracy and sustainable development. Second, we interact democracy with globalization to examine whether democracy can dampen the negative effect of globalization on sustainability. The third looks at the direct effect of democracy on the social dimension of sustainable development such as human development. There are three reasons why scholars suspect that democracy can promote sustainable human development outcomes. First, in a democracy, the government or leaders are accountable to the people through elections which make it difficult for them (political elites) to benefit from the environmental degradation. Second, the public involvement in decision-making under a democracy is likely to ensure that serious environmental issues are ranked high on the agenda of the government. Thus, it allows the public to put pressure on the government and other policymakers through protests and demonstrations to ensure that environmental problems are resolved. Third, availability and access to information allow citizens to be more aware of environmental problems under a democracy. To measure democracy, we used the index of democracy from the Polity IV project, while political rights and press freedom from the Freedom House database are also used.

Pooled OLS Estimations

Table 5.9 below shows the results of the OLS estimation. Model (1) shows the relationship between democracy and sustainable development. In model (2), we estimated again the effect of globalization on sustainability. In model (3), we interact democracy with globalization. Thus, the interaction term was created by multiplying democracy by globalization, and model (4) shows the combined model of democracy and globalization. Model (5) shows the relationship between democracy and human development.

Table 5.9 Dependent variable – Genuine wealth and HDI

VARIABLES	(1)	(2)	(3)	(4)	(5)
	GWP	GWP	GWP	GWP	HDI
KOF index		0.646*** (0.0230)		0.664*** (0.0262)	
Economic globalization		0.322*** (0.0198)		-0.309*** (0.0212)	
Social globalization		0.434*** (0.0429)		-0.493*** (0.0486)	
Political globalization		0.116*** (0.0370)		0.146*** (0.0411)	
GDP per capita (log)	0.0671 (0.370)	0.0555 (0.230)	0.0264 (0.326)	0.0833 (0.231)	0.0170*** (0.00571)
GDP per capita square	0.00384 (0.00265)	0.00127 (0.00143)	0.00222 (0.00201)	0.00140 (0.00168)	
GDP growth (log)	0.00945 (0.363)	-0.0418 (0.227)	0.0172 (0.321)	-0.0840 (0.227)	-0.00684*** (0.00194)
Urbanization	6.63e07** (1.26e-07)	-2.59e-07*** (8.45e-08)	3.55e-07*** (1.08e-07)	-1.35e-07 (9.19e-08)	-6.10e-09*** (2.10e-09)
Population growth	-0.695 (0.534)	0.996*** (0.290)	-0.934** (0.410)	-1.036*** (0.337)	0.000918 (0.00684)
Foreign aid (log)					-0.0474*** (0.00389)
Democracy	0.0461*** (0.0128)			0.0225*** (0.00824)	7.78e-05 (0.000254)
Political rights	0.852*** (0.234)			0.234 (0.154)	-0.0246*** (0.00365)
Press freedom	-0.155*** (0.0230)			0.0526*** (0.0147)	0.00157*** (0.000350)
KOF democracy ×			0.00700*** (0.000853)		
Economic globalization. ×			0.00436*** (0.00103)		

VARIABLES	(1)	(2)	(3)	(4)	(5)
	GWP	GWP	GWP	GWP	HDI
democracy					
Social globalization × democracy			0.00509* (0.00293)		
Political. Globalization × democracy			-0.000573 (0.00256)		
Constant	1.819 (1.308)	- 4.492*** (1.004)	-1.619** (0.750)	-3.180** (1.496)	0.589*** (0.0199)
Observations	708	819	819	706	531
R-squared	0.133	0.625	0.245	0.665	0.335

Note: Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1 indicate significance at 1%, 5% and 10% respectively.

As can be seen in models (1) and (4), democracy is positive and shows a significant association with sustainable development at a 1% level. Also, political right is positive and shows a significant relationship only in model (1). The KOF index of globalization remains positive and significant, while the economic and social globalizations also remain negative and significant at 1% levels. However, the results in column (3) are very interesting and need careful interpretation. Thus, the interactive effect (i.e., by multiplication) of democracy and globalization shows significant changes in both the coefficients and the sign. The interactive effect shows that the coefficient of the KOF index has changed to negative. Also, both the coefficient and the sign for economic globalization have changed. Thus, when democracy interacts with economic globalization, the sign has changed and shows a strong positive association with sustainable development. It should be emphasized that economic globalization has never been positive until now. The finding suggests that economic globalization is likely to have a positive association with sustainable development if the quality of democracy is present. It means that democracy has the potential of dampening the negative effect of economic globalization. More so, the interaction term between social globalization and democracy is positive and significant at a 10% level. This means that democracy has the potential to dampen the negative impact of social globalization on sustainability. Thus, social globalization is likely to have a positive impact on sustainable development if the quality of democracy is present.

From models (1) and (4), trade openness which also indicates economic liberalization has a negative association with sustainability. With regards to human development in model (5), democracy has shown no effect, and while political right is negative, press freedom is positive and significant at a 1% level.

Fixed-effect estimation

In table 5.10 below, when unobserved country-specific factors and time-invariant heterogeneities are controlled for through fixed-effect estimation, democracy is still positive and significant at a 1% level from models (1) and (4). This means that a 1% change in the value of democracy is likely to be associated with 0.0215 and 0.0212 points increase in sustainable development in SSA.

Table 5.10 Dependent variable: Genuine wealth and HDI

VARIABLES	(1) GWP	(2) GWP	(3) GWP	(4) GWP	(5) HDI
KOF index		0.0701* (0.0408)		0.0345 (0.0441)	
Economic globalization		-0.0469 (0.0295)		-0.0125 (0.0326)	
Social globalization		-0.0281 (0.0515)		-0.0379 (0.0573)	
Political globalization		-0.0163 (0.0509)		0.0227 (0.0561)	
GPD per Capita (log)	0.0158 (0.161)	0.0287 (0.165)	0.0283 (0.162)	0.0102 (0.162)	0.00264 (0.00195)
GDP per Capita Square	0.00103 (0.00124)	0.000835 (0.00103)	0.000762 (0.00101)	0.00101 (0.00124)	
GDP growth	-0.0461 (0.157)	-0.0315 (0.162)	-0.0418 (0.159)	-0.0419 (0.158)	-0.00158 (0.00191)
Urbanization	-5.68e-07*** (1.57e-07)	-4.40e-07** (1.90e-07)	-5.31e-07*** (1.41e-07)	-5.70e-07** (2.24e-07)	4.33e-08*** (1.99e-09)
Population growth	-0.601** (0.255)	-0.711*** (0.215)	-0.744*** (0.211)	-0.604** (0.258)	0.00455 (0.00291)
Foreign aid (log)					-0.0215*** (0.00234)
Democracy	0.0215*** (0.00636)			0.0212*** (0.00641)	2.88e-05 (7.75e-05)
Political rights	-0.203 (0.138)			-0.207 (0.143)	- 0.00667*** (0.00169)
Press freedom	0.0246 (0.0154)			0.0227 (0.0157)	0.000434** (0.000186)
KOF x democracy			-0.000117 (0.000466)		
Economic glob. x democracy			-0.000399 (0.000554)		
Social glob x democracy			-0.000126		

VARIABLES	(1)	(2)	(3)	(4)	(5)
	GWP	GWP	GWP	GWP	HDI
			(0.00156)		
Political glob x democracy			0.00137 (0.00141)		
Constant	-1.263 (1.172)	-0.321 (1.000)	-0.380 (0.483)	-1.647 (1.586)	0.383*** (0.0149)
Observations	708	819	819	706	707
R-squared	0.059	0.069	0.099	0.061	0.577

Note: Standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$ indicate significance at 1%, 5% and 10% respectively. Fixed-effect is more appropriate from Hausman test.

In column (3), we further interact democracy with globalization to assess whether democracy can dampen the negative effect of globalization on sustainability. In congruence with our prior expectation, the coefficient of the interaction term between the KOF index and democracy has decreased but is insignificant. Also, the coefficients of interactions between the economic globalization and democracy, social globalization and democracy, and political globalization and democracy have increased drastically. Although the coefficients of the interaction terms are not significant, it is important to partially comment on them because of the sign they bear. The plausible reason for the negative sign is due to the fact that most countries in SSA are still in the process of democratization amidst a host of challenges. Nevertheless, the change in the coefficients suggests that when countries in Africa are able to strengthen their democracies, they may be able to take advantage of the current wave of globalization.

From column (6), we examine whether democracy has a direct effect on human development. Contrary to our prior expectation, democracy has no relationship with human development in both the OLS and fixed-effect estimations, suggesting that the current democracy in SSA appears to be irrelevant for the advancement of human development. Also, political right index was found to have a negatively direct impact on human development. This is particularly true because a close analysis of the human development index shows that most African countries are performing below 0.5, suggesting a very poor performance based on UNDP standards (Neumayer,

2012; Stewart, 2013). This finding is contrary to the conventional view in the existing literature that suggests that democracy has a positive effect on human development outcomes in both developed and developing countries (Gerring et al., 2012; Lake & Baum, 2001). This stream of scholarship claims that democracies are responsive to the demands and needs of the median voter, which increases public spending and engenders redistribution of goods and services that increase the welfare of the society (A. Sen, 2004). However, our finding agrees with the work of Ross (2006), who concludes that democracy exerts little or no effect on human development. According to (Ross, 2006), although a democracy expends a large amount of resources on education and health compared to non-democracies, it turns out that the benefits tend to be pro-rich. Interestingly, however, democracy was found to be positively associated with sustainability and the results hold in both OLS and fixed-effect estimations. These findings resonate very well with the existing literature that found a significant positive relationship between democracy and environmental quality (Li & Reuveny, 2006; Mak Arvin & Lew, 2011; Winslow, 2005).

5.3.4 Instrumental Variable Approach and the Robustness Checks

A number of tests was performed to ascertain whether the problem of endogeneity exists between the dependent and independent variables. The results of the Hausman test in table 5.11 below shows that sustainable development is endogenous, suggesting a reverse causality. It should be emphasized that the major drawbacks to the OLS and fixed-effect estimations could stem from the presence of endogeneity and the omitted variable bias. Therefore, this problem was addressed with the use of the instrumental variable (IV) approach with Two-stage least squares: IV(2SLS) and two- step system-Generalized Method of Moments (system-GMM).

Two-stage Least Squares (IV-2SLS) Estimation

The IV(2SLS) was employed to deal with the problem of endogeneity that is likely to persist despite the use of OLS and fixed-effect estimations. It should be noted that the efficiency of IV(2SLS) depends on the validity of the instruments. Nevertheless, the appropriate instruments often used in the literature include but are not limited to ethno-linguistic fractionalization (elf), common law, latitude, British

colonial origin, corruption, and trade openness. These instruments have been extensively used as policy variables in the growth literature.

Table 5.11 Instrumental Variable Estimation (IV-2SLS)

Instruments (British colonial origin, ethnic and linguistic fractionalization, and trade openness)

Variables	(1)	(2)	(3)	(4)	(5)
	GWP	GWP	GWP	GWP	HDI
GDP growth	0.344 (0.220)	0.397* (0.216)	-0.0335 (0.159)	0.331* (0.200)	-0.00815* (0.00418)
GDP per capita (log)	0.244 (0.374)	0.267 (0.407)	-0.0352 (0.282)	0.0767 (0.358)	0.0198*** (0.00760)
GDP per capita Square	-0.0180 (0.0111)	-0.0188* (0.0111)	0.00620 (0.00809)	-0.0131 (0.0102)	5.41e-05 (0.000217)
Foreign aid(log)	-1.993*** (0.248)	-1.906*** (0.250)	-1.874*** (0.175)	-2.194*** (0.213)	-0.0544*** (0.00532)
Population growth	-2.676*** (0.463)	-2.834*** (0.475)	-1.639*** (0.322)	-2.839*** (0.435)	0.00234 (0.00843)
Secondary education	0.0266** (0.0123)	0.0563*** (0.0141)	0.0210** (0.00916)	0.0243** (0.0111)	
CO ₂ Emissions	-0.173*** (0.0175)	-0.157*** (0.0143)	-0.123*** (0.0103)	-0.171*** (0.0124)	- 0.00146*** (0.000323)
Government Effectiveness	1.625 (2.383)				0.0435*** (0.0120)
Corruption Control	-3.335* (1.738)		5.527*** (0.751)	-0.233 (0.940)	
Rule of law		-3.949*** (1.363)			
Political rights		0.325 (0.263)			-0.0680*** (0.0109)
Democracy		0.0322** (0.0162)			
Press freedom	- 0.0723*** (0.0258)	-0.136*** (0.0294)			0.00486*** (0.000800)
KOF index			0.264*** (0.0360)		
Economic globalization			- 0.116*** (0.0235)		
Social globalization			- 0.374*** (0.0541)		
Political globalization			0.112*** (0.0411)		
Life expectancy			0.0798** (0.0313)		
Genuine wealth per Capita					-0.00244** (0.00110)
KOF x Democracy				-0.00400*** (0.00133)	
Economic x democracy				0.00346** (0.00159)	

Variables	(1)	(2)	(3)	(4)	(5)
	GWP	GWP	GWP	GWP	HDI
Social globalization x democracy				0.00402 (0.00487)	
Political globalization x democracy				-0.00307 (0.00413)	
Constant	10.72*** (1.275)	9.817*** (1.551)	7.293*** (2.181)	8.673*** (1.157)	0.635*** (0.0230)
Observations	457	434	460	450	474
Year Dummy	YES	YES	YES	YES	YES
Country Dummy	NO	NO	NO	NO	NO
R-squared	0.382	0.324	0.655	0.460	0.355
Anderson Canon LM	41.210	83.715	106.700	101.581	87.659
Statistics & p-value	0.0000	0.0000	0.0000	0.0000	0.0000
Cragg-Donald Wald F	14.702	33.459	44.697	42.275	34.866
Hausman Test	0.078	0.003	0.001	0.042	0.0023
Sargan	0.6205	0.2203	0.1534	0.4625	0.0000
Endogeneity Test	0.0000	0.0000	0.0013	0.0000	0.0000

Note: Standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$, Standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$ indicate significance at 1%, 5% and 10% respectively. From column (1), Stock and Yogo (2005) weak identification test critical values for 10%, 15%, 20%, and 25% are: 13.43, 8.18, 6.40, 5.45 respectively. In model (2), Stock and Yogo (2005) weak identification test critical values for 10%, 15%, 20%, and 25% are: 22.30, 12.83, 9.54, 7.80 respectively. In model (3), 10% (22.30), 15% (12.83), 20% (9.54), and 25% (7.80). From model (4), 10% (22.30), 15% (12.83), 20% (9.54), and 25% (7.80). In model (5), 10% (22.30), 15% (12.83), 20% (9.54), and 25% (7.80).

We instrumented the measures of governance, globalization, and democracy with external instruments such as British colonial origin, ethnic and linguistic fractionalization, and trade openness. Further, we used Anderson Canon LM test to check for the problem of under-identification. The problem of under-identification occurs when the instrumental variables are less than the endogenous variables. The null hypothesis states that there is the problem of under-identification. Hence, the significant p-values of Anderson Canon LM statistics from models (1) to (5) indicate that there is no problem of under-identification, and the null hypothesis was subsequently rejected. Additionally, Cragg-Donald Wald F-statistics was used to test whether or not the instruments are weak. Thus, the Cragg-Donald Wald test is used to

test the explanatory power of the instruments. To do that, Stock and Yogo (2005) weak identification critical values were applied to ensure that none of the values for 10%, 15%, 20%, and 25% is more than the Cragg-Donald Wald F statistics. As can be seen in table 5.11, none of the critical values is more than the corresponding Cragg-Donald Wald F statistics, suggesting that the instruments used such as British colonial origin, ethnic and linguistic fractionalization, and trade openness have the power to explain endogenous variables. Further, the Sargan test was applied to test for the over-identification of the instruments. The Problem of over-identification occurs when the instrumental variables are more than the endogenous variables. The rationale is that the instruments should not be more than the endogenous variables and should not also correlate with the error term in the model. Where the instruments are correlated with the error term, then, they cannot be treated or rated as valid instruments. The null hypothesis states that the instruments are valid. Hence, when the chi square value is insignificant, it means that we fail to reject the null hypothesis and conclude that the instruments are valid. From columns (1) to (4), it can be seen that the p-values ($p > 0.6205$, $p > 0.2203$, $p > 0.1534$, $p > 0.4625$) for the Sargan test are insignificant, indicating that our instruments are not over-identified or our instruments are not correlated with the error term. More so, the significant p-values of endogeneity test also indicate that our measure of sustainability is predetermined or endogenous.

In table 5.11 above, the relationship between governance and sustainable development is presented in column (1), democracy is presented in model (2), the measures of globalization are shown in column (3), the interaction term involving the measures of globalization and democracy is shown in column (4), and the relationship between genuine wealth per capita as the measure of sustainability and human development is shown in column (5). The results from IV-2SLS are not far different from the fixed-effect estimations. As can be seen, corruption and press freedom are negative at 1% significant levels in column (1). Whereas democracy remains positive and significant at a 5% significant level, rule of law and press freedom are negative and significant at 1% levels in column (2). Again, the negative effect of rule of law and press freedom is indicative of the worsening governance system in SSA. From column (3), the findings with regards to the measures of globalization is not different from the OLS and fixed-effect estimations. The KOF index remains positive and

significant at 1% level, economic globalization is negative and significant, and social globalization also remains negative and significant. However, political globalization has now become positive and significant at 1% level. Thus, it should be noted that countries' integration into the global governance system (political globalization) may bring benefits such as the global fight against epidemics, prevention of human rights abuses, and the fight against environmental threats like climate change and global warming which may contribute to sustainable development outcomes. In column (4), the interaction term between KOF index and democracy saw the coefficient changed to negative and significant. The coefficient of economic globalization and democracy has again changed to positive and significant. These results are not different from the OLS and fixed-effect estimations. It shows that high quality of democracy has the potential to dampen the negative effect of globalization on sustainable development.

From column (6), we examine whether genuine wealth per capita as a measure of sustainability has effect on human development. That is, if human development is everything about making people live long, healthy, educated, and fulfilling lives, then, the current sustainability practices should have a positive impact on both current and future generations. It is argued that sustainability should not be seen as an end in itself, but a means to an end. Against this backdrop, we decided to provide empirical evidence to support this assumption. It can be seen from column (6) that genuine wealth per capita as a measure of sustainability is negative and significant at 5% level, suggesting that the current level of sustainable development in SSA appears to have a negative impact on human development.

The plausible reason is that the current development trajectory of SSA countries is not sustainable and the net effect is its negative relationship with human development. This implies that a 1% change in the value of the sustainable development is likely to be associated with 0.00244 points reduction in human development if all things remain the same. Hence, our earlier hypothesis of the positive relationship between sustainability and human development is not confirmed with respect to countries in SSA. Commenting on other variables, foreign aid, population growth rate, and carbon dioxide emissions have consistently been significant and show a negative relationship with sustainable development. The negative effect of foreign aid is consistent with emerging view in the literature that

foreign aid tends to have deteriorating impact on the political and economic institutions in Africa. However, secondary education has proven consistently to be very relevant to post-2015 sustainable development agenda in SSA.

The System Generalized Method of Moment (GMM) Estimations

The IV-2SLS and system-GMM estimations both make use of instrumental variable approach. However, the difference is that whilst IV-2SLS estimation uses external instruments, system-GMM uses part of independent variables as instruments. Therefore, the difficulty of looking for valid instrumental variables has been reduced with the use of system GMM estimation.

Table 5.12 System GMM Estimation

VARIABLES	(1) GWP	(2) GWP	(3) GWP	(4) GWP	(5) HDI
Genuine wealth-1	0.403** (0.179)	0.388*** (0.102)	0.598*** (0.0625)	0.725*** (0.0513)	
GDP growth	0.0251 (0.102)	-0.0125 (0.116)	-0.00439 (0.0511)	-0.00246 (0.0527)	0.00192 (0.00142)
GDP per capita (log)	0.0469 (0.208)	0.104 (0.184)	0.149* (0.0826)	0.191 (0.123)	-0.00152 (0.00172)
Population growth	-1.157** (0.430)	-1.084** (0.431)			-0.000504 (0.00174)
Foreign aid (log)	-1.955 (1.326)	- (0.593)	-0.0649*** (0.0171)	-0.116** (0.0514)	-0.00326* (0.00170)
CO ₂ emissions	-0.196* (0.114)	- (0.0567)			
Secondary education	0.00103 (0.0593)				
Life expectancy	-0.0163 (0.0888)				
KOF index	0.183* (0.104)				
KOF1	-0.0152 (0.0775)				
KOF2	-0.233 (0.392)				
KOF3	0.159 (0.327)				
Regulatory quality	2.406 (1.843)	1.255 (2.471)	1.158 (0.738)		
Democracy			0.0107 (0.0156)		

VARIABLES	(1) GWP	(2) GWP	(3) GWP	(4) GWP	(5) HDI
Political rights			-0.324 (0.433)		
Press freedom			0.0479 (0.0799)		
KOF x democracy				- 0.000847* (0.000448)	
KOF1 x democracy				0.00130** (0.000641)	
KOF2 x democracy				-0.00671* (0.00345)	
KOF3 x democracy				0.00532* (0.00281)	
HDI-1					0.984*** (0.0139)
Genuine wealth					- 0.000178** (7.49e-05)
Constant	9.892 (7.770)	2.913 (4.432)	-1.032 (2.507)	0.566 (0.344)	0.0113 (0.00880)
Observations	460	474	470	470	658
AR (1)	0.139	0.110	0.134	0.214	0.075
AR (2)	0.432	0.420	0.471	0.702	0.257
No. of Lags	1	1	1	1	1
Groups/Instruments	36/32	37/33	36/31	36/33	37/33
Sargan OIR	0.000	0.000	0.000	0.000	0.000
Hansen OIR	0.367	0.318	0.508	0.075	0.191
Endogeneity test	0.000	0.000	0.000	0.000	0.000

Note: Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1 indicate significance at 1%, 5% and 10% respectively. GMM estimation is done using xtabond2 routine in Stata.

To address the problem of endogeneity, system-GMM estimator uses lagged values of dependent variables as part of independent variables. The use of lagged dependent variable as part of independent variables in system GMM estimation helps deal with the problem of endogeneity or reverse causality. From the system-GMM estimation in Table 5.12, columns (1) to (4) indicate that the lag of genuine wealth capita (sustainable development) is statistically significant (0.403 – 0.725) at 5% and 1% levels respectively, suggesting that sustainability is weakly persistent in SSA. In fact, a lagged dependent variable in system-GMM can only be considered to be strongly persistent if it is significant and higher than 0.800, which is the rule of thumb for establishing such persistence. Given the choice of one lag length, the insignificant

specification test results of the AR (2) (0.432, 0.420, 0.471, 0.702, and 0.257) revealed that the system-GMM model does not suffer from second-order serial correlation. Thus, the null hypothesis of the second-order Arellano and Bond (1991) autocorrelation test (AR (2) in difference for the absence of autocorrelation in the residuals should not be rejected. Additionally, the results of Hansen test show that the instruments used are not over-identified. Thus, it shows that the instruments are valid or are not correlated with the error term. The Hansen test of over-identification restrictions (OIR) should not be significant in that the null hypothesis is that the instruments are valid or not correlated with the error term. Furthermore, the significance of the endogeneity test suggests that governance, globalization, and democracy are indeed endogenous.

The results from the system-GMM are to a reasonable extent consistent with the fixed-effects estimation and IV-2SLS estimations. Nonetheless, some minor differences are discernible. In general, the coefficients of many of the variables are not significant compared to fixed-effects and IV-2SLS estimations. In column (1), the statistical direction of KOF index has not changed. It remains positive and significant at 10% level. The economic (KOF1) and social (KOF2) globalizations are not significant as they were in fixed-effect and IV-2SLS estimations. However, the negative signs of their coefficients suggest the potential of exerting a negative influence on sustainability in SSA. The governance variable, which is proxied by the regulatory quality is not significant from columns (1) to (3). Democracy, political rights, press freedom are also insignificant in column (3). In column (4), the interaction between globalization and democracy shows that the coefficients of the KOF index has changed, whereas the economic globalization has also suddenly assumed a positive sign, suggesting that democracy has the potential of dampening the negative effect of economic globalization on sustainable development. The social globalization remains negative despite the combined effect of democracy.

In column (5), the lag of human development is statistically significant at 1% level, suggesting that given the strong coefficient of 0.984, human development is persistent in SSA as the first lagged value is higher than 0.800, which is the rule of thumb for establishing such persistence.

5.4 East and South East Asia (ESEA) in Perspective

5.4.1 Descriptive Statistics (Asian Countries)

As noted earlier, the descriptive statistics allows the researcher to casually examine the data based on the raw facts. With the aid of descriptive statistics, challenges such as multicollinearity, non-linearity, serial correlation/autocorrelation, heteroscedasticity, and normality were appropriately dealt with. The study considered a sample of 19 countries in East, South-East, and South Asia.

Table 5.13 Descriptive Statistics in Asia

Variable	Obs	Mean	Std.Dev.	Min	Max
Genuine wealth per capita (gwp)	396	1.666	2.048	-4.209	6.583
Human development index (hdi)	479	.647	.152	.35	.929
Life expectancy (lexp)	494	.768	.115	.506	.985
Primary education (hcprm)	379	105.08	12.112	50.633	149.957
Secondary education (hcsec)	322	64.295	23.126	16.598	120.651
GDP growth rate (gdpgr)	490	5.473	3.947	-34.809	17.926
GDP per capita growth rate (gdppcgr)	490	4.031	3.952	-37.002	16.602
Population growth rate (popgr)	494	1.396	.833	-1.475	5.322
Urbanization (urb)	442	847000	8540000	283000	3.73e+07
Trade openness (opness)	481	103.13	92.827	.167	442.62
Foreign aid (faid)	378	3.75	5.488	-.645	30.854
Carbon dioxide emissions (co2elh)	420	42.851	18.968	0	84.03
KOF globalization index (kof)	493	52.981	16.168	19.411	85.343
KOF economic globalization (kofe1)	494	51.87	19.004	15.438	95.285
KOF social globalization index (kofs2)	494	47.259	22.101	6.578	88.591
KOF political globalization (kofp3)	494	42.153	23.414	4.934	89.601
Press freedom (press)	435	58.839	19.66	17	100
Political rights (porit)	468	4.502	2.056	1	7
Democracy (demo)	442	3.482	9.452	-88	10
Inequality (gini)	465	.456	.074	.248	.708
Government effectiveness (ge)	380	.199	.954	-1.618	2.437
Regulatory quality (rq)	379	.02	.999	-2.344	2.261
Control of corruption (cc)	379	-.054	.997	-1.673	2.326
Rule of law (rl)	378	-.049	.911	-1.74	1.861
Institutional quality (avgiq)	380	.029	.934	-1.77	2.101
Ethnic fractionalization(elf)	394	.346	.25	.002	.735
British colonial origin (bcolony)	493	.578	.494	0	1

Source: Author's own computation

From table 5.13, the Genuine wealth per capita (gwp) recorded the mean of 1.666 and the deviation of 2.048. A close observation of the raw data suggests that whereas Brunei has the maximum Genuine wealth of 6.583, Cambodia records the minimum of -4.209. Some observations should be noted here. Thus, it is interesting to note that whereas sub-Saharan African countries recorded a negative mean of -2.982, that of Asian countries recorded a mean with a positive figure of 1.666. As noted earlier, this implies that current development trajectory of the selected Asian countries appears to be somewhat on a sustainable path compared to sub-Saharan countries. The GDP growth and GDP per capita growth rates recorded the means of 5.473% and 4.031 percent as well as the deviations of 3.947% and 3.952% respectively for 19 countries sampled. Trade openness recorded the mean of 103.135 percent and deviation of 92.827%, foreign aid had the mean of 3.75% and the deviation of 5.488%, and life expectancy recorded the mean of .768 percent and the dispersion of .115%.

With respect to the measures of globalization, economic globalization (kofe1) recorded the mean of 51.87 percent and the dispersion of 19.004 percent, the social globalization (kofs2) had the mean of 47.259% and the standard deviation of 22.101 percent, and the political globalization (kofp3) recorded the highest mean of 42.153 percent and the standard deviation of 23.141%. The KOF index recorded the total mean of 52.981% and the standard deviation of 16.168 percent. The raw data also reveals that Malaysia has the highest KOF index of 80.9354 percent, whereas Burma recorded the lowest of 21.6365%. Singapore recorded the highest economic globalization index of 95.2853 percent and the lowest index of 15.4381% is recorded by India. Hong Kong recorded the highest social globalization of 88.5909% whilst Burma had the lowest of 11.4127%. With respect to political globalization, Singapore recorded the highest of 89.6006% whereas Cambodia had the lowest index of 9.03815%.

From the governance or an institutional perspective, control of corruption has the mean of -.054% and the deviation of .997%, the government effectiveness recorded the mean and the dispersion of -.199% and .954 percent respectively, the regulatory quality recorded the mean of -.0.2% and the dispersion of .999%, and the rule of law recorded the mean of -.049% and the deviation of .911%. Additionally, we

took the averages of control of corruption, government effectiveness, regulatory quality, and the rule of law indexes to form a single index called an ‘institutional quality’. Therefore, an institutional quality index had a mean of .029% the dispersion of .934%. The democracy index had the mean of 3.482% and the standard deviation of 9.452%.

5.4.2 Pairwise Correlation Matrix (Asian Countries)

From the correlation matrices in Tables 14, 15 and 16, most of the correlation coefficients among variables is below 0.7 and significant at 5%. This notwithstanding, some variables are highly correlated (above 0.7). Although scholars recommend correlation not above 0.7, 0.8. and 0.9 some steps were taken to ensure that multicollinearity could not have adverse impact on our models. First, some constructs that were found to correlate we dropped in some cases. Also, the correlated constructs were analyzed in individual models. We also assessed the collinearity with the use of Variance Inflation Factor (VIF) technique. For instance, we combined some constructs (such corruption control, effectiveness of the government, rule of law, and regulatory quality) which were found to be highly correlated to form an aggregate index known as institutional quality index. These techniques enabled us to deal with the problem of multicollinearity among the institutional variables

Table 5.14 Pairwise Correlations

Variables	(X ₁)	(X ₂)	(X ₃)	(X ₄)	(X ₅)	(X ₆)	(X ₇)	(X ₈)	(X ₉)	(X ₁₀)	(X ₁₁)	(X ₁₂)	(X ₁₃)	(X ₁₄)	(X ₁₅)	(X ₁₆)	(X ₁₇)
gwp(X ₁)	1.00																
hcprn (X ₂)	-0.09	1.00															
hcsec(X ₃)	0.52*	-0.09	1.00														
lexp(X ₄)	0.60*	0.09	0.86*	1.00													
gdpggr(X ₅)	0.01	0.05	-0.34*	-0.19*	1.00												
gdppcgr(X ₆)	0.10*	0.05	-0.27*	-0.11*	0.98*	1.00											
urb(X ₇)	0.14*	-0.27*	0.31*	0.41*	-0.19*	-0.10*	1.00										
popgr(X ₈)	-0.35*	0.00	-0.36*	-0.38*	0.02	-0.19*	-0.42*	1.00									
opness(X ₉)	0.27*	-0.03	0.38*	0.50*	-0.04	-0.09	-0.29*	0.21*	1.00								
faid(X ₁₀)	-0.44*	-0.23*	-0.58*	-0.67*	-0.01	-0.03	-0.56*	0.10*	-0.10	1.00							
co2elh(X ₁₁)	0.40*	-0.40*	0.45*	0.53*	-0.15*	-0.17*	0.33*	0.11*	0.50*	-0.71*	1.00						
kof(X ₁₂)	0.40*	0.06	0.78*	0.84*	-0.18*	-0.14*	0.35*	-0.21*	0.52*	-0.67*	0.56*	1.00					
kofe1(X ₁₃)	0.26*	0.05	0.58*	0.69*	-0.14*	-0.15*	-0.05	0.02	0.81*	-0.37*	0.60*	0.78*	1.00				
kofs2(X ₁₄)	0.48*	-0.05	0.84*	0.85*	-0.24*	-0.20*	0.30*	-0.23*	0.62*	-0.41*	0.64*	0.87*	0.79*	1.00			
kofp3(X ₁₅)	0.44*	-0.07	0.74*	0.74*	-0.24*	-0.23*	0.12*	-0.06	0.70*	-0.20*	0.67*	0.74*	0.79*	0.95*	1.00		
demo(X ₁₆)	-0.04	0.08	0.33*	0.27*	-0.23*	-0.21*	0.25*	-0.21*	-0.12*	-0.22*	0.08	0.30*	0.12*	0.23*	0.18*	1.00	
avgig(X ₁₇)	0.46*	-0.31*	0.72*	0.82*	-0.39*	-0.37*	0.30*	-0.05	0.68*	-0.21*	0.67*	0.71*	0.70*	0.88*	0.86*	0.23*	1.00

Note: * shows significance at the 0.05 level

Table 5.15 Pairwise Correlations

Variables	(X ₁)	(X ₂)	(X ₃)	(X ₄)	(X ₅)	(X ₆)	(X ₇)	(X ₈)	(X ₉)	(X ₁₀)	(X ₁₁)	(X ₁₂)	(X ₁₃)	(X ₁₄)	(X ₁₅)	(X ₁₆)	(X ₁₇)
gwp(X ₁)	1.00																
hcprm(X ₂)	-0.09	1.00															
hcsec(X ₃)	0.52*	-0.09	1.00														
Lexp (X ₄)	0.60*	0.09	0.86*	1.00													
gdpgr(X ₅)	0.01	0.05	-0.34*	-0.19*	1.00												
gdppcgr(X ₆)	0.10*	0.05	-0.27*	-0.11*	0.98*	1.00											
urb(X ₇)	0.14*	-0.27*	0.31*	0.41*	-0.19*	-0.10*	1.00										
popgr(X ₈)	-0.35*	0.00	-0.36*	-0.38*	0.02	-0.19*	-0.42*	1.00									
opness(X ₉)	0.27*	-0.03	0.38*	0.50*	-0.04	-0.09	-0.29*	0.21*	1.00								
faid(X ₁₀)	-0.44*	-0.23*	-0.58*	-0.67*	-0.01	-0.03	-0.56*	0.10*	-0.10	1.00							
co2elh(X ₁₁)	0.40*	-0.40*	0.45*	0.53*	-0.15*	-0.17*	0.33*	0.11*	0.50*	-0.71*	1.00						
ge(X ₁₂)	0.43*	-0.38*	0.73*	0.81*	-0.36*	-0.35*	0.35*	-0.04	0.66*	-0.25*	0.71*	1.00					
rq(X ₁₃)	0.41*	-0.13*	0.73*	0.81*	-0.43*	-0.43*	0.23*	-0.00	0.69*	-0.36*	0.65*	0.92*	1.00				
cc(X ₁₄)	0.50*	-0.36*	0.58*	0.73*	-0.31*	-0.30*	0.30*	-0.05	0.65*	0.05	0.63*	0.93*	0.85*	1.00			
rl(X ₁₅)	0.45*	-0.33*	0.73*	0.84*	-0.40*	-0.37*	0.31*	-0.12*	0.62*	-0.18*	0.61*	0.95*	0.91*	0.94*	1.00		
avgiq(X ₁₆)	0.46*	-0.31*	0.72*	0.82*	-0.39*	-0.37*	0.30*	-0.05	0.68*	-0.21*	0.67*	0.98*	0.95*	0.96*	0.98*	1.00	
demo(X ₁₇)	-0.04	0.08	0.33*	0.27*	-0.23*	-0.21*	0.25*	-0.21*	-0.12*	-0.22*	0.08	0.23*	0.26*	0.14*	0.25*	0.23*	1.00

Note: * shows significance at the 0.05 level

Table 5.16 Pairwise Correlations

Variables	(X ₁)	(X ₂)	(X ₃)	(X ₄)	(X ₅)	(X ₆)	(X ₇)	(X ₈)	(X ₉)	(X ₁₀)	(X ₁₁)	(X ₁₂)	(13)	(X ₁₄)	(X ₁₅)	(X ₁₆)	(X ₁₇)
gwp(X ₁)	1.00																
hcprm(X ₂)	-0.09	1.00															
hcsec(X ₃)	0.52*	-0.09	1.00														
lexp(X ₄)	0.60*	0.09	0.86*	1.00													
gdpgr(X ₅)	0.01	0.05	-0.34*	-0.19*	1.00												
gdppcgr(X ₆)	0.10*	0.05	-0.27*	-0.11*	0.98*	1.00											
urb(X ₇)	0.14*	-0.27*	0.31*	0.41*	-0.19*	-0.10*	1.00										
popgr(X ₈)	-0.35*	0.00	-0.36*	-0.38*	0.02	-0.19*	-0.42*	1.00									
gini(X ₉)	-0.26*	0.15*	-0.26*	-0.28*	0.13*	0.08	-0.47*	0.24*	1.00								
porit(X ₁₀)	-0.03	0.01	-0.40*	-0.35*	0.28*	0.25*	-0.49*	0.17*	0.41*	1.00							
press(X ₁₁)	-0.05	0.06	-0.35*	-0.37*	0.28*	0.23*	-0.53*	0.20*	0.41*	0.82*	1.00						
demo(X ₁₂)	-0.04	0.08	0.33*	0.27*	-0.23*	-0.21*	0.25*	-0.21*	-0.15*	-0.43*	-0.37*	1.00					
ge(13)	0.43*	-0.38*	0.73*	0.81*	-0.36*	-0.35*	0.35*	-0.04	-0.32*	-0.32*	-0.43*	0.23*	1.00				
rq(X ₁₄)	0.41*	-0.13*	0.73*	0.81*	-0.43*	-0.43*	0.23*	-0.00	-0.21*	-0.34*	-0.46*	0.26*	0.92*	1.00			
cc(X ₁₅)	0.50*	-0.36*	0.58*	0.73*	-0.31*	-0.30*	0.30*	-0.05	-0.36*	-0.27*	-0.41*	0.14*	0.93*	0.85*	1.00		
rl(X ₁₆)	0.45*	-0.33*	0.73*	0.84*	-0.40*	-0.37*	0.31*	-0.12*	-0.39*	-0.39*	-0.49*	0.25*	0.95*	0.91*	0.94*	1.00	
avgiq(X ₁₇)	0.46*	-0.31*	0.72*	0.82*	-0.39*	-0.37*	0.30*	-0.05	-0.32*	-0.34*	-0.46*	0.23*	0.98*	0.95*	0.96*	0.98*	1.00

Note: * shows significance at the 0.05 level

5.5 Effect of Governance on Sustainable Development

This section seeks to test the hypothesis that governance has a positive effect on development outcomes based on a sample of some selected Asian countries. Like sub-Saharan African countries, the measures of governance include government effectiveness, control of corruption, regulatory quality, and rule of law. Being mindful of the high correlation among governance variables (see correlation matrix, table 5.15 above), the averages of the governance variables were taken to form a single index known as ‘institutional quality’. A positive coefficient of a variable shows the potential of governance to improve sustainable development and vice versa.

OLS Estimation

Columns (1) to (3), government effectiveness, control of corruption, and regulatory quality were estimated. Column (4) presents the result with regards to ‘institutional quality’. The OLS results (table 5.17) show that government effectiveness, control of corruption, and the overall ‘institutional quality’ have a positive effect on Genuine wealth (sustainable development) at 5%, 1%, and 5% significant levels respectively. It should be noted that the OLS results were estimated with a robust option which is efficient in dealing with heteroscedasticity and autocorrelation. With regards to government effectiveness, which measures the quality of public services, the quality of the civil service, the extent to which the public sector is free from political interference, and the extent to which the government is committed to such policies - is relevant for sustainable development.

Table 5.17 Dependent Variable: Genuine wealth (sustainable development)

VARIABLES	(1)	(2)	(3)	(4)
GDP per capita growth (log)	0.0523** (0.0264)	0.0506** (0.0235)	0.0436* (0.0258)	0.0538** (0.0256)
GDP per capita growth square	0.00617* (0.00319)	0.00574** (0.00288)	0.00454 (0.00307)	0.00607** (0.00303)
Primary enrollment	-0.00110 (0.0153)	0.00129 (0.0142)	-0.00853 (0.0156)	0.00186 (0.0147)
Secondary enrollment	0.0333*** (0.00888)	0.0363*** (0.00902)	0.0375*** (0.00874)	0.0335*** (0.00935)
Foreign aid (log)	0.254* (0.129)	0.241* (0.126)	0.144 (0.121)	0.223* (0.123)
Population growth rate	-1.150*** (0.296)	-1.090*** (0.295)	-1.055*** (0.314)	-1.021*** (0.293)

VARIABLES	(1)	(2)	(3)	(4)
Inequality	-1.631 (2.271)	-1.109 (2.243)	-1.508 (2.433)	-2.087 (2.338)
Trade openness	- 0.00896*** (0.00325)	-0.00715*** (0.00239)	-0.00579* (0.00344)	- 0.00968*** (0.00297)
CO2 emissions	-0.00214 (0.0125)	0.00640 (0.0120)	0.000489 (0.0131)	0.00267 (0.0122)
Press freedom	-0.00723 (0.00970)	-0.00385 (0.00951)	-0.00463 (0.0113)	-0.00179 (0.00969)
Government effectiveness	0.974** (0.419)			
Control of corruption		1.057*** (0.359)		
Regulatory quality			0.317 (0.316)	
Institutional quality				1.117** (0.429)
Constant	2.805 (2.585)	1.808 (2.451)	2.554 (2.646)	2.309 (2.516)
Observations	118	118	118	118
R-squared	0.488	0.496	0.466	0.490

Note: Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

It also suggests that quality delivery of public services such as education and health care services is relevant for sustainable development. More so, control of corruption, which shows the extent to which public power is relevant for sustainable development. What it means is that countries that are able to control corruption will be able make progress in advancing sustainable development. The positive effect of the ‘institutional quality’ suggests that countries are likely to make progress in the achievement of sustainable development if they are able to control corruption, improve on government effectiveness, ensure strict enforcement of rules and regulations, and if activities are conducted under the dictates of the rule of law. With respect to other confounding factors, secondary enrollment, GDP per capita growth, and foreign aid appear to relevant for the improvement of sustainable development in the selected Asian countries. However, population growth and trade openness show a negative relationship with sustainable development. In OLS, however, all observations are pulled together and treated as a single unit. Thus, OLS assumes that there are no differences among the countries included in the sample.

Fixed-Effect Estimation

Unlike OLS, the fixed-effect estimation is efficient in controlling for country-level heterogeneity as illustrated in table 5.18 below. In a situation where some countries experienced some shocks such as financial crises, outbreak of diseases, disasters (e.g., earthquakes), and other unobserved factors than other countries, fixed-effect estimation is efficient in ensuring that such factors do not influence the model. Therefore, when the fixed effect was applied, the results suddenly changed. As illustrated above, the regulatory quality, is significant at 10% level and shows a positive relationship with sustainable development.

Table 5.18 Dependent Variable: Genuine wealth per capita (sustainable development)

Variables	(1)	(2)	(3)	(4)
GDP growth rate	0.0673 (0.400)	1.377 (0.810)	0.0929 (0.407)	1.360 (0.808)
GDP per capita growth	-0.127 (1.065)	-2.255 (2.353)	-0.104 (1.011)	-2.208 (2.356)
GDP per capita square	0.00169 (0.0177)	-0.0791** (0.0292)	-0.000460 (0.0190)	-0.0784** (0.0290)
Primary enrollment	0.0277 (0.0159)	-0.154 (0.0965)	0.0266 (0.0181)	-0.155 (0.0963)
Population growth	-1.153 (1.354)	-4.157 (2.395)	-0.817 (1.257)	-4.120 (2.356)
Secondary enrollment	0.0261 (0.0275)	-0.0955 (0.0686)	0.0270 (0.0266)	-0.0947 (0.0680)
Foreign aid (log)	-0.0119 (0.0940)	-0.456 (0.316)	-0.0901 (0.112)	-0.481 (0.302)
Trade openness	0.00579 (0.00742)	0.0268 (0.0346)	0.00702 (0.00762)	0.0280 (0.0354)
Inequality	-15.47*** (4.024)	-15.83 (17.17)	-14.13*** (4.179)	-15.08 (16.98)
Urbanization	2.51e07** (8.78e-08)		2.61e-07** (9.63e-08)	
Press freedom	-0.0592* (0.0285)	0.145 (0.100)	-0.0655* (0.0332)	0.146 (0.101)
Government effectiveness	0.758 (0.687)			-0.434 (1.352)
Regulatory quality		7.193* (3.536)		7.191* (3.524)
Control of corruption			-0.679 (0.541)	
Constant	25.18*** (6.372)	49.61** (20.27)	22.79*** (6.962)	49.14** (21.06)
Observations	128	142	128	142
R-squared	0.466	0.509	0.465	0.509

Note: Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

It implies that a unit change in the value of regulatory quality is likely to improve sustainable development by 7.193 and 7.191 points. This suggests that countries that are able to formulate and implement sound policies, and effectively regulate the activities of the private sector will likely improve their sustainable development path. It should be noted that most companies and organizations are owned by private individuals and groups, and their activities or businesses tend to pollute the environment. Therefore, governments ability to effectively regulate businesses is likely to improve the environmental quality and consequently promote sustainable development. The findings further show that inequality and press freedom appear to have a worsening impact on sustainable development due to the sign they bear. With respect to press freedom, it is understandable given that most countries included in the sample are either governed under controlled democracy (e.g. Malaysia, Singapore, and Cambodia), unstable democracy (e.g. Thailand and Myanmar) or autocrats such as China, Laos, Vietnam, and Brunei (Laiprakobsup, 2019), where the media is unnecessarily controlled, and the media freedom is highly restricted. In sum, the findings are consistent with the existing previous studies that found support for the governance hypothesis (Davis, 2017; Güney, 2019), which consistently maintained that governance has a positive effect on sustainable development outcomes.

5.6 Globalization and Sustainable Development

This section examines the relationship between globalization and sustainable development among Asian countries. Globalization is measured from economic (*kofe1*), social (*kofs2*), and political (*kofp3*) perspectives. Also, the three dimensions are combined to form an overall index of globalization. A negative coefficient shows a worsening impact of globalization on Genuine wealth and sustainable development as a consequence.

OLS Estimation

The measures of globalization were estimated individually from columns (1) to (4). In column (5), however, the four dimensions were combined in one model as

shown in Table 5.19 below. Column (6) presents the effect of globalization on human development.

Table 5.19 Dependent Variable – Genuine wealth (sustainable development) and HDI

Variables		(1)	(2)	(3)	(4)	(5)	(6)
		GWP	GWP	GWP	GWP	GWP	GWP
GDP per capita	per	0.00439 (0.0205)	0.00380 (0.0176)	0.0318 (0.0224)	0.0332 (0.0204)	0.0392** (0.0189)	0.000975** (0.000494)
GDP per capita square	per	0.000842 (0.00199)	0.00472*** (0.00170)	0.00185 (0.00212)	0.00156 (0.00222)	0.00871*** (0.00214)	4.33e-05 (6.43e-05)
Foreign aid (log)	aid	-0.0927 (0.108)	-0.0435 (0.0867)	0.0693 (0.112)	0.0559 (0.106)	0.193* (0.108)	-0.00729*** (0.00272)
Primary enrollment		-0.0130 (0.0143)	-0.0203 (0.0133)	-0.0167 (0.0149)	-0.0156 (0.0147)	-0.0270** (0.0130)	-0.000515** (0.000232)
Secondary enrollment		0.00748 (0.00847)	0.00401 (0.00809)	0.00359 (0.00777)	0.00364 (0.00774)	-0.00622 (0.00934)	0.00222*** (0.000218)
Population growth		-1.010*** (0.232)	-0.847*** (0.212)	-1.214*** (0.196)	-1.158*** (0.207)	-0.414 (0.320)	-0.00629 (0.00620)
Life expectancy		8.858** (3.626)	8.484*** (2.839)	4.868 (3.794)	5.424 (3.874)	7.669** (3.241)	
Urbanization		5.35e-08*** (1.78e-08)	1.19e-08 (2.11e-08)	4.80e-08*** (1.50e-08)	3.98e-08** (1.82e-08)	-3.73e-08 (3.41e-08)	-2.06e-09*** (5.42e-10)
KOF index		-0.0606*** (0.0196)				0.0383 (0.0460)	0.00227** (0.00102)
Eco. Globalization (kof1)			-0.0506*** (0.00955)			-0.0831*** (0.0176)	0.000486 (0.000416)
Soc. Globalization (kof2)				-0.00620 (0.0158)		0.127** (0.0565)	0.000600 (0.000832)
Pol. Globalization (kof3)					-0.00988 (0.0137)	-0.0890** (0.0394)	0.000416 (0.000533)
Constant		-0.223 (3.156)	0.286 (2.954)	0.660 (3.379)	0.195 (3.484)	-0.811 (2.722)	0.345*** (0.0306)
Observations		204	205	205	205	204	205
R-squared		0.307	0.352	0.279	0.281	0.392	0.944

Note: Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

The OLS results show that the overall index of globalization (kof) is negative and statistically significant at 1% in column (1) and economic globalization (kofe1) is negative and significant at 1% level in columns (2) and (5) respectively. Whereas social globalization is positive and statistically significant at 5% in column (5), political globalization is negative and significant at 5% level. In the model (6), whilst

the overall index of globalization was found to have a positive relationship on human development in among the sampled Asian countries, the economic, social, and political globalization show no relationship.

Fixed-Effect Estimation

When the model was estimated with the use of fixed-effect, Table 5.20 shows that none of the measures of globalization is significant from columns (1) to (4). But in column (5) where the measures of globalization were estimated in a single model, it turns out that the overall globalization index has assumed a positive sign and statistically significant at 5% level, economic globalization remains negative and significant at 10% level, social globalization has also assumed a negative sign and significant at 1%, and the coefficient of political globalization has become positive and significant at 1% level. In the model (6), however, none of the measures of globalization was found to affect human development.

Table 5.20 Dependent variable – Genuine wealth (sustainable development) and HDI

Variables	(1)	(2)	(3)	(4)	(5)	(6)
	GWP	GWP	GWP	GWP	GWP	HDI
GDP per capita	0.0426*** (0.0112)	0.0353** (0.0133)	0.0436*** (0.00945)	0.0469*** (0.0105)	0.0297** (0.0113)	0.000258 (0.000331)
GDP per capita square	0.00431 (0.00326)	0.00453 (0.00290)	0.00486 (0.00284)	0.00576* (0.00271)	0.00628** (0.00272)	2.94e-05 (4.80e-05)
Foreign aid (log)	0.0296 (0.150)	0.0306 (0.135)	0.0458 (0.156)	0.0809 (0.144)	0.0911 (0.135)	-0.00167 (0.00169)
Primary enrollment	0.0163 (0.0128)	0.0199 (0.0143)	0.0146 (0.0123)	0.00921 (0.0128)	0.0214 (0.0171)	0.000325 (0.000271)
Secondary enrollment	-0.0371** (0.0149)	-0.0321** (0.0132)	-0.0356** (0.0132)	-0.0378** (0.0137)	-0.0391** (0.0142)	0.000935** (0.000399)
Population growth	-1.995*** (0.264)	-2.082*** (0.287)	-2.018*** (0.256)	-1.894*** (0.305)	-1.624*** (0.307)	-0.00740** (0.00262)
Urbanization	1.06e-07 (6.47e-08)	1.51e-07*** (4.50e-08)	1.17e07*** (3.71e-08)	1.08e-07** (3.60e-08)	1.67e-07* (8.66e-08)	-1.11e-10 (1.72e-09)
CO2 emissions	0.0100 (0.0172)	0.0198 (0.0161)	0.0139 (0.0169)	0.00940 (0.0125)	-0.00376 (0.0118)	
KOF index	0.0211 (0.0462)				0.144** (0.0534)	0.00306 (0.00190)
Eco. Globalization (kof1)		-0.0107 (0.0182)			-0.0674* (0.0376)	-0.000981 (0.000944)
Soc. Globalization(kof2)			0.0114 (0.0157)		-0.103*** (0.0310)	0.00158 (0.00116)
Pol. Globalization(kof3)				0.0330 (0.0265)	0.0799* (0.0423)	0.000241 (0.000907)
Constant	2.074 (1.630)	2.468 (1.437)	2.607* (1.415)	2.716* (1.485)	-0.588 (2.311)	0.320*** (0.0313)
Observations	175	176	176	176	175	205

Variables	(1)	(2)	(3)	(4)	(5)	(6)
	GWP	GWP	GWP	GWP	GWP	HDI
R-squared	0.658	0.662	0.662	0.673	0.701	0.958

Note: Robust standard errors in parentheses *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

In column (6), it is clear that globalization has no effect on human development. This is contrary to our prior assumption that globalization has a positive effect on human development. The fixed-effects results in table 5.20 above hold some implications for the selected countries in Asia. First, the economic globalization, which encapsulates the extent to which countries open up their borders and trade internationally with other countries, how countries attract foreign direct investments, portfolio management as well as restrictions regarding inflows and outflows of goods, services, and capital – appears to have a worsening impact on the sustainable development. The reason may be that economic integration means that global crises are likely to cause domestic trade volatility. For instance, the recent ‘trade war’ between the United States of America and China is likely to have a negative impact on countries in Asia which trade with either US or China. It is also predicted that the exit of United Kingdom from the European Union is expected to have a negative impact on other countries, especially those from the developing world. Second, the negative effect of social globalization (integration with regards to personal contacts and linkages, internet connectivity, telephone services, international tourism services, immigration and emigration, daily newspapers, television stations, and number of foreign restaurants) tends to negatively affect countries.

The plausible reason is that whilst social globalization such as tourism, internet connectivity, and immigration services tend to create both opportunities and threats. For instance, whereas tourism has become key contributor to the GDP of many countries in Asia and other developing countries, it equally has environmental consequences that pose greater health risk to the people. A classic example is the recent outbreak of coronavirus in the Wuhan area in China, which has spread to other countries including Thailand, Singapore, United States, France and many other Western countries. The fact is that the virus was able to spread so fast because of either through Chinese citizens who traveled to other countries for tourism activities

or through free movement of people across national borders. This shows how global integration, if not properly managed, can have negative consequences on development. Third, the plausible explanation to why political globalization may show a positive effect on sustainable development is because membership in international and regional organizations such as the UN, ASEAN, and others may lead to benefits such as global fight against epidemics, prevention of human rights abuses, and the fight against environmental threats like climate change and global warming, which pose serious threat to sustainable human development. Also, the formation of regional trade agreements or participation in global level treaties can result in mutual benefits among countries. Hence, our prior hypothesis that globalization has a negative relationship with sustainable development is partially confirmed based on the OLS and fixed-effect estimations. Whilst our findings with respect to political globalization confirm the previous literature (Gygli et al., 2019; Tsai, 2007), nevertheless, the consistently negative effect with respect to economic and social and globalizations contradict the work of Goryakin et al. (2015) who found a positive relationship.

5.7 Linkages between Globalization, Democracy, and Sustainable Development

In this section, three hypotheses are tested. First, the relationship between democracy and sustainable development was examined. Second, democracy was interacted with globalization to ascertain whether it can dampen the negative effect of globalization. Third, we further examined whether democracy has a direct effect on human development.

OLS Estimation

As illustrated in table 5.12, column (1) presents the results for the effect of democracy. In column (2), the model for globalization was estimated again in order to track its interactive effect with democracy. Column (3) shows that of the interaction term, and column (4) presents the direct effect of democracy on human development. The findings in column (1) revealed that democracy, political rights, and press

freedom are negative and statistically significant at 1% levels respectively, suggest their negative relationship with sustainable development.

Table 5.21 Dependent Variable – Genuine wealth and human development

Variables	(1)	(2)	(3)	(4)
	GWP	GWP	GWP	HDI
GDP per capita	8.115* (4.223)	0.0569*** (0.0199)	0.0433* (0.0240)	6.737 (4.523)
GDP growth rate	-7.887* (4.162)			-6.585 (4.459)
GDP per capita square	-0.00365 (0.00254)	0.00692*** (0.00200)	0.000675 (0.00253)	
Population growth	7.526* (4.331)	-1.038*** (0.137)	-1.038*** (0.135)	5.737 (4.764)
Foreign aid (log)				-0.324*** (0.0738)
Urbanization	4.68e-10 (1.15e-08)	-5.98e-08*** (1.03e-08)	-6.82e-08*** (1.17e-08)	-1.25e-08 (1.61e-08)
KOF index		0.0371* (0.0203)		
Eco. Globalization (kof1)		-0.0265*** (0.00756)		
Soc. Globalization(kof2)		0.0184 (0.0254)		
Pol. Globalization(kof3)		0.0480*** (0.0177)		
Democracy	-0.314*** (0.0623)			-0.231*** (0.0579)
Political rights	-0.391*** (0.102)			-0.194** (0.0841)
Press freedom	-0.0260*** (0.00837)			-0.0353*** (0.00812)
Kof x democracy			-0.000574 (0.00230)	
Eco. globali. x democracy			-0.00567*** (0.00164)	
Soc. Globali x democracy			0.000121 (0.00436)	
Pol. Globali. X democracy			0.00668* (0.00353)	
Constant	6.287*** (0.860)	2.286*** (0.439)	1.615*** (0.299)	6.305*** (0.806)
Observations	368	369	369	275
R-squared	0.219	0.537	0.488	0.360

Note: Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

In column (3), the results reveal that the interaction between economic globalization and democracy (*economic globalization x democracy*) is negative and significant at 1%. The interaction between political globalization and democracy

(*political globalization x democracy*) remains positive and significant at 10% level. As can be seen, interaction between the overall index of globalization is still negative and insignificant. These findings imply that democracy in the selected countries in the Asia has no modulating effect on globalization. With respect to column (4), the results show that whilst press freedom is negative and significant at 1% level, democracy index and political rights are also negative and significant at 1% and 5% levels respectively. This implies that democracy appears to have a negative impact on human development in the sampled Asian countries.

Fixed-Effect Estimation

The findings have not changed when we estimated the model with fixed-effect estimation. From table 5.22 below, the result in column (1) shows that democracy remains negative but insignificant. The political rights also remain negative and statistically significant at 10% level. These findings are contrary to the works of Lake and Baum (2001) and Gerring et al. (2012), who found a support for the positive effect of democracy. However, the findings are consistent with the work of Ross (2006).

Table 5.22 Dependent Variable – Genuine wealth and human development

VARIABLES	(1)	(2)	(3)	(4)
	GWP	GWP	GWP	HDI
GDP per capita growth (log)	-1.145 (2.217)	0.0386* (0.0183)	0.0456*** (0.0127)	0.147 (0.153)
GDP per capita square	0.000330 (0.00161)	0.00363 (0.00378)	0.00144 (0.00424)	
Population growth	-1.734 (2.293)	-1.116** (0.407)	-1.125** (0.395)	0.0983 (0.166)
Foreign aid				-0.00280 (0.00386)
GDP growth rate	1.158 (2.177)			-0.146 (0.150)
Urbanization	2.05e-07** (8.32e-08)	1.33e-07* (7.03e-08)	1.06e-07 (6.09e-08)	7.47e-09 (4.36e-09)
KOF		0.0895* (0.0454)		
Eco. Globalization (kof1)		-0.0538*** (0.0154)		
Soc. Globalization (kof2)		-0.0863* (0.0447)		
Pol. Globalization (kof3)		0.0642* (0.0340)		
Democracy	-0.103 (0.0677)			0.00437 (0.00341)

Political rights	-0.147* (0.0839)			0.0122 (0.0139)
Press freedom	-0.0445 (0.0254)			9.32e-05 (0.001000)
Kof x democracy			0.000694 (0.00464)	
Eco. globali. x democracy			-0.00510* (0.00282)	
Soc. Globali x democracy			-0.000512 (0.00674)	
Pol. Globali. X democracy			0.00465 (0.00520)	
Constant	2.831** (1.065)	1.698 (1.894)	2.722** (1.249)	0.546*** (0.0622)
Observations	368	369	369	301
R-squared	0.252	0.493	0.502	0.376

Note: Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

In column (3), the result shows that the interaction between economic globalization and democracy is still negative and significant at 10%, suggesting that democracy in the selected Asian countries appears to have less impact in moderating the negative effect of globalization. In column (4), democracy index, political rights, and press freedom shows no relationship with human development.

5.8 Instrumental Variable Approach and the Robustness Checks

As noted earlier, one major setback to the use of the OLS and fixed-effect estimations is when omitted variable bias or endogeneity is present in the data. To help deal with this problem, we estimated the model with two-staged least square approach and the system-Generalized Method of Moments. The findings from these estimations were also used as robustness checks to validate the results from OLS and fixed-effect estimations.

Two-Staged Least Square IV(2SLS) Estimation

Although the instrumental variable in two-stage least square is an efficient econometric technique in dealing with the problem of endogeneity, the difficulty is how to get valid instruments that can explain the model. Following the existing growth and policy literature (see Porta et al., 1998; Gupta et al., 2002; Alesina et al., 2003), ethno-linguistic fractionalization (elf), common law, latitude, British colonial

origin, corruption, and trade openness have proven to be valid instruments. To ensure that the instruments used are not over-identified, Anderson Canon LM test was performed. From columns (1) to (5), the p-values of the Anderson Canon LM test were significant, suggesting that there is no problem of under-identification of instruments and the null hypothesis was subsequently rejected. Therefore, we conclude that our model is not suffering from second-order serial correlation. To ascertain whether the instruments used are weak or not, Cragg-Donald Wald test was performed. Additionally, Stock and Yogo (2005) weak identification critical values were applied to ensure that none of the values for 10%, 15%, 20%, and 25% is more than that Cragg-Donald Wald F statistics. From table 5.23, none of the critical values is more than the corresponding Cragg-Donald Wald F statistics, suggesting that the instruments used such as British colonial origin, ethnic and linguistic fractionalization, and trade openness have the power to explain endogenous variables. The p-values of the Sargan test are insignificant, indicating that our instruments are not over-identified or our instruments are not correlated with the error term.

Table 5.23 Dependent Variable – Genuine wealth and human development

VARIABLES	(1)	(2)	(3)	(4)	(5)
	GWP	GWP	GWP	GWP	HDI
GDP growth grate (log)	13.01 (22.48)		1.640 (20.07)	-10.78 (20.55)	-0.00181 (0.00454)
GDP per capita growth (log)	-13.16 (22.84)	0.147 (0.142)	-1.752 (20.39)	11.02 (20.87)	0.0108 (0.0185)
GDP per capita growth square	0.00774 (0.0132)	-0.0135 (0.0119)	0.00156 (0.0128)	-0.0135 (0.0129)	
Foreign aid (log)	-1.123** (0.520)	-0.170 (0.287)	-0.815** (0.394)	-0.131 (0.298)	-0.0312*** (0.00648)
Population growth rate	-9.181 (22.80)	1.755 (1.155)	-0.0969 (21.01)	12.76 (21.65)	-0.0282 (0.0174)
Secondary education	-0.0356 (0.0412)	0.0365 (0.0464)	-0.0238 (0.0403)	-0.00489 (0.0431)	
Inequality	-6.070 (9.089)	- 31.51*** (9.921)	-11.28 (8.027)	-25.59** (10.52)	0.00425 (0.109)
Government effectiveness	13.27*** (5.047)				-0.140* (0.0738)
Control of corruption	11.93*** (3.625)		-1.266 (1.925)		
Rule of law		-1.657 (1.620)		-1.138 (2.126)	0.279*** (0.0866)
Political rights		0.337 (0.498)			0.0101* (0.00587)
Press freedom		-0.0791* (0.0463)			0.000529 (0.000500)
Democracy		-0.503* (0.293)			0.00639** (0.00324)
KOF			-0.371*** (0.133)		
Eco. Globalization (kof1)			-0.0477 (0.0453)		
Soc. Globalization (kof2)			0.417* (0.231)		
Pol. Globalization (kof3)			-0.125 (0.114)		
Kof x democracy				-0.0248 (0.0168)	
Eco. globali. x democracy				-0.00392 (0.00931)	
Soc. Globali x democracy				0.0461 (0.0286)	
Pol. Globali. X democracy				-0.0187 (0.0172)	
Genuine wealth					- 0.00944*** (0.00292)
Constant	-21.92 (16.10)	16.39** (6.785)	14.18*** (5.266)	11.85* (6.422)	0.629*** (0.0748)
Observations	171	159	171	170	186
Year dummy	YES	YES	YES	YES	YES
Country dummy	NO	NO	NO	NO	NO
Anderson Canon LM	20.244	56.261	32.680	38.242	13.194
Statistics & P-Value	0.0000	0.0000	0.0000	0.0000	0.0042
Cragg-Donald Wald F	7.117	26.651	12.286	14.996	4.378

VARIABLES	(1)	(2)	(3)	(4)	(5)
	GWP	GWP	GWP	GWP	HDI
Sargan Test	0.1030	0.1445	0.7062	0.1445	0.1000
Endogeneity	0.0033	0.0000	0.0001	0.0001	0.0415

Note: Standard errors in parentheses *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

As illustrated in column table 5.23 above, the result in column (1) shows that government effectiveness is positive and significant at 1% level. This implies that our sampled countries are likely to make progress in their quest to achieve sustainable development if their governance systems are effective in the areas of quality delivery of public services (e.g. education and health), retool and reform civil service, ensure that the public sector is not manipulated for political gains, and there is government commitment to policies and programs. To forecast, a unit change in the government effectiveness, all other things being equal, is likely to lead to 13.27 points increase in Genuine wealth per capita and subsequently an improvement in the sustainable development of the selected Asian countries. More so, control of corruption is positive and significant at 1% level, suggesting that the ability to effectively control corruption will likely improve sustainable development in East and South-East Asian countries. The positive effect of government effectiveness and control of corruption is consistent with the OLS results in table 5.17. In column (2), democracy and press freedom are negative and significant at 10% levels respectively. The results confirm that of the OLS estimation in table 5.21. Whilst the overall globalization (KOF index) is negative and significant at 1% level in column (3), the social globalization is positive and significant at 10% level. The results confirm the OLS estimation in table 5.19 and fixed-effect estimations in table 5.20 respectively. Interesting, the interactions between democracy and globalization are not significant in column (4), which reaffirm the earlier point that democracy has no modulating effect on globalization in the selected Asian countries. The plausible reason is that most of these countries are not democratic and it is not surprising that democracy appears to be irrelevant to their current sustainable development path. In column (4), the genuine wealth is negative and statistically significant at 1%, suggesting that the current state of sustainable development in the East and South-East Asia tends to have negative effective on human development. The plausible reason is that most of these countries

focus on economic growth but rather disrespect environmental norms, standards, and practices. Therefore, most companies and businesses, perhaps, do not incorporate sustainable practices into their business models. Consequently, ambient or outside air pollution from companies and industries poses serious risks to human lives. These findings confirm the report by the World Bank that air pollution was the major cause of welfare losses in South Asia and East Asia and the Pacific and was the equivalent of 7.4% and 7.5% of the regional GDP in 2013 respectively (World Bank, 2016: Xii).

In the model (5) where the effect of genuine wealth per capita was examined to ascertain whether the current level of sustainable development has a direct positive impact on human development, the result was interesting. The finding shows that genuine wealth per capita as a measure of sustainable development has a negative impact on human development. This is particularly true because most of the countries in Asia including Thailand tend to suffer a lot from pollution due to economic activities, and this tends to have negative impact on human lives as well as the ecosystem. With respect to the control variables, foreign aid and inequality are consistently negative and statistically significant, suggesting that they have worsening impact on sustainable development.

System GMM Estimation

As mentioned earlier, the Generalized Method of Moments (GMM) allows the use of some independent variables as instruments to solve the problem of endogeneity. Additionally, it uses lagged dependent variables as a regressor to effectively account for the problem of reverse causality or endogeneity in the dataset. However, some conditions must be observed to ensure the efficiency of the system GMM estimation. First, the insignificant p-values of AR (2) in table 5.24 below suggests that the model does not suffer from the second-order-serial correlation. Additionally, the results of Hansen test show that the instruments used are not over-identified, suggesting that the instruments are valid, and do not correlate with the error term. In all these cases, we ensured that the number of instruments are less than the number groups.

Table 5.24 Dependent Variable – Genuine wealth and human development

VARIABLES	(1) GWP	(2) GWP	(3) GWP	(4) GWP	(5) HDI
Genuine wealth-1	0.901*** (0.00686)	0.908*** (0.0108)	0.892*** (0.0228)	0.930*** (0.00599)	
Democracy		-0.113* (0.0619)			
Political rights		0.135 (0.187)			
Press freedom		-0.0408 (0.0276)			
GDP growth (log)		-7.464 (6.154)	-54.16** (20.01)	-18.77** (7.274)	0.0544 (0.0780)
GDP per capita growth (log)	0.0561* (0.0298)	7.702 (6.242)	55.13** (20.34)	19.14** (7.405)	-0.0548 (0.0792)
GDP per capita square	-0.00565 (0.00482)	-0.0192*** (0.00433)	- (0.00883)	-0.0149* (0.00834)	
Population growth rate	-0.182 (0.153)	7.616 (6.543)	56.62** (21.04)	19.57** (7.777)	-0.0595 (0.0833)
Foreign aid (log)	-0.0761 (0.0655)	-0.0647 (0.0401)			- 0.000818 (0.00173)
Government effectiveness	0.508*** (0.103)				
Regulatory quality	0.381 (0.298)				
Kof (overall)			-0.0614** (0.0252)		
Eco. Globalization (kofe1)			-0.00400 (0.00995)		
Soc. Globalization (kofs2)			-0.112** (0.0466)		
Pol. Globalization (kofp3)			0.0704** (0.0330)		
Secondary education			-0.0104 (0.0209)		
Kof x democracy				0.00361 (0.00358)	
Eco. globali. x democracy				-0.00208 (0.00512)	
Soc. Globali x democracy				-0.00580 (0.00938)	
Pol. Globali. X democracy				0.00423 (0.00513)	
Inequality				11.48 (9.732)	-0.0333 (0.145)
Hdi - 1					0.939*** (0.0619)
Genuine wealth					0.00117 (0.00109)
Constant	0.359 (0.292)	2.408* (1.218)	-3.303** (1.511)	-6.347 (5.071)	0.0640 (0.0974)
Observations	252	290	232	318	303
AR (1)	0.032	0.034	0.016	0.019	0.302
AR (2)	0.086	0.137	0.508	0.723	0.403
No. of Lags	1	1	1	1	1

VARIABLES	(1)	(2)	(3)	(4)	(5)
	GWP	GWP	GWP	GWP	HDI
Groups/instruments	14/22	16/23	16/30	16/29	16/30
Sargan OIR	0.000	0.000	0.007	0.000	0.000
Hansen OIR	0.986	1.000	1.000	1.000	0.991

Note: Standard errors in parentheses *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

As illustrated in table 5.24, the lagged of Genuine wealth is positive and statistically significant from columns (1) to (5). In column (1), government effectiveness is positive and shows a significant relationship with sustainable development. The result is consistent with the IV2SLS, OLS, and fixed-effect estimations. The index of democracy has remained negative and significant in column (2), suggesting that democracy appears to be irrelevant to the sustainable development trajectory of East and South-East Asian countries. With respect to globalization, the overall Kof index is negative and significant at 5%, the economic globalization bears a negative sign, but insignificant, social globalization is negative and significant at 5%, and the political globalization is positive and significant at 5% level. These findings to some extent, confirm the OLS, fixed-effect, and IVSLS estimations. However, interactions between democracy and globalization are not significant in column (4). In column (5), The genuine wealth shows no relationship with human development.

5.9 Sub-Saharan Africa and East/South-East Asia: The Comparative Analysis

This section compares and contrasts the key findings of the study between sub-Saharan African and the selected countries in Asia. It should be noted that a sample of 56 (37 in sub-Saharan Africa and 19 in East and South-East Asia) countries was used for the analysis. The object is to examine how governance, level of democracy, and globalization affect the sustainable development of the countries included in the sample.

With respect to governance, whilst there is a consistently positive relationship between governance and genuine wealth (sustainable development) for countries in

East and South-East Asia, the findings for that of sub-Saharan African countries showed a negative relationship. The results showed that government effectiveness, control of corruption, regulatory quality, and institutional quality were consistently positive and show a significant relationship with sustainable development in the selected Asian countries. These results were consistent in the OLS, fixed-effect, IV2SLS, and system GMM estimations. It implies that as the governance level increases in the selected Asian countries, all things being equal, the level of sustainable development also increases. However, apart from the regulatory quality which was positive in OLS and fixed-effect estimations, the findings showed that government effectiveness, control of corruption, rule of law, and the index of institutional quality were negative in fixed-effect, IV2SLS, and system GMM estimations in sub-Saharan Africa. For instance, government effectiveness was positive in OLS, but became negative in fixed-effect, IV2SLS, and system-GMM estimations. Also, control of corruption and the rule of law were negative in most of the estimations apart from the OLS. Since the fixed-effect, IV2SLS, and GMM estimations are more efficient, it is difficult to rely solely on the results of OLS estimations for statistical inference. It implies that the current governance system in sub-Saharan Africa is a threat to sustainable development agenda in the sub-region.

In the next hypothesis, we examined the relationship between globalization and sustainable development. The results revealed generally that globalization produced mixed results for the two regions. However, some differences can be highlighted when globalization is disaggregated into various dimensions. The results revealed that while the overall index of globalization (kof index) has a positive effect on sustainable development in sub-Saharan Africa, its relationship is negative for countries in Asia. It means that the net effect of economic, social, and political dimensions of globalization seems to increase sustainable development in sub-Saharan Africa than their Asian counterparts. The study also found that economic globalization has consistently shown a negative relationship on sustainable development of the two regions. This implies that the current global economic integration appears not to favor the two regions. This is consistent with the view that global trade system tends to benefit the developed countries than low and middle-income countries (Petrus & Veltmeyer, 2001). Furthermore, social globalization has

also shown a negative effect on sustainability in both regions. This suggests that the measures of social globalization (e.g., internet connectivity, international tourism services, etc.) tend to create opportunities as well as challenges. The study found that political globalization appears to show a positive effect on sustainable development in the two regions.

However, when globalization was regressed on human development index, the results showed that KOF index and social globalization consistently had positive effect in sub-Saharan Africa. But economic and political globalizations show a negative impact on human development in OLS estimation but became negative in fixed effect technique. This result from sub-Saharan Africa further confirms the compensation theory (Kaufman & Segura-Ubiergo, 2001). Compensation theory contends that globalization creates risks and uncertainty in domestic economy, which in turn trigger domestic political for compensation policies (Rudra & Haggard, 2005). Thus, globalization compels governments to invest more in social services like education, health and social securities which is expected to lead to improvement in human development. Among the Asian countries, however, the economic, social, and political dimensions of globalizations have consistently shown a negative to no relationship on human development. It can be reasoned that whilst our earlier hypothesis on the relationship between globalization and human development has been partially confirmed for sub-Saharan Africa, that of Asian countries is not confirmed.

In the hypothesis that sought to test the effect of democracy on sustainable development, the study revealed interesting results. It emerged that democracy has consistently shown a positive relationship with sustainable development in sub-Saharan Africa. The findings revealed that democracy index from Polity IV project and the political rights index from freedom House have a positive effect on sustainable development in sub-Saharan Africa. It implies that as the level of democracy and political rights increases, all things being equal, sustainable development also increases accordingly. However, when democracy was regressed on human development index to test whether democracy has a direct effect, the result turns out that the democracy has no effect on human development. It suggests that the current level of democracy in sub-Saharan Africa has no effect on the extent to which

people live long, get educated, and increased their income levels. Nevertheless, political rights and press freedom were found to have a significantly positive effect on human development based on the fixed-effect estimation. With respect to East and South-East Asia, however, it was observed that democracy has a negative relationship with sustainable development as well as human development.

Unlike sub-Saharan African countries, the results indicate that democracy appears to have a negative impact on both sustainability and human development in the sampled Asian countries. The result for the Asian countries is not surprising because whilst some of these countries are governed under controlled democracy, others are governed either under unstable democracy or under autocracies. The study further observed that press freedom has consistently had a negative effect on sustainable development in both regions. These results are very crucial and need deeper analysis. From the political economy perspective, some scholars (Lew, 2011; Winslow, 2005) have argued that a democracy is more likely to have a positive impact on development outcomes than autocracies. But the key question is that why is most African countries poorer than their Asian counterparts even though most of them are democratic since 1990s? As argued in the previous literature, it is the level of democracy that has a positive impact on development outcomes (Baum & Lake, 2003; Lake & Baum, 2001; Plümper & Martin, 2003). This argument suggests that democracy at nascent stage or countries at the process of democratization may experience several challenges including poor growth, but at a certain level, it begins to pay off. Applying this theory to African countries, it is likely that as countries in the sub-region continue to nurse and nature their democracies including political and economic institutions, it may begin to yield pay offs when democracies are finally consolidated. The findings of this study shed more light on redistribution rather than generic economic growth. This is because strong governance (as in the case of most Asian countries including China) may be good for economic growth, however, the extent to which such growth is evenly distributed to deal with the problem of inequality, and the extent to which economic activities does not harm the environment are critical ingredients for sustainable development. The is when issues about press freedom, access to information, tolerance of opposing views, participation the political process, transparency and accountability are also very important.

It should be noted that because globalization creates both opportunities and threats, the index of democracy was interacted with the measures of globalization to ascertain whether democracy has a modulating effect on globalization. The study found that democracy modulates the negative impact of globalization on sustainable development in sub-Saharan Africa. Thus, in situations where the measures of globalization are negative, the coefficients changed to positive, suggesting that democracy has the potential of dampening the negative impact of globalization on sustainability in sub-Saharan Africa. However, the findings with regards to Asian countries revealed that the current democracy in the region appears to have no modulating effect on globalization. For instance, economic globalization remains negative across OLS, fixed-effects, and system GMM estimations despite the interactions between democracy and globalization.

Some scholars contend that sustainable development should be seen as a means to an end and not an end in itself. In line with this argument, we regressed the Genuine wealth per capita as a measure of sustainable development on human development index. The findings revealed that the current level of sustainable development has a negative relationship with human development in both sub-Saharan Africa and the Asian countries. The findings signal that the current development trajectory of the two regions is not on the sustainable path. The plausible reason is that their economies tend to pollute the environment due to economic activities, which is likely to pose health risk to the people. This is possible because of high consumption of non-renewable sources of energy such as coal, charcoal, and wood. It is important to state that since carbon dioxide emissions constitute about 75% of the global greenhouse emissions due to economic activities (), the reliance on non-renewable sources of energy suggests that climate change is likely to have a devastating impact on the two regions.

With respect to control factors, the findings showed that GDP per capita growth, secondary education, and life expectancy were found to have a positive relationship with sustainable development in the two regions. It implies that, as incomes of the people increase, as the rate at which people attain secondary education increases, and as more people live long, all things being equal, sustainable development also increases. On the other hand, GDP growth rate, foreign aid, primary

education, population growth, inequality, and carbon dioxide emissions were found to have a negative impact on sustainable development in both the sub-Saharan Africa and East and South-East Asian countries. With respect to urbanization, which measures the number of people living in the major cities, the results revealed that whilst urbanization appears to have a positive impact on sustainable development among the Asian countries, its impact is mixed for sub-Saharan African countries.

5.10 Revised Conceptual Framework

The main objective of this study is to develop an empirical model to investigate whether the linkages between governance, the level of democracy, and globalization predict the heterogeneity of sustainable development in sub-Saharan Africa and East and South East Asia. After the hypotheses were tested for the two regions, the original conceptual framework is revised as shown in the figure below.

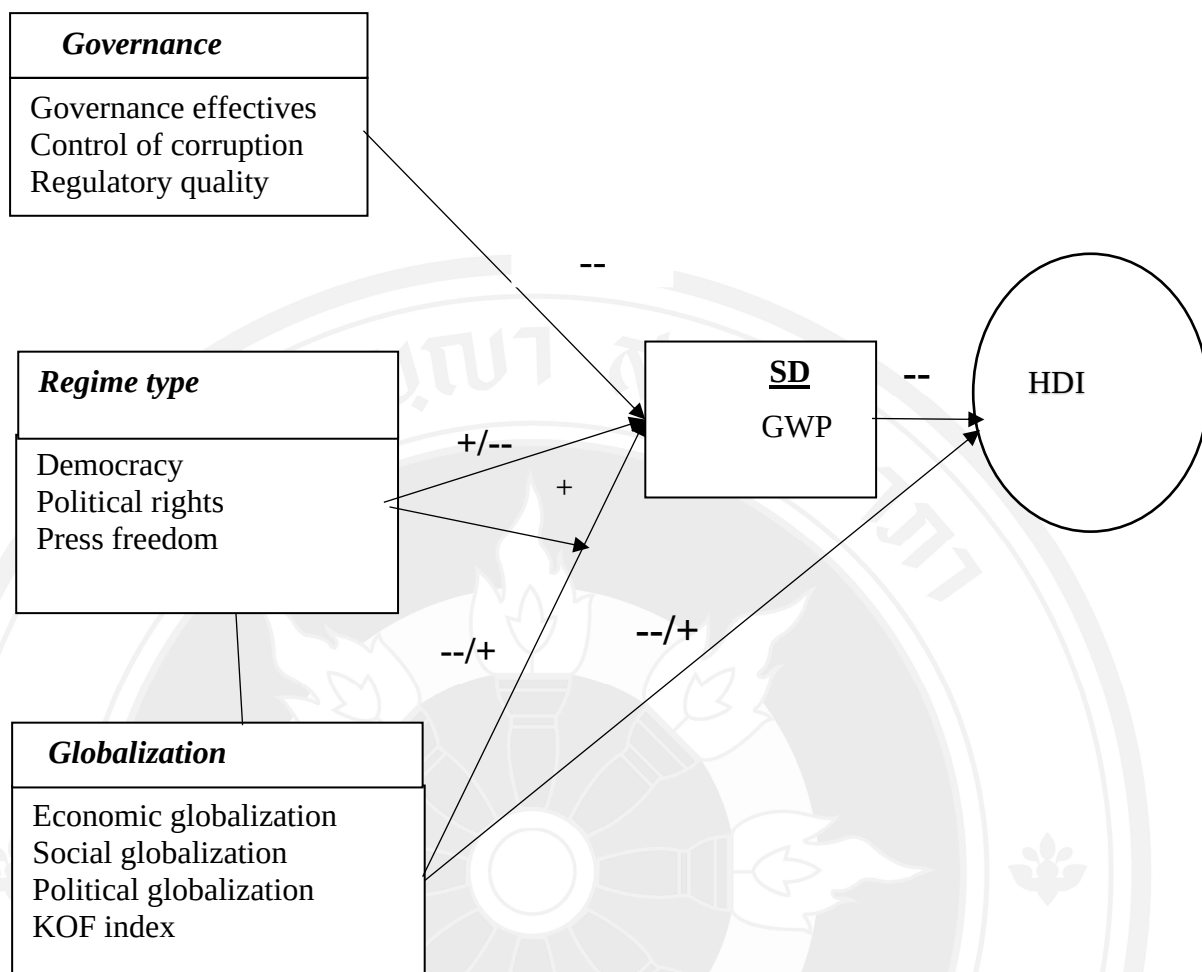


Figure 5.2 A Revised framework showing the linkages between governance, democracy, and globalization on sustainable human development in sub-Saharan Africa.

Note: GWP denotes genuine wealth per capita, SD is sustainable development, and HDI is the human development index.

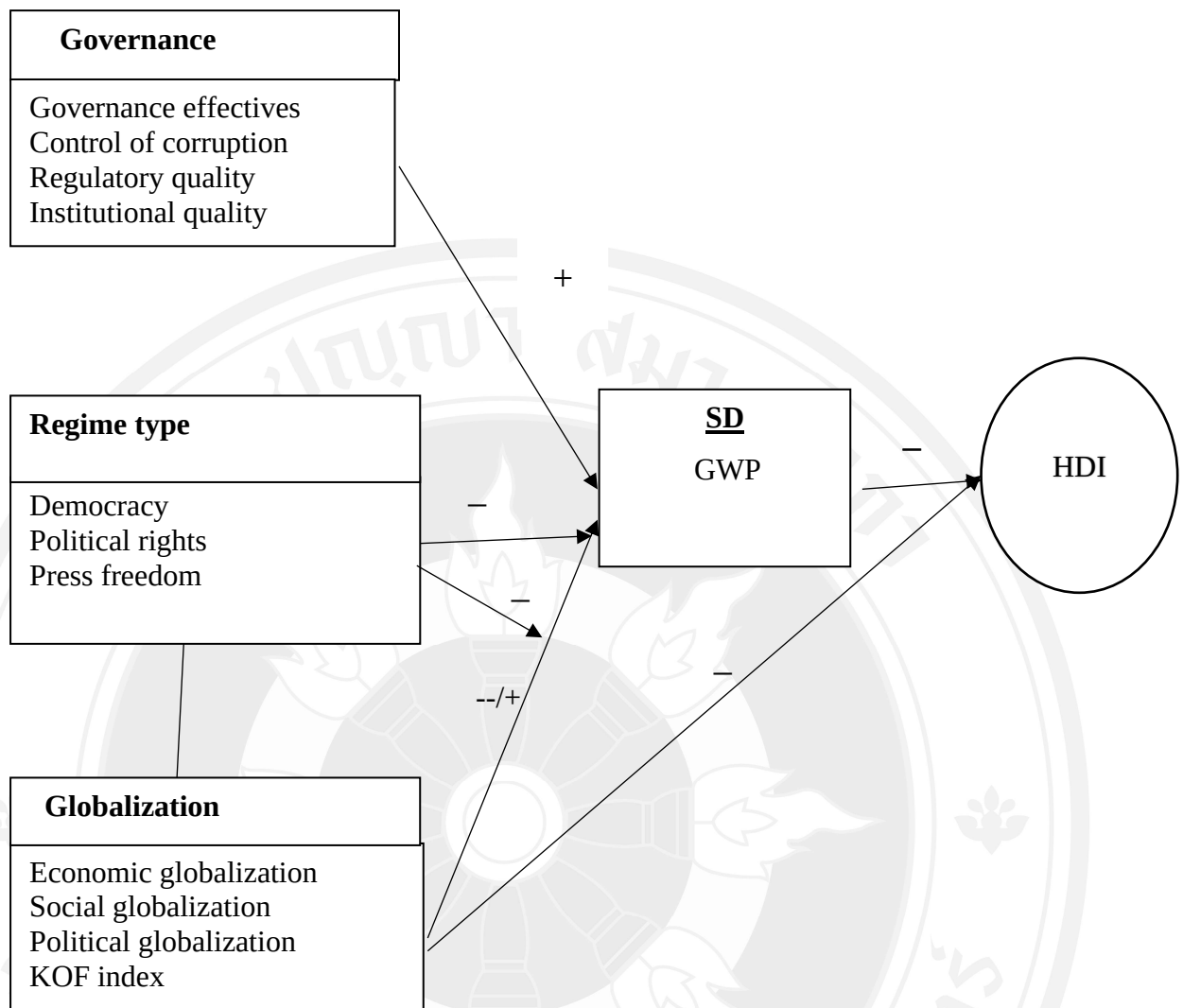


Figure 5.3 A Revised Framework Showing the Effect of Governance, Democracy, and Globalization on Sustainable Human Development in Asia.

Note: GWP denotes genuine wealth per capita, SD is sustainable development, and HDI is the human development index

5.11 Chapter Summary

This chapter sought to respond to the following objectives: 1) to examine the effect of governance on sustainable development, 2) to investigate the relationship between globalization and sustainable development, 3) to examine the linkages between globalization, democracy, and sustainable development, and 4) to interrogate the relationship between sustainability and human development outcomes. Generally,

the following findings were established: first, the relationship between governance and sustainable development is positive for countries in Asia, but negative for those in sub-Saharan Africa. Second, the study found that the effect of globalization on sustainable development in the two regions produced mixed results. Third, democracy showed a positive relationship on sustainability and human development in sub-Saharan Africa, but a negative relationship was established for countries in the Asian region. Fourth, democracy modulates the negative effect of globalization in sub-Saharan Africa, but not in the selected Asian countries. Fifth, the relationship between genuine wealth and human development was found to be negative for the two regions, suggesting that the current development path of the two regions is not sustainable, and has a negative impact on human development.



CHAPTER 6

DISCUSTIONS AND SUMMARY OF MAJOR FINDINGS, CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

This Chapter presents the summary of the general findings of the study, the conclusion, and recommendations. These are done in accordance with the following objectives of the study: 1) to examine the effect of governance on sustainable development, 2) to investigate the relationship between globalization and sustainable development, 3) to examine the linkages between globalization, democracy, and sustainable development, and 4) to interrogate the relationship between sustainability and human development outcomes.

As countries have barely 10 years away to achieve UN sustainable development goals, the findings of this study come at the right time. The theory of sustainability assumes that the use of natural resources for today's needs should not damage its use by future generations. It is anchored on three pillars: social dimension - to improve the living standards of the society, economic dimension – to achieve productive activities considered critical for the society, and environmental dimension – to minimize the pollution and the degradation of the ecological resources that are used in these processes. In short, the idea of sustainability seeks to explain how human activity can successfully sustain itself without depleting the resources on which it feeds on. Policy makers continue to face problematic trade-offs between balancing the three features of sustainability (social, economic, and the environment). Several explanations of the causes of poverty and underdevelopment in developing countries have largely been attributed to lack of economic growth, geography or physical location (landlocked), and population as well as ethnic diversity.

6.2 Governance and Sustainable Development

The relationship between governance and sustainable development is clearly articulated under the Goal 16 of post-2015 UN sustainable development goals. It states that “*peace, justice, and strong institutions* are essential for the achievement of SDG goals. It should be noted that global leaders have recognized that peace, justice, and strong institutions are key pillars of development. Clearly, sustainable development goal 16 falls under the broad spectrum of governance. Despite the fact that governance is an important in the current development discourse, scholars tend to differ in many respects on its definition. The 2017 World Development Report defined governance in terms its capacity to deliver three development outcomes – minimize threat to violence (security), promote prosperity (growth), and ensuring that such prosperity is shared (equity). Other scholars defined governance as the process by which governments are selected, monitored and replaced; the capacity of the government to effectively formulate and implement sound policies; and the respect of citizens and the state for the institutions that govern economic and social interactions among them. Thus, the term governance consists of several features such as protection of human rights, gender equality, government effectiveness, participation, transparency, accountability, corruption, rule of law and many more.

Scholars of governance hypothesis have argued that inefficient governance environment tends to destroy the economic potential of a country and could lead to displacement of large sections of the population with its attendance consequences such as increase in poverty, and poor delivery of essential public services like health and education. Also, some other scholars have questioned whether the problems of poverty and underdevelopment in developing countries are caused by any other factors beyond poor governance. In fact, scholars in international development seem to converge on the point that because institutions or governance in most middle- and low-income countries are weak, there is no capacity for such governance environment to absorb and convert donor resources into an improved socio-economic environment.

Since it is impossible to capture all dimensions of governance, this study examines governance hypothesis with respect to four domains: government effectiveness, regulatory quality, control of corruption, and the rule of law. Generally, whilst the study found a negative effect of governance on sustainable development in sub-Saharan Africa, the findings revealed a positive relationship between governance and sustainable development among Asian countries. Among Asian countries, however, the results were found to be consistently positive in the OLS, fixed-effect, IV2SLS, and system GMM estimations. The positive effect means that governance in Asian countries included in the study is capable of facilitating the achievement of United Nations sustainable development goals. Thus, as governance increases, all other things being equal, sustainable development also increases in the short term. The aspects of governance that seem to support sustainable development is their government effectiveness, the ability to deal with corruption, and the regulatory quality. However, apart from the regulatory quality, the current state of governance in sub-Saharan Africa appears to hinder the achievement of sustainable development. In sub-Saharan Africa, however, dimensions of governance that consistently showed a negative impact on sustainable development is the ability to control corruption, and the governance effectiveness. In sum, whereas the positive effect of governance in Asia lends support for the governance hypothesis and deemed to be consistent with large body of literature (Davis, 2017; Farag et al., 2013; Güney, 2019; Hilaire, 2016; Kaufmann et al., 2011; Rosenberg, 2018; B. O. Rothstein & Teorell, 2008), the findings with respect to African countries in contrary to this body scholarly works, suggesting that governance is bad in sub-Saharan Africa.

6.3 Globalization, Sustainability and Human Development

With respect to the globalization hypothesis, the study found mixed results for the two regions. The findings revealed that economic globalization and social globalization consistently have negative impact on the sustainable development of the two regions. This means that the current global economic integration does not favour the two regions. Also, social globalization in the form of tourism, internet connectivity, immigration, telecommunication, and a host of others appears to have

some unintended negative consequences on the sustainable development path of the regions included in the study. Nevertheless, the findings further showed that political globalization have a positive impact on the sustainable development of both regions. Therefore, the positive impact of political globalization means that the membership of the two regions in the United Nations as well as their respective regional organizations appears to facilitate the achievement of sustainable development. However, when globalization was regressed on human development index, the results showed that KOF index and social globalization consistently had positive effect in sub-Saharan Africa. But economic and political globalizations show a negative impact on human development in OLS estimation but became negative in fixed effect technique. Among the Asian countries, however, the economic, social, and political dimensions of globalizations have consistently shown a negative to no relationship on human development. The positive effect of social globalization is on human development is in line with the works of Cho (2013) and Goryakin et al. (2015) but contradicts that of Andreas Bergh and Therese Nilsson (2010), who observed that social globalization had no effect on inequality and poverty respectively. The result on economic globalization based on fixed-effect estimation tends to contradict the work of Andreas Bergh and Therese Nilsson (2010) who found a robust positive relationship on life expectancy. The no relationship between political globalization and human development in fixed effect is consistent with the works of Figge et al. (2017) and Gurgul and Lach (2014), who established that political globalization has no impact on ecological footprints and economic growth respectively. Overall, the effect of globalization on sustainability and human development is mixed for the two regions.

6.4 Democracy, Sustainability, and Human Development

When the hypothesis on the effect of democracy on sustainable development as well as on human development index was empirically tested, several findings were established. First, democracy index has consistently shown a positive effect on the measure of sustainable development only in sub-Saharan Africa. And second, political rights also shown a positive impact on sustainable development, suggesting that more

political right is good for social, economic, and environmental development in sub-Saharan Africa. These findings resonate very well with the existing literature that found a significant positive relationship between democracy and environmental quality (Li & Reuveny, 2006; Mak Arvin & Lew, 2011). These means that under more or quality democracy, the needs of today's generations can be met without necessarily harming that of future generation to equality meet their needs. However, democracy was found to have no relationship on human development index in the same region. And political right was found to have a negative direct effect on human development. This negative effect of democracy and political rights on human development among African countries is contrary to the works of Lake and Baum (2001) and Gerring et al. (2012). With respect to East and South-East Asian countries, democracy and political rights have consistently shown a negative impact on sustainable development and human development index. The study further revealed that press freedom has negative impact on the sustainable development of the two regions included in the sample.

6.5 Interactive Effect of Democracy and Globalization on Sustainable Development

It should be emphasized that because globalization creates both opportunities and threats, we created interaction terms to test whether democracy has the potential of dampening the negative impact of globalization on sustainable development. The study found that democracy reduces the negative impact of globalization on sustainable development only in sub-Saharan Africa. This is consistent with the work of Welander et al. (2015). This means that globalization is likely to facilitate the achievement of sustainable development in the study context if the level of democracy is high. It also means that democracy has the potential of modulating the negative impact of globalization on sustainable development agenda. As such, democracy matters for the extent to which globalization will exert influence on development outcomes in Africa. This is particularly true under high quality of democracy where access to and flow of information is very high. Hence, citizens are well informed about the problems engineered by the current wave of globalization. Among Asian

countries, however, our findings revealed that the current status of democracy in the region has no potential of reducing the negative impact of globalization on sustainable development, and this further contradicts the work of Welander et al. (2015).

6.6 Sustainability and Human Development

Genuine wealth per capita as a measure of sustainable development was regressed on human development index. This is because some scholars have argued that sustainable development should be seen as a means to an end and not an end in itself. The findings revealed that the current level of sustainable development has a negative impact on human development in both sub-Saharan Africa and the Asian countries. This means that the current development trajectory of the two regions is not on the sustainable path. These empirical findings do not support the emerging argument by Neumayer (2012), and Sen (2013). However, it should not be interpreted that these are contrary to the emerging literature, but rather, it is because the current development in the regions is not on the sustainable path, and that may be the possible reason why it shows a negative influence on human development index.

6.7 Other Control Variables

The study found that population growth rate, inequality, carbon dioxide emissions, foreign aid, and primary education have consistently shown a negative relationship with sustainability and human development in the two regions. Specifically, the negative effect of foreign aid has some implications. Contrary to what many commentators and analysts tend to converge, foreign aid appears to reduce sustainable development in the sub-Saharan Africa. This is consistent with the emerging view in the literature that foreign aid tends to have deteriorating impact on the political and economic institutions in Africa (Asongu & Nwachukwu, 2016a). Two implications should be flagged: First, aid is given to countries in the sub-region regardless of the poor governance environment. In this case, development assistance is likely to further domestic political interest to the detriment of the poor and the vulnerable groups. For example, empirical evidence suggests that development aid is

likely to be used to further local political ambition in Africa. Second, foreign aid may dampen domestic revenue mobilization capacity in the presence of a weak institutional environment. Third, the conditions attached to development aid may be detrimental to developing countries. Also, secondary education, GDP growth per capita, and life expectancy have a significantly positive relationship with sustainable development in the two regions. However, urbanization shown a negative and positive relationship with sustainable in sub-Saharan Africa and Asia respectively.

6.8 Contributions of the Study

The strength of this study is the fact that it takes the form of a comparative approach between sub-Saharan Africa and some selected countries in Asia. The study makes three key contributions: theory, research, and practice.

6.8.1 Theoretical Contribution

A number of theoretical avenues were relied on to be able to test the prior assumptions of the study. These are: the new institutional theory, the theory of political economy, and the theories of globalization. These theories take their roots from the classical growth theory, neoclassical growth theory, and the endogenous growth theory.

First, the new institutional theory is rooted in the idea of institutions or governance. Douglass North defined institution as the “humanly devised constraints that structure political, economic, and social interaction” or served as the “rules of the game in a society”. The new institutional theory has argued that rules and regulations set constraints on human behaviour. These humanly devised rules are meant to create order, reduce uncertainty, and provide an incentive platform that shapes the direction of economic exchange towards “growth, stagnation, or decline”. North places much emphasizes on rules, which are viewed as constraints on changing behavioral patterns and norms. From this line of thinking, institutions are also a “set of rules, compliance, procedures and moral and ethical behavioral norms designed to constrain the behavior of individuals in the interests of maximizing the wealth or utility of principles”. That said, new institutional theory assumes that a system of good governance and quality

of institutions are key cornerstone of development. From this theoretical underpinning, the priori assumption of this study is that if institutions or governance affects the behaviour of social actors, then, the 'right mix' of institutions should have a positive independent effect on the global effort towards achieving sustainable and inclusive development, especially in developing countries.

Indeed, the findings of the study revealed the importance of governance or institutions to sustainable development and contribute to the governance hypothesis or the new institutional theory. The study revealed that whilst the current governance in sub-Saharan Africa tends to have a negative impact on sustainability and human development, that of Asian countries shows a positive impact. Since most Asian countries have high human development outcomes compared to African countries, this study agrees with the institutional theory or the governance hypothesis that poverty and poor delivery of public services such as health and education is due to inefficient or bad governance practices. Thus, governance effectiveness, control of corruption, and regulatory quality have proven to be critical for the sustainable development of the countries included in the study. These aspect of institutions or governance are intentional choices or decisions that countries would have to make that would determine the extent to which human welfare will be improved and sustained. Another key contribution to new institutional theory or the theory of governance is the area of democracy and press freedom. The political economy perspective assumes that democracies are more likely to have a positive impact on development outcomes (including environmental quality) than autocracies. However, whilst our findings confirmed this theory in among countries in Africa because democratic index and political rights was found to positively affect sustainable development, such factors were found to be irrelevant to the Asian countries included in the study. But the key question is that why is most Asian countries, especially, those in the East and South-East Asia seem to be performing far better than most African countries as shown in human development index even though most of them are not democratic? The theoretical argument is that governance is different from democracy – a country can have strong governance without democracy (e.g., China). And with a strong governance, high economic growth can be achieved. Nevertheless, although high economic growth can be achieved with a strong governance

environment, the concern about how the fruit of economic growth is distributed among every segment of the population is more important. Therefore, issues of redistribution of the benefits of growth (equity), human rights and press freedom are important parts of governance system which democracy seeks to achieve. Consequently, in addition to governance effectiveness, regulatory quality, and control of corruption, issues regarding press freedom, human rights, transparency and accountability, tolerance of different views (either political, ethnic, or religious), participation, and rule of law are key dimensions of governance that can sustain the welfare of the current generation as well as that of future generation.

Second, globalization is a contested concept and its definition is subject to controversies. In this study, however, globalization is the “process of integrating nations, societies, people, and institutions in the economic, political and intellectual domains through means such as capital, production, exchange, and information owned and controlled unequally by various states, classes, groups, and individuals. Proponents of the theory of globalization have argued that globalization has increased economic growth, and ultimately improved the quality of life especially in developing countries. However, anti-globalists have argued that globalization is a principal driver of carbon dioxide emissions, high poverty rate and inequality in low income countries. This means that globalization creates both opportunities and threats. This study argues that given the complexity of global challenges, it is likely that quality institutions, policies, and regimes types are not the only determinant factors, however, there is a possibility that the influence of globalization and its concomitant challenges are linked to the concerns of sustainable development, climate change as well as inter-temporal human welfare outcomes. The study found support for anti-globalist argument that globalization is a threat and responsible for underdevelopment of many developing countries. Thus, the results consistently shown that economic and social dimensions negatively affect sustainable development of countries that are included in the study. Also, the argument by the proponents of globalization that it promotes growth and ensures global fight against global problems was supported. Thus, political globalization was found to be very relevant to sustainable human development.

Third, as noted earlier, the theory of sustainability assumes that the current use of resources should not harm their use by future generations. By following the works of Hamilton and Arrow et al. to derive the genuine wealth per capita as a proxy for sustainable development, this study makes a modest contribution to the theory of sustainability. Thus, the genuine wealth per capita reflects the deduction of the depletion of fixed capital, education expenditure, depletion of natural resources (energy, minerals, and forest resources) and pollution damages.

6.8.2 Contribution to Research

This study responds to the lacunae in the economic growth literature. Previous studies on the effect of institutions or governance have traditionally focused on how to achieve economic growth. These strands of literature have emphasized on the rule of law and property rights as preconditions to achieving economic development. They argue that as the economy grows, the poor will benefit, the unemployed will find jobs, and the world will become more equal, cities more livable, and the environment more sustainable. However, a close analysis of most developing countries, especially those in Africa, shows that although countries have recorded an increase in economic growth (GDP growth), but this growth has not translated into an improved social welfare. Scholars have argued for the need to move beyond GDP growth since it gives a limited picture about the conditions under which people live. Consequently, this study examined the effect of governance on sustainable development. Also, most growth literature tends to use rule of law and property rights index as a measure of institutions or governance. Therefore, there is deficiency in the mainstream literature in using only these aspects of governance variables since it does not give a broader picture of how governance affect broader development outcomes. However, governance also includes pluralism, accountability, political stability, the absence of violence, protection of human rights, and the government effectiveness. Consequently, the use of government effectiveness, control of corruption, and regulatory quality is an important contribution to the sustainable growth literature. More so, the study also contributes to literature by examining the impact of democracy, political rights, and press freedom on sustainable development. Thus, the relationship between democracy and the environmental quality is now an emerging

area and this study provides a blueprint in that regard. With respect to globalization, previous studies have traditionally focused on a single indicator such as trade openness as a measure of globalization. However, since globalization is a multidimensional concept, the uniqueness of this study is that globalization is measured from three dimensions – economic, social, and political globalizations, instead of focusing on a single indicator as pertained in the literature.

6.8.3 Contribution to Practice

The findings of this study hold several implications for international development policy in developing countries. The transition from the Millennium Development Goals (MDGs) to the Sustainable Development Goals (SDGs) showed that all regions of the world have improved in Human Development with exception of sub-Saharan Africa (SSA). The World Bank for instance reports that SSA has the largest number of extreme poor people – about 389 million – and account for half of the total number of the global figure. Second, the consequent of climate change and global warming are predicted to pose the greatest threat to developing and an emerging economy. In 2016, the World Bank reported that household air pollution from cooking with solid fuels were the major cause of welfare losses in sub-Saharan Africa and South-Asia. By policy implication, sustainability, climate change, global warming, and carbon dioxide emissions have become key themes on global agenda. Nevertheless, no decisive policy implication can be drawn without empirical evidence to support the post-2015 global development agenda, especially, in developing countries. The findings of the study provide impetus for both international and national policy makers to devise direct policies targeting both institutional and environmental reforms. This is expected to help redress institutional ineffectiveness, unsustainable environmental practices and low technological productivity that trap most developing countries in perpetual poverty and underdevelopment. Most discussions in these papers have seemingly ignored other national level and global factors that may push some countries to invest in environmental quality, economic growth, and social welfare programs in order to achieve sustainable development. The study's attempt to examine the national level factors such as governance/institutions

and regime type (democracy) as well as the impact of global forces (globalization) sheds more lights and contribute to the existing literature.

6.9 Study Limitation and Avenues for further Research Direction

It should be noted that there are many setbacks to cross-country analysis. Therefore, this study was beset with several challenges that somewhat impaired its timely completion. In the panel data studies, it is always recommended that a larger sample should be used to obtain more robust findings. In the present study, this was a herculean task especially in developing countries where data is not readily available. This further limited the scope of the study. Nevertheless, 56 countries with 962 observations and the use of superior statistical techniques such as the instrumental variable in Two Stage Least Squares and system-Generalized Method of Moments, the study provided a much credible and reliable results. More so, other notable hindrances such as funds and time presented key challenge. Thus, panel data or cross-country studies require that data from various sources are used. However, some data are not free but comes with a fee. This presented great financial burden.

Based on the limitation indicated above, there are several avenues for future researchers in the field of development policy. This study presents several research avenues to guide future researchers who are interested in the complex relationship between national level factors and the global forces such as globalization. This offers an opportunity for venturing into the area of sustainable human development literature. Thus, future studies can improve on the extant scholarship by conducting case studies that reflect country-level experience and realities. Since the present study is based on cross-sectional analysis, it is possible that critical country-level factors that are important for sustainable development may not be uncovered. This is important because country-level factors were controlled for in the regression models due to the statistical techniques that were used in the study. Therefore, if individual countries experienced shocks such as diseases outbreaks, internal conflict, financial crisis, and many others, such factors were not made to influence the model. Nevertheless, controlling for them does not in any way means that that they are not relevant in the countries' level of development. Hence, further studies that offer

insights from individual country-level nuances will make a modest contribution to this strand of the literature. Also, since factors such as governance or institutions are decisions or choices countries would have to make, such individual country-level studies will be a significant contribution to the existing literature. We further recommend that for studies to effectively investigate specific country issues, time series analysis such as an autoregressive distributive lag (ARDL) and cointegration methods can be employed in that regards.

Furthermore, there is paucity of studies investigating the sustainability aspect of development. Though part of it stems from unavailability of data, it can be observed that research efforts tend to focus on developed countries. Therefore, future empirical studies should focus on middle and low-income countries to shed more light on country-level realities. Additionally, future studies should replicate this study by using the index of genuine wealth per capita as a measure of sustainability at different geographical settings. This is particularly important because critics have argued that the use of perception data can offer misleading results. As such, future researchers should explore or examine specific country level factors with a more objective dataset.

Studies on the relationship between democracy and the environmental quality are emerging. It is important for future studies to focus on these areas of research. Though theories suggest that a democracy is more concerned about the environmental quality (because of broader participation) than autocracies, there is less empirical studies to support such wild assertion. More specifically, our findings suggest that democracy is irrelevant for the current sustainable development among the Asian countries included in the study. In sub-Saharan Africa, however, although the democracy has proven to have a positive impact on sustainability, the environmental conditions of most African countries tell otherwise. This means there are some mechanisms or conditions under which democracy may be good for the environments. Such studies should interrogate the linkages between globalization and democracy based on their convergent features to see whether a high quality of democracy modulates the negative impact of globalization on other development outcomes such as infant mortality, gender inequality, institutional quality, and a host of others. Future studies along such nuances will contribute to the debate on democracy-

environment nexus. After all, there are severe environmental problems in the most democratic nations. Additionally, future studies can improve on the extant scholarship by investigating how globalization affects sustainable development based on case studies reflecting country-level realities. More so, the present study examined the effect of globalization from economic, political, and social standpoints. However, it should be noted that environment forms an important part of the current wave of globalization since challenges such as global warming, emission of greenhouse gases, and climate change are transboundary and threaten human survival across the globe. As consequence, future studies should incorporate the environmental dimension of globalization in the model. In that regard, the Maastricht globalization index developed by Figge et al. comes in handy.

Another area within the sustainability literature that future studies can look at is to employ a qualitative or a mixed-method approach. One limitation of this study (although not fatal) is the inability to collect a qualitative data where interviews would have been conducted with key government officials and international organizations and the regional bodies such as the United Nations, the African Union and ASEAN secretariat and others. Interviews with these officials would have enhanced our understanding on how countries are performing with respect to efforts aimed at achieving sustainable development goals. Therefore, it is recommended that future studies should employ either qualitative method or a mixed-method approach to investigate these nuances.

6.10 Conclusion

The study examined the effect of governance, democracy, and globalization on sustainable human development. Overall, the following results are established after controlling for confounding factors. *First*, governance, which is measured by governance effectiveness, control of corruption, and the regulatory quality showed a negative relationship with sustainable development in sub-Saharan Africa. *Second*, governance (governance effectiveness, control of corruption, and regulatory quality) has a positive impact on sustainable development of Asian countries. *Third*, economic and social globalizations exert a negative impact on sustainable development in both

regions. *Fourth*, political globalization has a positive effect on sustainable development of all countries included in the study. *Fifth*, social globalization has a positive effect on human development among African countries. *Sixth*, economic and political globalizations showed a negative impact on human development in African. *Seventh*, the economic, social, and political dimensions of globalization have consistently shown a negative impact on human development among Asian countries. *Eighth*, whilst democracy index and political rights have a positive effect on sustainability and human development in sub-Saharan Africa, they were found to be negative for Asian countries. *Ninth*, press freedom showed a negative effect on development outcomes in the two regions. *Tenth*, genuine wealth per capita as a measure of sustainability showed a negative impact on human development, suggesting that the current development of the two regions is not on the sustainable path. The following table provides the summary of the findings of the study based on the prior hypotheses or assumptions.

Table 6.1 Conclusion based on the Hypotheses Testing

Hypotheses	Conclusion
H1: There is significant and direct positive relationship between governance and sustainable development (SD).	Confirmed for East and South-East Asia. Not confirmed for sub-Saharan Africa.
H2: There is significant and negative relationship between globalization (economic, social, political, total globalization) and sustainable development (SD).	Mixed findings
H3: There is significant and positive relationship between globalization and human development.	Partially confirmed for sub-Sahara Africa. Not confirmed for Asian countries.
H4: There is significant and positive relationship between democracy and sustainability, and human development	Confirmed for sub-Saharan Africa. Not confirmed for Asian countries.
H5: There is likely to be a positive relationship	Confirmed for sub-Saharan

Hypotheses	Conclusion
between globalization and sustainable development if a high level of democracy is present.	Africa. Not confirmed for Asian countries.
H6: There is significant and positive relationship between sustainable development and human development.	Not confirmed for the two regions.

6.11 Policy Recommendations

From the governance perspective, some urgent policy recommendations are offered towards the achievement of sustainable development agenda. For countries in sub-Saharan Africa to make progress on the path of sustainable development, African leaders should make strong commitment to good governance including the consolidation of peace, stability, and security. Specifically, political commitment should aim at improving government effectiveness, administrative reforms to control corruption, and strengthening regulatory quality. These indicators have consistently shown a negative influence on sustainable human development. With respect to government effectiveness, governments in sub-Saharan Africa should commit more resources towards ensuring quality delivery of public services through improvement in civil service without political interference and manipulations. This improvement will ensure that public bureaucracy has the capacity to formulate and implement sound policies that aimed at reducing poverty and increase human development opportunities.

Though donor community and international financial institutions such as the World Bank and the IMF have consistently argued that developing countries should rely on neoliberal market policies for efficient resource allocation, like their Asian counterparts, this study strongly recommends that state-led approach is important for sustained economic growth and development in sub-Saharan Africa. However, state-led approach should not be understood as the one that is repressive and restrict press freedom as well as peoples' participation in the political process. But state-led approach in this study is understood in the context of the ability of the government to

exert influence over policy space rather than being controlled and dictated to by external actors such as the World Bank and the IMF. Under the neoliberal market forces, most African countries have lost control over their policy space but continuously dance to the tune of donor partners. Hence, the states in Africa somewhat lack the capacity to initiate home-grown policies that internalize domestic norms and values but rather policies that reflect western style of governance. Like Asian countries, however, sub-Saharan African countries can strengthen their governance architecture through the determination of what works best for Africa and African people rather than copying blindly from western countries. Although policy learning is a standard practice for the development of poor countries, such policies should be internalized into African norms and values rather than trying to superimpose them on African people, which may result in resistance and eventual policy failure.

The study further recommends the urgent need for retooling of public bureaucracy in Africa. Thus, reforms in the form of the promotion public bureaucracy with merit and fairness. Thus, the current practice where politicians manipulate the civil service leading to favoritism and the patrimonial system should be discouraged. On the enigma of corruption, the study recommends strict implementation of anticorruption laws and the automation of government services to reduce the discretion of frontline bureaucrats and to also reduce face-face contact between government officials and citizens. The automation process is likely to reduce incidence of bribery and corruption. For regulatory quality, leaders should strengthen the regulatory environment, especially environmental laws to ensure that companies and businesses incorporates environmental sustainability practices into their business models. With respect to Asian countries, it is important for countries in Asia to continue with their strong governance practices, however, such practices should include strict implementation of environmental laws and standards to induce compliance from individuals and business corporations. As shown in figure 4.4 of chapter 4, most Asian countries have somewhat weak regulatory environment in the sense that the regulatory quality index is almost sliding to negative.

Furthermore, it is important for countries in the two regions to ensure broader participation and access to information. The findings of the study suggest that press

freedom has a negative impact on the sustainable development in the two regions. Though democracy is not the ultimate solution to global problems, it is likely that effective flow of information, control of corruption, participation in the political process, press freedom, and the environmental quality can be guaranteed under a democracy. The study recommends that although Asian countries have a strong governance environment compared to their counterparts in Africa, the need to ensure broader participation and access to information by a majority of citizens is becoming more imperative in this era of their development trajectory. Asian countries need to ensure improvement in access to information and allow greater participation in the governance process. The fact that most African countries are poor and are not able to guarantee economic prosperity and human development despite their democratic credentials does not mean that democracy, as a regime type, is unable to ensure high economic growth, reduce poverty and inequality, and protect environmental quality. For development in Asia to be sustained, power must ultimately rest in the people. It is when majority of the people are allowed to participate in the governance process that accountability can be deepened, resources may be equitably distributed, and the yawning inequality gap between the rich and the poor can be bridged.

Indeed, globalization creates both threats and opportunities. Generally, the economic and social globalization were found to have a negative impact on the sustainable development of countries that are included in the study. This is clearly in line with the recent outbreak of the deadly virus (covid-19) in China and its subsequent spread into other countries is due to social globalization, which measure captures the movement of people across national borders, tourism activities, telecommunication and internet services and others. Though movement of people and tourism activities is important for the development of countries and cannot be halted by any means possible, the study recommends that countries in the sub-Saharan Africa and Asia should become flexible in order to take advantage of the numerous opportunities the current wave of globalization offer and overcome the threats. It requires institutional renewal and strict enforcement of environmental standards and practices. Specifically, countries should reexamine the cross-border movement of people, cultures, and cybersecurity issues, which serve as conduits for social globalization. Although tourism, technology and internet connectivity have proven to

be powerful tools for poverty reduction and economic development, however, the strict enforcement of environmental laws, practices, and standards should not be compromised.

Furthermore, political globalization which relates to the formation of regional trade agreements or participation in global level treaties particularly the participation in UN security Council Meetings, is found to be relevant to the post-2015 sustainable development agenda of the two regions. Hence, countries in the study should strengthen ties with the regional and international political bodies such as the African Union, the ASEAN, United Nations, and other regional bodies in a manner that will bolster global fight against outbreaks of diseases, epidemics, prevention of human rights abuses, and the fight against environmental threats like climate change and global warming, which are critical ingredients for sustainable human development. However, the political alliances with international bodies should be built in such a way that the policy space of individual countries will be respected. This is critical for effective enforcement of domestic laws, practices, and standards under the current wave of globalization.

Moreover, countries included in the study should reexamine the kind of trade negotiations and alliances to which they are signatories to. This is important in the sense that the findings of this study showed that economic globalization – whose measurement focuses on integration regarding actual flows (trade, foreign direct investments, and portfolio investments) and restrictions on trade and capital (such as import barriers, taxes on international trade, and capital accounts restrictions) with other countries – was found to consistently have a negative impact on sustainable development. This means that the current integration into the global economic system such as the World Trade Organization may not be favoring the two regions. This is important because the decision by the citizens of United Kingdom (UK) to leave European Union (EU) is a testament that economic integration may not be favorable to some countries after all. Hence, African and Asian countries should reexamine the kind of trade agreements, alliances, and partnerships they have with other countries, regions, and the entire world if they are determined to achieve the targets set under the sustainable development goals by 2030.

What more, both African and Asian countries need to take urgent steps to control the rate at which the population is fast growing. The findings of the study showed that population growth has a negative impact on the success of sustainable development agenda. The 2015 UN Population projections showed that by 2100 the total population in Africa is expected to hit four (4) billion. Clearly, the population size in Africa is becoming a burden than an asset, especially, when it is apparent that there is no commensurate economic growth to accommodate the growing surge in population. Consequently, it makes it more difficult to reduce poverty and inequality, expand health and education facilities, and combat hunger and malnutrition. Therefore, policies that are aimed at controlling population growth should be pursued vigorously. Additionally, public policies should also be tailored toward ensuring massive investment in renewable energy sources as a requirement to reduce high consumption of non-renewable sources and consequently reduce environmental pollution, global warming, and mitigate the effect of climate change.

Finally, there is no doubt that the novel coronavirus pandemic that causes COVID-19 has presented novel global and domestic socio-economic and health challenges, which analysts have argued that it is likely to hamper efforts aimed at achieving United Nations SDGs by 2030. In fact, the pandemic has disrupted to varying degrees the regular functioning of state institutions and affected key government functions and processes that are supposed to ensure the implementation of SDGs. In that regard, the study recommends that policy makers need to design and implement resilient and inclusive public health infrastructure and effective institutions that will be able to handle crisis in post-COVID-19 era. The governments especially in Asia and sub-Saharan Africa and their people should reflect on the kind of governance relationships that need to be in place to ensure the resilience, sustainability and wellbeing of all people in society.

BIBLIOGRAPHY

- Abosedo, A. J., & Onakoya, A. B. (2013). Entrepreneurship, economic development and inclusive growth. *International Journal of Social Sciences Entrepreneurship*, 1(3), 375-387.
- Acemoglu. (2002). Technical change, inequality, and the labor market. *Journal of Economic Literature*, 40(1), 7-72. doi:10.1257/0022051026976
- Acemoglu, Johnson, S., Robinson, J., & Thaicharoen, Y. (2003). Institutional causes, macroeconomic symptoms: Volatility, crises and growth. *Journal of Monetary Economics*, 50(1), 49-123. doi:10.1016/S0304-3932(02)00208-8
- Acemoglu, Johnson, S., & Robinson, J. A. (2001). The colonial origins of comparative development: An empirical investigation. *American Economic Review*, 91(5), 1369-1401. doi: 10.1257/aer.91.5.1369
- Acemoglu, Johnson, S., & Robinson, J. A. (2002). Reversal of fortune: Geography and institutions in the making of the modern world income distribution. *The Quarterly Journal of Economics*, 117(4), 1231-1294. doi:10.1162/003355302320935025
- Acemoglu, Johnson, S., Robinson, J. A., & Yared, P. (2009). Reevaluating the modernization hypothesis. *Journal of Monetary Economics*, 56(8), 1043-1058. doi:10.1016/j.jmoneco.2009.10.002
- Acemoglu, Naidu, S., Restrepo, P., & Robinson, J. A. (2019). Democracy does cause growth. *Journal of Political Economy*, 127(1), 47-100. doi:10.1086/700936
- Acemoglu, & Robinson, J. A. (2008). The persistence and change of institutions in the Americas. *Southern Economic Journal*, 75(2), 282.
- Acemoglu, D., & Robinson, J. A. (2006). De facto political power and institutional persistence. *American Economic Review*, 96(2), 325-330. doi: 10.1257/000282806777212549
- Adams, S., & Klobodu, E. K. M. (2019). Urbanization, economic structure, political regime, and income inequality. *Social Indicators Research*, 142(3), 971-995. doi:10.1007/s11205-018-1959-3
- Adelman, I., & Yeldan, E. (2000). Is this the end of economic development? *Structural Change and Economic Dynamics*, 11(1-2), 95-109. doi:10.1016/SO954-

349X(99)00019-3

- Ahmed, S., Creanga, A. A., Gillespie, D. G., & Tsui, A. (2010). Economic status, education and empowerment: implications for maternal health service utilization in developing countries. *PloS One*, 5(6). doi:10.1371/journal.pone.0011190
- Aidt, T. S. (2011). Corruption and sustainable development. In T. S. Susan Rose-Ackerman (Ed.), *International Handbook on the Economics of Corruption* (Vol. 2, pp. 3-51). United Kingdom: Edward Elgar
- Akpan, U. S., Green, O. A., Bhattacharyya, S., & Isihak, S. (2015). Effect of Technology Change on CO2 Emissions in Japan's Industrial Sectors in the Period 1995–2005: An Input–Output Structural Decomposition Analysis. *Environmental and Resource Economics* 61(2), 165-189.
- Alam, M. M., Murad, M. W., Noman, A. H. M., & Ozturk, I. (2016). Relationships among carbon emissions, economic growth, energy consumption and population growth: Testing Environmental Kuznets Curve hypothesis for Brazil, China, India and Indonesia. *Ecological Indicators*, 70, 466-479. doi:10.1016/j.ecolind.2016.06.043
- Alesina, A., Devleeschauwer, A., Easterly, W., Kurlat, S., & Wacziarg, R. (2003). Fractionalization. *Journal of Economic Growth*, 8(2), 155-194. doi:10.1023/A:1024471506938
- Alesina, A., & Rodrik, D. (1994). Distributive politics and economic growth. *The Quarterly Journal of Economics*, 109(2), 465-490. doi:10.2307/2118470
- Ali, I., & Son, H. H. (2007). Measuring Inclusive Growth *Asian Development Review*(Vol. 24 (1),), pp. 11-31.
- Ali, I., & Zhuang, J. (2007). *Inclusive growth toward a prosperous Asia: Policy implications*. Retrieved from <https://www.econstor.eu/bitstream/10419/109299/1/ewp-097.pdf>
- Alkire, S., & Foster, J. E. (2010). *Designing the inequality-adjusted human development index* (Working Paper No. 37). *Oxford Poverty & Human Development Initiative (OPHI)*. doi:10.2139/ssrn.1815248
- Allen, D. W., & Anzalone, S. (1981). Basic needs: New approach to development—But new approach to education? *International Review of Education*, 27(3), 209-226.

doi:10.1007/BF00598635

Alvaredo, F., Chancel, L., Piketty, T., Saez, E., & Zucman, G. (2018). *World Inequality Report 2018*. Cambridge: The Balkanap Press.

Anderlini, L., & Felli, L. (2006). Transaction costs and the robustness of the Coase theorem. *The Economic Journal*, 116(508), 223-245. doi:10.1111/j.1468-0297.2006.01054.x

Angeles, L. (2011). Institutions, property rights, and economic development in historical perspective. *Kyklos*, 64(2), 157-177. doi:10.1111/j.1467-6435.2011.00500.x

Anielski, M. (2004). Genuine wealth and the good life. *Journal for Positive Futures*. Retrieved from http://www.anielski.com/old_site/Documents/Anielski%20Good%20Life.pdf

Antonio, A. (2001). The role of interracial interaction in the development of leadership skills and cultural knowledge and understanding. *Research in Higher Education*, 42(5), 593-617. doi:10.1023/A:1011054427581

Apergis, N. (2017). Democracy and market crashes: Evidence from a worldwide panel of countries. *Finance Research Letters*, 22, 244-248. doi:10.1016/j.frl.2016.12.014

Arellano, M., & Bond, S. (1991). Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. *The Review of Economic Studies*, 58(2), 277-297. doi:10.2307/2297968

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

Aron, J. (2000). Growth and institutions: a review of the evidence. *The World Bank Research Observer*, 15(1), 99-135. doi:10.1093/wbro/15.1.99

Arrow, K. J., Dasgupta, P., Goulder, L. H., Mumford, K. J., & Oleson, K. (2012). Sustainability and the measurement of wealth. 17(3), 317-353. doi:10.1017/S1355770X12000137

Arrow, K. J., Dasgupta, P., Goulder, L. H., Mumford, K. J., & Oleson, K. (2013). Sustainability and the measurement of wealth: further reflections. *Environment and Development Economics*, 18(4), 504-516.

- Artadi, E. V., & Sala-i-Martin, X. (2003). *The economic tragedy of the XXth century: Growth in Africa* (0898-2937). Retrieved from nber.org/papers/w9865.pdf
- Asiedu, E. (2014). Does foreign aid in education promote economic growth? Evidence from Sub-Saharan Africa. *Journal of African Development*, 16(1), 37-59. doi:10.5325/jafrideve.16.1.0037
- Asongu, & Nwachukwu. (2016a). Foreign aid and governance in Africa. *International Review of Applied Economics*, 30(1), 69-88. doi:10.1080/02692171.2015.1074164
- Asongu, & Nwachukwu. (2016b). The mobile phone in the diffusion of knowledge for institutional quality in sub-Saharan Africa. *World Development*, 86, 133-147. doi:10.1016/j.worlddev.2016.05.012
- Asongu, S. A., & Le Roux, S. (2017). Enhancing ICT for inclusive human development in Sub-Saharan Africa. *Journal Technological Forecasting and Social Change*, 118, 44-54. doi:10.1016/j.techfore.2017.01.026
- Ayee, J. R. (2013). The developmental state experiment in Africa: The experiences of Ghana and South Africa. *The Round Table*, 102(3), 259-280. doi:10.1080/00358533.2013.794577
- Ayelazuno, J. (2014). Oil wealth and the well-being of the subaltern classes in Sub-Saharan Africa: A critical analysis of the resource curse in Ghana. *Resources Policy*, 40, 66-73. doi:10.1016/j.resourpol.2013.06.009
- Babbie, E. (2015). *The practice of social research* (13th ed.). Belmont, CA: Wadsworth.
- Bajo-Rubio, O. (2000). A further generalization of the Solow growth model: the role of the public sector. *Economics Letters*, 68(1), 79-84. doi:10.1016/S0165-1765(00)00220-2
- Bakari, M. E.-K. (2013). Globalization and Sustainable Development: False Twins? *New Global Studies*, 7(3), 23-56. doi:10.1515/ngs-2013-021
- Balakrishnan, R., Steinberg, C., & Syed, M. M. H. (2013). *The elusive quest for inclusive growth: Growth, poverty, and inequality in Asia*. Washington, D.C: International Monetary Fund.
- Baldwin, R., Braconier, H., & Forslid, R. (2005). Multinationals, endogenous growth, and technological spillovers: theory and evidence. *Review of International*

- Economics*, 13(5), 945-963. doi:10.1111/j.1467-9396.2005.00546.x
- Barro, R. J. (1991). Economic growth in a cross section of countries. *The Quarterly Journal of Economics*, 106(2), 407-443. doi:10.2307/2937943
- Barro, R. J., Mankiw, N. G., & Sala-i-Martin, X. (1992). *Capital mobility in neoclassical models of growth*. Retrieved from https://scholar.harvard.edu/files/mankiw/files/capital_mobility.pdf
- Bates, R. H., & Block, S. A. (2013). Revisiting African agriculture: Institutional change and productivity growth. *The Journal of Politics* 75(2), 372-384.
- Bates, W. (2009). Gross national happiness. *Asian-Pacific Economic Literature*, 23(2), 1-16. doi:10.1111/j.1467-8411.2009.01235.x
- Baum, M. A., & Lake, D. A. (2003). The political economy of growth: democracy and human capital. *American Journal of Political Science*, 47(2), 333-347. doi:10.1111/1540-5907.00023
- Becker, G. S., & Tomes, N. (1986). Human capital and the rise and fall of families. *Journal of Labor Economics*, 4(3, Part 2), S1-S39. doi:10.1086/298118
- Beegle, K., Galasso, E., & Goldberg, J. (2015). *Direct and indirect effects of Malawi's public works program on food security*: The World Bank.
- Beny, L. N., & Cook, L. (2009). Metals or management? Explaining Africa's recent economic growth performance. *American Economic Review*, 99(2), 268-274. doi:10.1257/aer.99.2.268
- Berger, G., Flynn, A., Hines, F., & Johns, R. (2001). Ecological modernization as a basis for environmental policy: Current environmental discourse and policy and the implications on environmental supply chain management. *Innovation: The European Journal of Social Science Research*, 14(1), 55-72. doi:10.1080/13511610125074
- Bergh, A., & Nilsson, T. (2010). Do liberalization and globalization increase income inequality? *European Journal of Political Economy*, 26(4), 488-505. doi:10.1016/j.ejpoleco.2010.03.002
- Bergh, A., & Nilsson, T. (2010). Good for living? On the relationship between globalization and life expectancy. *World Development*, 38(9), 1191-1203. doi:10.1016/j.worlddev.2010.02.020

- Bernauer, T., & Koubi, V. (2009). Effects of political institutions on air quality. *Ecological Economics*, 68(5), 1355-1365. doi:10.1016/j.ecolecon.2008.09.003
- Bhagwati, J. (1999). Regionalism and multilateralism: An overview. Trading blocs: Alternative approaches to analyzing preferential trade agreements. In P. K. Jagdish N. Bhagwati, Arvind Panagariya (Ed.), *Trading blocks: Alternative approaches to analyzing preferential trade agreements* (pp. 3-32). Cambridge: MIT Press.
- Bhagwati, J., & Panagariya, A. (1996). The theory of preferential trade agreements: historical evolution and current trends. *The American Economic Review*, 86(2), 82-87. Retrieved from <https://www.jstor.org/stable/2118101>
- Bleys, B. (2012). Beyond GDP: Classifying alternative measures for progress. *Social Indicators Research*, 109(3), 355-376. doi:10.1007/s11205-011-9906-6
- Block, S. (2001). Does Africa grow differently? *Journal of Development Economics*, 65(2), 443-467. doi:10.1016/S0304-3878(01)00144-4
- Bloom, C. (2010). *Violent London: 2000 years of riots, rebels and revolts*. London, UK: Springer.
- Blundell, R., & Bond, S. (1998). Initial conditions and moment restrictions in dynamic panel data models. *Journal of Econometrics*, 87(1), 115-143. doi:10.1016/S0304-4076(98)00009-8
- Boettke, P., & Fink, A. (2011). Institutions first. *Journal of Institutional Economics*, 7(4), 499-504. doi:10.1017/S1744137411000063
- Boix, C., & Stokes, S. (2003). Endogenous democratization. *World Politics*, 55(4), 517-549. doi:10.1353/wp.2003.0019
- Boogaard, H., van Erp, A. M., Walker, K. D., & Shaikh, R. (2017). Accountability studies on air pollution and health: the HEI experience. *Current Environmental Health Report*, 4(4), 514-522. doi:10.1007/s40572-017-0161-0
- Bos, K., & Gupta, J. (2016). Inclusive development, oil extraction and climate change: a multilevel analysis of Kenya. *International Journal of Sustainable Development & World Ecology*, 23(6), 482-492. doi:10.1080/13504509.2016.1162217
- Brundtland, G. H. (1987). *Presentation of the Report of the World Commission on Environment and Development to the Commission of the European*

- Communities, the EC and EFTA Countries... 5 May 1987, Brussels: World Commission on Environment and Development.*
- Bryman, A. (1984). The debate about quantitative and qualitative research: a question of method or epistemology? *British Journal of Sociology*, 75-92.
doi:10.2307/590553
- Byrne, J., & Glover, L. (2002). A common future or towards a future commons: Globalization and sustainable development since UNCED. *International Review for Environmental Strategies*, 3(1), 5-25.
- Byrne, J., Glover, L., & Alrøe, H. F. (2006). Globalization and sustainable development: a political ecology strategy to realize ecological justice. In N. Halberg (Ed.), *Global Development of Organic Agriculture*. (pp. 49-74). United Kingdom: CABI.
- Campos, N. F., & Nugent, J. B. (1998). Institutions and growth: Can human capital be a link? *Cepal Review*. Retrieved from repositorio.cepal.org/handle/11362/10622
- Carlsson, B., Eliasson, G., & innovation. (2003). Industrial dynamics and endogenous growth. *Industry and innovation* 10(4), 435-455.
doi:10.1080/1366271032000163676
- Carree, M. A., & Thurik, A. R. (2010). The impact of entrepreneurship on economic growth. In *Handbook of entrepreneurship research* (pp. 557-594): Springer.
- Caselli, M. (2012). *Globalization indices based on states: a comparison and some criticisms*. In *Trying to Measure Globalization* (pp. 97-120). Dordrecht: Springer.
- Cesaratto, S. (1999). Savings and economic growth in neoclassical theory. *Cambridge Journal of Economics*, 771-793. Retrieved from www.jstor.org/stable/23600444
- Charron, N., Dijkstra, L., & Lapuente, V. (2015). Mapping the regional divide in Europe: A measure for assessing quality of government in 206 European regions. *Social Indicators Research*, 122(2), 315-346. doi:10.1007/s11205-014-0815-3.
- Cheung. (2013). Public governance reform in Hong Kong: rebuilding trust and governability. *International Journal of Public Sector Management*.
doi:10.1108/IJPSM-05-2013-0070

- Cheung, C., Baum, T., & Wong, A. (2012). Relocating empowerment as a management concept for Asia. *Journal of Business Research*, 65(1), 36-41.
doi:10.1177/0020852312438843
- Cho, S.-Y. (2013). Integrating equality: Globalization, women's rights, and human trafficking. *International Studies Quarterly*, 57(4), 683-697.
doi:10.1111/isqu.12056
- Choudhary, K. (2007). Globalisation, governance reforms and development: An introduction. In K. Choudhary (Ed.), (pp. 1). India: SAGE Publications India.
- Clark, C., Crombie, R., Head, J., Van Kamp, I., Van Kempen, E., & Stansfeld, S. A. y. (2012). Does traffic-related air pollution explain associations of aircraft and road traffic noise exposure on children's health and cognition? A secondary analysis of the United Kingdom sample from the RANCH project. *American Journal of Epidemiology*, 176(4), 327-337. doi:10.1093/aje/kws012
- Coase, R. H. (1960). The problem of social cost. In *Classic papers in natural resource economics* (pp. 87-137): Springer.
- Cobb, J., & Daly, H. (1989). For the common good, redirecting the economy toward community, the environment and a sustainable future. In: Boston: Beacon Press.
- Collier, P. (2007). Why the poorest countries are failing and what can be done about it. *Wider Angle*, 1-3. Retrieved from
http://www.ired.org/modules/infodoc/files/english/wider_angle__p._6_et_7___a_ngle-2007-2-online_1_.pdf
- Cornia, G. A. (2017). Income Inequality Trends in sub-Saharan Africa: Divergence, determinants and consequences: Inequality Levels, Trends and Determinants in sub-Saharan Africa: An Overview of main changes since the early 1990s. Retrieved from http://www.undp.org/content/dam/rba/docs/Reports/undp-rba_Income%20Inequality%20in%20SSA_Chapter%202.pdf
- Costantini, V., & Martini, C. (2006). A modified environmental Kuznets curve for sustainable development assessment using panel data. *International Journal of Global Environmental Issues*. doi:10.2139/ssrn.951457
- Costantini, V., & Monni, S. (2008). Environment, human development and economic growth. *Ecological Economics*, 64(4), 867-880.

doi:10.1016/j.ecolecon.2007.05.011

Costanza, R., De Groot, R., Sutton, P., Van der Ploeg, S., Anderson, S. J., Kubiszewski, I., . . . Turner, R. K. (2014). Changes in the global value of ecosystem services. *Global Environmental Change*, 26, 152-158.

doi:10.1016/j.gloenvcha.2014.04.002

Costanza, R., Fisher, B., Ali, S., Beer, C., Bond, L., Boumans, R., . . . Farley, J. (2007). Quality of life: An approach integrating opportunities, human needs, and subjective well-being. *Ecological Economics*, 61(2-3), 267-276.

doi:10.1016/j.ecolecon.2006.02.023

Costanza, R., Hart, M., Talberth, J., & Posner, S. (2009). Beyond GDP: The need for new measures of progress. *The pardee papers*. Retrieved from https://pdxscholar.library.pdx.edu/cgi/viewcontent.cgi?article=1010&context=iss_pub

Creswell, J. W. (2009). *Mapping the field of mixed methods research*. Los Angeles, CA: Sage

Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process*: Sage.

Currie, C., Zanotti, C., Morgan, A., Currie, D., De Looze, M., Roberts, C., . . . Barnekow, V. (2009). Social determinants of health and well-being among young people. *Health Behaviour in School-aged Children (HBSC) study, 2010*, 271.

Currie, J., Hanushek, E. A., Kahn, E. M., Neidell, M., & Rivkin, S. (2009). Does pollution increase school absences? *The Review of Economics Statistics*, 91(4), 682-694. doi:10.1162/rest.91.4.682

Cypher, & Dietz, L. (2009). *The process of economic development*. London, UK: Routledge.

Cypher, J. (2014). *The process of economic development*. Oxfordshire, UK: Routledge.

Dalgaard, C. J., Hansen, H., & Tarp. (2004). On the empirics of foreign aid and growth. *The Economic Journal*, 114(496), F191-F216. doi:10.1111/j.1468-0297.2004.00219.x

Daly, L., & Posner, S. (2011). *Beyond GDP: New measures for a new economy*.

Retrieved from

https://www.demos.org/sites/default/files/publications/BeyondGDP_0.pdf

Dasgupta, P., & Mäler, K.-G. (2000). Net national product, wealth, and social well-being. *Environment Development Economics*, 5(1), 69-93.

doi:10.1017/S1355770X00000061

David, P. A. (1994). Why are institutions the 'carriers of history'? Path dependence and the evolution of conventions, organizations and institutions. *Structural Change Economic Dynamics*, 5(2), 205-220. doi:10.1016/0954-349X(94)90002-7

Davis. (2017). Good governance as a foundation for sustainable human development in sub-Saharan Africa. *Third World Quarterly*, 38(3), 636-654.

doi:10.1080/01436597.2016.1191340

Davis, C. L. (2009). Overlapping institutions in trade policy. *Perspectives on Politics*, 7(1), 25-31. doi:10.1017/S1537592709090045

De Haan, J. (2007). Political institutions and economic growth reconsidered. *Public Choice*, 131(3-4), 281-292. doi:10.1007/s11127-007-9172-y

Deacon, R. (2003). Dictatorship, democracy, and the provision of public goods.

Demsetz, H. (1974). Toward a theory of property rights. In H. emsetz (Ed.), *Classic papers in natural resource economics* (pp. 163-177). London: Palgrave Macmillan.

Denscombe, M. (2002). *Ground rules for good research*: Open University Press.

Denzin, N. K., & Lincoln, Y. S. (2008). Introduction: The discipline and practice of qualitative research.

Devarajan, S., & Wealth. (2013). Africa's statistical tragedy. *Review of Income*, 59(S1), S9-S15. doi:10.1111/roiw.12013

Dietz, S., & Neumayer, E. (2007). Weak and strong sustainability in the SEEA:

Concepts and measurement. *Ecological Economics*, 61(4), 617-626.

doi:10.1016/j.ecolecon.2006.09.007

Dincer, I. (2000). Renewable energy and sustainable development: A crucial review.

Renewable Sustainable Energy Reviews, 4(2), 157-175. doi:10.1016/S1364-0321(99)00011-8

Dincer, I., & Rosen, M. A. (2011). Sustainability aspects of hydrogen and fuel cell

- systems. *Energy for Sustainable Development*, 15(2), 137-146.
doi:10.1016/j.esd.2011.03.006
- Dinda, S. (2004). Environmental Kuznets curve hypothesis: a survey. *Ecological Economics*, 49(4), 431-455. doi:10.1016/j.ecolecon.2004.02.011
- Dondeynaz, C., Moreno, C. C., & Lorente. (2012). Analysing inter-relationships among water, governance, human development variables in developing countries: WatSan4Dev database coherency analysis. *Hydrology Earth System Sciences Discussions*, 9(1), 485-539.
- Doornbos, M. (2001). 'Good governance': The rise and decline of a policy metaphor? *Journal of Development Studies*, 37(6), 93-108. doi:10.1080/713601084
- Dreher, A. (2006). Does globalization affect growth? Evidence from a new index of globalization. *Applied Economics*, 38(10), 1091-1110.
doi:10.1080/00036840500392078
- Dreher, A., & Gaston, N. (2008). Has globalization increased inequality? *Review of International Economics*, 16(3), 516-536. doi:10.1111/j.1467-9396.2008.00743.x
- Dreher, A., Gaston, N., & Martens, P. (2008). Measuring globalisation. Gauging its Consequences Retrieved from <https://www.research-collection.ethz.ch/handle/20.500.11850/84969>
- Easterlin, R. A. (2015). Happiness and economic growth—the evidence. In *Global handbook of quality of life* (pp. 283-299): Springer.
- Easterlin, R. A., Morgan, R., Switek, M., & Wang, F. (2012). China's life satisfaction, 1990–2010. . *Proceedings of the National Academy of Sciences*, 109(25), 9775-9780. doi:10.1073/pnas.1205672109
- Easterly, W. (2001). The lost decades: developing countries' stagnation in spite of policy reform 1980–1998. *Journal of Economic Growth*, 6(2), 135-157.
doi:10.1023/A:1011378507540
- Easterly, W., Levine, R., & Roodman, D. (2004). Aid, policies, and growth: comment. *American Economic Review*, 94(3), 774-780. doi:10.1257/0002828041464560
- Eberhardt, M. (2019). Democracy does cause growth: Comment. *CEPR Discussion Paper No. DP13659*. Retrieved from

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3372858

- Edigheji, O. (2010). *Constructing a democratic developmental state in South Africa: potentials and challenges*. Cape Town, South Africa: HSRC Press.
- Eichengreen, B., & Leblang, D. (2008). Democracy and globalization. *Economics & Politics*, 20(3), 289-334. doi:10.1111/j.1468-0343.2007.00329.x
- Eicher, T. S., & Leukert, A. (2009). Institutions and economic performance: Endogeneity and parameter heterogeneity. *Journal of Money, Credit and Banking*, 41(1), 197-219. doi:10.1111/j.1538-4616.2008.00193.x
- Eltis, W. (2000). The classical theory of economic growth. In *The Ellassical Theory of Economic Growth* (pp. 310-338). London: Palgarave Macmillan.
- Fairhead, J., Leach, M., & Scoones, I. (2012). Green grabbing: a new appropriation of nature? *Journal of peasant studies*, 39(2), 237-261. doi:10.1080/03066150.2012.671770
- Farag, M., Nandakumar, A., Wallack, S., Hodgkin, D., Gaumer, G., & Erbil, C. (2013). Health expenditures, health outcomes and the role of good governance. *International Journal of Health Care Finance Economics*, 13(1), 33-52. doi:10.1007/s10754-012-9120-3
- Farazmand, H., Moradi, M., & Management. (2015). Determinants of Money Demand: Evidence from MENA. *European Journal of Business*, 7(22), 21-29.
- Fares, J., Gauri, V., Jimenez, E. Y., Lundberg, M. K., McKenzie, D., Murthi, M., . . . Sinha, N. (2007). World development report 2007: Development and the next generation. Retrieved from <https://openknowledge.worldbank.org/bitstream/handle/10986/5989/WDR%202007%20-%20English.pdf?sequence=4&isAllowed=y>
- Feng, Y. (2001). Political freedom, political instability, and policy uncertainty: A study of political institutions and private investment in developing countries. *International Studies Quarterly*, 45(2), 271-294. doi:10.1111/0020-8833.00191
- Figge, L., Oebels, K., & Offermans, A. (2017). The effects of globalization on Ecological Footprints: An empirical analysis. *Environment, Development and Sustainability*, 19(3), 863-876. doi:10.1007/s10668-016-9769-8
- Fioramonti, D. L. (2013). *Gross domestic problem: The politics behind the world's most*

powerful number: Zed Books.

- Forson, J. A., Buracom, P., Chen, G., & Baah-Ennumh, T. Y. (2017). Genuine wealth per capita as a measure of sustainability and the negative Impact of corruption on sustainable growth in sub-sahara Africa. *South African Journal of Economics*, 85(2), 178-195. doi:10.1111/saje.12152
- Fosu, A. (2017). Growth, inequality, and poverty reduction in developing countries: Recent global evidence. *Research in Economics*, 71(2), 306-336. doi:10.1016/j.rie.2016.05.005
- Frawley, T. H., Finkbeiner, E. M., & Crowder, L. B. (2019). Environmental and institutional degradation in the globalized economy. *Ecology and Society*, 24(1).
- Fukuyama. (2013). What is governance? *Governance*, 26(3), 347-368. doi:10.1111/gove.12035
- Fukuyama, M. F. (2000). *Social capital and civil society*. Washington, D.C: International monetary fund.
- Gasiorowski, M. J. (2000). Democracy and macroeconomic performance in underdeveloped countries: An empirical analysis. *Comparative Political Studies*, 33(3), 319-349. doi:10.1177/0010414000033003002
- Gastil, J. (1993). *Democracy in small groups: Participation, decision making, and communication*. Philadelphia, PA: New Society.
- Gauri, V., & Khaleghian, P. (2002). Immunization in developing countries: its political and organizational determinants. *World Development*, 30(12), 2109-2132.
- Gay, L., & Airasian, P. (2000). *Educational research: Competencies for analysis and application* (6th ed.). Upper Saddle River, NJ: Merrill an imprint of Prentice Hall.
- Gerring, J., Thacker, S. C., & Alfaro, R. (2012). Democracy and human development. *The Journal of Politics*, 74(1), 1-17. doi:10.1017/S0022381611001113
- Ghardallou, W., & Sridi, D. (2019). Democracy and economic growth: a literature review. *Journal of the Knowledge Economy*, 1-21. doi:10.1007/s13132-019-00594-4
- Ghobarah, H. A., Huth, P., & Russett, B. (2004). Comparative public health: The political economy of human misery and well-being. *International Studies*

- Quarterly*, 48(1), 73-94. doi:10.1111/j.0020-8833.2004.00292.x
- Glaeser, E. L., La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (2004). Do institutions cause growth? *Journal of Economic Growth*, 9(3), 271-303. doi:10.1023/B:JOEG.0000038933.16398.ed
- Goryakin, Y., Lobstein, T., James, W. P. T., Suhrcke, M., & Medicine. (2015). The impact of economic, political and social globalization on overweight and obesity in the 56 low and middle income countries. *Social science*, 133, 67-76. doi:10.1016/j.socscimed.2015.03.030
- Gossel, S. (2018). FDI, democracy and corruption in Sub-Saharan Africa. *Journal of Policy Modeling*, 40(4), 647-662. doi:10.1016/j.jpolmod.2018.04.001
- Gough, I. (2004). Human well-being and social structures: Relating the universal and the local. *Global Social Policy*, 4(3), 289-311. doi:10.1177/1468018104047489
- Graff Zivin, J., & Neidell, M. (2012). The impact of pollution on worker productivity. *American Economic Review*, 102(7), 3652-3673. doi:10.1257/aer.102.7.3652
- Greenes, T. (2002). Creative destruction and globalization. *Cato Journal*, 22(3), 543.
- Greif, A. (2006). Family structure, institutions, and growth: the origins and implications of western corporations. *American Economic Review*, 96(2), 308-312. doi:10.1257/000282806777212602
- Grindle, M. S. (2011). Good enough governance revisited. *Development Policy Review*, 29, s199-s221. doi:10.1111/j.1467-7679.2007.00385.x
- Grix, J. (2018). *The Foundations of Research* (3rd ed.). New York City: Macmillan International Higher Education.
- Guba, E. G., & Lincoln, Y. (1994). Competing paradigms in qualitative research. . In N. K. D. Y. S. Lincoln (Ed.), *Handbook of Qualitative Research* (Vol. 2, pp. 105-117). London: Sage.
- Güney, T. (2019). Renewable energy, non-renewable energy and sustainable development. *International Journal of Sustainable Development World Ecology*, 26(5), 389-397. doi:10.1080/13504509.2019.1595214
- Gupta, J., Pouw, N. R., & Ros-Tonen, M. (2015). Towards an elaborated theory of inclusive development. *The European Journal of Development Research*, 27(4), 541-559. doi:10.1057/ejdr.2015.30

- Gupta, J., Vegelin, C., & economics. (2016). Sustainable development goals and inclusive development. *International environmental agreements: Politics, law*, 16(3), 433-448. doi:10.1007/s10784-016-9323-z
- Gurgul, H., & Lach, Ł. (2014). Globalization and economic growth: Evidence from two decades of transition in CEE. *Economic Modelling*, 36, 99-107. doi:10.1016/j.econmod.2013.09.022
- Gygli, S., Haelg, F., Potrafke, N., & Sturm, J.-E. (2019). The KOF globalisation index—revisited. *The Review of International Organizations*, 14(3), 543-574. doi:10.1007/s11558-019-09344-2
- Hall, R. E., & Jones, C. I. (1999). Why do some countries produce so much more output per worker than others? *The Quarterly Journal of Economics*, 114(1), 83-116. doi:10.1162/0033553995555954
- Hamilton, J. (2003). What is an oil shock? *Journal of Econometrics*, 113(2), 363-398. doi:10.1016/S0304-4076(02)00207-5
- Hamilton, K., & Clemens, M. (1999). Genuine savings rates in developing countries. *The World Bank Economic Review*, 13(2), 333-356. doi:10.1093/wber/13.2.333
- Hamilton, K., Hamilton, K., & Atkinson, G. (2006). *Wealth, welfare and sustainability: Advances in measuring sustainable development*. Cheltenham, UK: Edward Elgar
- Hamilton, K., & Hepburn, C. (2014). Wealth. *Oxford Review of Economic Policy*, 30(1), 1-20. doi:10.1093/oxrep/gru010
- Hanley, N. (2000). Macroeconomic measures of 'sustainability'. *Journal of economic surveys*, 14(1), 1-30. doi:10.1111/1467-6419.00102
- Hanley, N., Dupuy, L., & McLaughlin, E. (2015). Genuine savings and sustainability. *Journal of economic surveys*, 29(4), 779-806. doi:10.1111/joes.12120
- Haque, M. S. (2002). Globalization, new political economy, and governance: A third world viewpoint. *Administrative Theory & Praxis*, 24(1), 103-124. doi:10.1080/10841806.2002.11029352
- Harttgen, K., Klasen, S., Vollmer, S., & Wealth. (2013). An African growth miracle? Or: what do asset indices tell us about trends in economic performance? *Review of Income*, 59(S1), S37-S61. doi:10.1111/roiw.12016

- Hayami, Y. (2009). Social capital, human capital and the community mechanism: Toward a conceptual framework for economists. *The Journal of Development Studies*, 45(1), 96-123. doi:10.1080/00220380802468595
- Hickey, S., Sen, K., & Bukenya, B. (2015). *The politics of inclusive development: Interrogating the evidence*: Oxford University Press, USA.
- Hilaire, H. G. (2016). *Does good governance improve public health expenditure-health outcomes nexus? New empirical evidence from Africa*. Retrieved from
- Hodgson, G. M. (2006). What are institutions? *Journal of Economic Issues*, 40(1), 1-25. doi:10.1080/00213624.2006.11506879
- Holmberg, S., & Rothstein, B. (2012). *Good government: The relevance of political science*. Northampton, MA: Edward Elgar.
- Hornborg. (2009). Zero-sum world: challenges in conceptualizing environmental load displacement and ecologically unequal exchange in the world-system. *International Journal of Comparative Sociology*, 50(3-4), 237-262. doi:10.1177/0020715209105141
- Howitt, P. (2000). Endogenous growth and cross-country income differences. *American Economic Review*, 90(4), 829-846. doi:10.1257/aer.90.4.829
- Howitt, P. (2010). Endogenous Growth Theory. In B. L. E. Durlauf S.N. (Ed.), *Economic Growth* (pp. 68-73). London: Palgrave Macmillan.
- Huang, W. M., Lee, G. W., & Wu, C. C. (2008). GHG emissions, GDP growth and the Kyoto Protocol: A revisit of Environmental Kuznets Curve hypothesis. *Energy Policy*, 36(1), 239-247. doi:10.1016/j.enpol.2007.08.035
- Ijaiya, G. T., & Ijaiya, M. A. (2004). Foreign aid and poverty reduction in sub-Saharan Africa: A cross-country investigation. *South African Journal of Economic Management Science*, 7(3), 542-552.
- Jabareen, Y. (2009). Building a conceptual framework: philosophy, definitions, and procedure. *International journal of qualitative methods*, 8(4), 49-62. doi:10.1177/160940690900800406
- Jacobsen, J. (2015). Revisiting the Modernization Hypothesis: Longevity and Democracy. *World Development*, 67, 174-185. doi:10.1016/j.worlddev.2014.10.003

- Jakimowicz, A. (2015). Path Dependence in Neoclassical Economic Growth Theory. *Acta Physica Polonica*, 127. doi:10.12693/APhysPolA.127.A-86
- Jamil, I., Aminuzzaman, S. M., & Haque, S. T. (2013). Introduction: Governance in South, Southeast, and East Asia. *Public Organization Review*, 13(4), 341-347. doi:10.1007/s11115-013-0256-5
- Jenmana, T., Alvaredo, F., & Piketty, T. (2018). Income Inequality, Political Instability, and the Thai Democratic Struggle. *The Paris School of Economics Masters in Analysis and Policy in Economics Working Paper*.
- Jenmana, T., & Gethin, A. (2019). Extreme Inequality, Democratisation and Class Struggles in Thailand. Retrieved from <https://www.semanticscholar.org/paper/Extreme-Inequality-%2C-Democratisation-and-Class-in-Jenmana-Gethin/ae8b2cec69187633be0df9f9cddb84a8cc3c29aa?p2df>
- Johanson, R. K., & Adams, A. V. (2004). Skills development in sub-Saharan Africa. Retrieved from <https://openknowledge.worldbank.org/bitstream/handle/10986/15028/288200PA PER0Skills0development.pdf?sequence=1&isAllowed=y>
- Jones, C. I., & Klenow, P. J. (2016). Beyond GDP? Welfare across countries and time. *American Economic Review*, 106(9), 2426-2457. doi:10.1257/aer.20110236
- Jorgenson, A. K., & Clark, B. (2012). Are the economy and the environment decoupling? A comparative international study, 1960–2005. *American Journal of Sociology*, 118(1), 1-44. doi:10.1086/665990
- Kallis, G. (2011). In defence of degrowth. *Ecological Economics*, 70(5), 873-880. doi:10.1016/j.ecolecon.2010.12.007
- Kanbur, R., & Rauniyar, G. (2010). Conceptualizing inclusive development: with applications to rural infrastructure and development assistance. *Journal of the Asia Pacific Economy*, 15(4), 437-454. doi:10.1080/13547860.2010.516163
- Kaufman, & Segura-Ubiergo, A. (2001). Globalization, domestic politics, and social spending in Latin America: a time-series cross-section analysis, 1973–97. *World Politics*, 53(4), 553-587. doi:10.1353/wp.2001.0016
- Kaufman, B. E. (2003). The organization of economic activity: insights from the

- institutional theory of John R. Commons. *Journal of Economic Behavior and Organization*, 52(1), 71-96. doi:10.1016/S0167-2681(02)00153-1
- Kaufmann, D., Kraay, A., & Mastruzzi, M. (2008). Governance matters VII: aggregate and individual governance indicators 1996-2007. In A. K. Daniel Kaufmann, Massimo Mastruzzi (Ed.): The World Bank.
- Kaufmann, D., Kraay, A., & Mastruzzi, M. (2011). The worldwide governance indicators: methodology and analytical issues. In D. K. Aart Kraay, Massimo Mastruzzi (Ed.), *Policy Working Papers* (Vol. 3, pp. 220-246). Washington, DC: World Bank.
- Kaygusuz, K., & Bilgen, S. (2009). Thermodynamic aspects of renewable and sustainable development. *Energy Sources, Part A: Recovery, Utilization, Environmental Effects*, 31(4), 287-298. doi:10.1080/15567030701715401
- Keefer, P., & Shirley, M. M. (2000). Formal versus informal institutions in economic development. In C. Ménard (Ed.), *Institutions, Contracts and Organizations*. United Kingdom: Edward Elgar Publishing.
- Keping, Y. (2018). Governance and good governance: A new framework for political analysis. *Fudan Journal of the Humanities Social Science*, 11(1), 1-8. doi:10.1007/s40647-017-0197-4
- Khan, M. H. (2007). Governance, economic growth and development since the 1960s. doi:10.18356/a39cdf00-en
- Knight, M., Loayza, N., & Villanueva, D. (1993). Testing the neoclassical theory of economic growth: a panel data approach. *Staff papers*, 40(3), 512-541. doi:10.2307/3867446
- Knoll, M., & Zloczysti, P. (2012). The good governance indicators of the millennium challenge account: How many dimensions are really being measured? *World Development*, 40(5), 900-915. doi:10.1016/j.worlddev.2011.11.010
- Knowles, S., & Owen, P. D. (2010). Which institutions are good for your health? The deep determinants of comparative cross-country health status. *The Journal of Development Studies*, 46(4), 701-723. doi:10.1080/00220380903428399
- Knutsen, C. H. (2013). Democracy, state capacity, and economic growth. *World Development*, 43, 1-18. doi:10.1016/j.worlddev.2012.10.014

- Kovacevic, M. (2010). Review of HDI critiques and potential improvements. *Human development research paper*, 33, 1-44. Retrieved from https://www.researchgate.net/profile/Milorad_Kovacevic/publication/235945302_Review_of_HDI_Critiques_and_Potential_Improvements_Human_Development_Research_Paper_201033/links/004635149b2674756d000000/Review-of-HDI-Critiques-and-Potential-Improvements-Human-Development-Research-Paper-2010-33.pdf
- Kroll, G. M., & Robbins, R. H. (2008). *World in Motion: The Globalization and the Environment Reader*. In R. H. R. Gary M. Kroll (Ed.). Plattsburgh.: Altamira Press.
- Kwon, & Kim. (2014). Poverty reduction and good governance: Examining the rationale of the Millennium Development Goals. *Development and Change*, 45(2), 353-375. doi:10.1111/dech.12084
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., Vishny, R., & Organization. (1999). The quality of government. *The Journal of Law, Economics, and Organization*, 15(1), 222-279. doi:10.1093/jleo/15.1.222
- Laiprakobsup, T. (2019). Democracy, economic growth and government spending in public health in Southeast Asia. *International Journal of Development Issues*. doi:10.1108/IJDI-08-2018-0112
- Lake, D. A., & Baum, M. A. (2001). The Invisible Hand of Democracy: Political Control and the Provision of Public Services. *Comparative Political Studies*, 34(6), 587-621. doi:10.1177/0010414001034006001
- Landes, J. B. (1998). *Feminism, the Public and the Private*. Oxford: Oxford University Press.
- Laovakul, D. (2016). Concentration of land and other wealth in Thailand. In C. B. Pasuk Phongpaichit (Ed.), *Unequal Thailand: Aspects of income, wealth and power* (illustrated, reprint ed., pp. 32-42). Singapore: NUS Press, 2015.
- Leblang, D. A. (1997). Political democracy and economic growth: pooled cross-sectional and time-series evidence. *British Journal of Political Science*, 27(3), 453-472. doi:10.1017/S0007123497210215
- Lew, M. (2011). Does democracy affect environmental quality in developing countries?

- Applied Economics*, 43(9), 1151-1160. doi:10.1080/00036840802600277
- Li, Q., & Reuveny, R. (2006). Democracy and environmental degradation. *International Studies Quarterly*, 50(4), 935-956. doi:10.1111/j.1468-2478.2006.00432.x
- Lin, J. Y., & Nugent, J. B. (1995). Institutions and economic development. 3, 2301-2370. doi:10.1016/S1573-4471(05)80010-5
- List, J. A. (2004). Neoclassical theory versus prospect theory: Evidence from the marketplace. *Econometrica*, 72(2), 615-625. doi:10.1111/j.1468-0262.2004.00502.x
- Loh, J., & Wackernagel, M. (2004). Living planet report 2004. In: Gland, Switzerland: WWF.
- Lorek, S., & Spangenberg, J. H. (2014). Sustainable consumption within a sustainable economy—beyond green growth and green economies. *Journal of Cleaner Production*, 63, 33-44. doi:10.1016/j.jclepro.2013.08.045
- Macharoenrungrueang, S. (2018). The Impacts of Neoliberal Policies on Corruption Regarding Institutional Quality in APEC Countries during 1996-2015. *Thai Journal of Public Administration*, 16(2), 137-137. Retrieved from <https://so05.tci-thaijo.org/index.php/pajournal/article/view/181734>
- Mak Arvin, B., & Lew, B. (2011). Does democracy affect environmental quality in developing countries? *Applied Economics*, 43(9), 1151-1160. doi:10.1080/00036840802600277
- Makuta, & O'Hare. (2015). Quality of governance, public spending on health and health status in Sub Saharan Africa: A panel data regression analysis. 15(1), 932. doi:10.1186/s12889-015-2287-z
- Malik, S., & Courtney, K. (2011). Higher education and women's empowerment in Pakistan. *Gender Education*, 23(1), 29-45. doi:10.1080/09540251003674071
- Maneschi, A. (2008). How would David Ricardo have taught the principle of comparative advantage? *Southern Economic Journal*(4), 1167-1176. doi:10.2307/20112020
- Mankiw, N. G., Romer, D., & Weil, D. N. (1992). A contribution to the empirics of economic growth. *The Quarterly Journal of Economics*, 107(2), 407-437. doi:10.3386/w4206

- Marsh, D., & Furlong, P. (2002). A skin not a sweater: Ontology and epistemology in political science. In D. M. Vivien Lowndes, Gerry Stoker (Ed.), *Theory methods in political science* (Vol. 2, pp. 17-41). United States: Macmillan International Higher Education.
- Marshall, M. G., Gurr, T. R., & Jaggers, K. (2016). Polity IV project: Political regime characteristics and transitions, 1800–2015. *Center for Systemic Peace*.
- Martens, P., & Raza, M. (2010). Is globalisation sustainable? *Sustainability*, 2(1), 280-293. doi:10.3390/su2010280
- McKibben, B. (2007). Deep economy: The wealth of communities and the durable future. In B. McKibben (Ed.): Macmillan.
- McLaren, P., & Nature. (2003). Critical Pedagogy and Class Struggle in the Age of Neoliberal Globalization: Notes from History's Underside. *Democracy*, 9(1), 65-90. doi:10.1080/1085566032000074959
- Meltzer, A. H., & Richard, S. F. (1981). A rational theory of the size of government. *Journal of Political Economy*, 89(5), 914-927. doi:10.1086/261013
- Mertens, D. M., & McLaughlin, J. A. (2004). *Research and evaluation methods in special education*: Corwin Press.
- Miles, M. B., Huberman, A. M., Huberman, M. A., & Huberman, M. (1994). Qualitative data analysis: An expanded sourcebook. In. London, UK: sage.
- Mlambo, D. (2019). Governance and service delivery in the public sector: the case of South Africa under Jacob Zuma (2009–2018). *16*(3), 203-220. Retrieved from <https://journals.co.za/content/journal/10520/EJC-1834727f56>
- Motonishi, T. (2006). Why has income inequality in Thailand increased?: An analysis using surveys from 1975 to 1998. *Japan and the World Economy*, 18(4), 464-487. doi:10.1016/j.japwor.2004.11.003
- Mushongera, D. (2017). Beyond GDP in assessing development in South Africa: The gauteng city-region socio-economic barometer. *Development Southern Africa*, 34(3), 330-346. doi:10.1080/0376835X.2017.1308246
- Nahman, A., Mahumani, B. K., & De Lange, W. J. (2016). Beyond GDP: Towards a green economy index. *Development Southern Africa*, 33(2), 215-233. doi:10.1080/0376835X.2015.1120649

- Ndikumana, L., & Pickbourn, L. (2017). The impact of foreign aid allocation on access to social services in sub-Saharan Africa: The case of water and sanitation. *World Development*, 90, 104-114. doi:10.1016/j.worlddev.2016.09.001
- Neumayer, E. (2012). Human development and sustainability. *Journal of Human Development Capabilities*, 13(4), 561-579. doi:10.1080/19452829.2012.693067
- Norris, P. (2000). *A virtuous circle: Political communications in postindustrial societies*. Cambridge, UK: Cambridge University Press.
- North. (1990). A transaction cost theory of politics. *Journal of Theoretical Politics*, 2(4), 355-367. doi:10.1177/0951692890002004001
- North. (1991). Institutions, ideology, and economic performance. *Cato* 11, 477. Retrieved from https://heinonline.org/HOL/Page?handle=hein.journals/catoj11&div=47&g_sent=1&casa_token=-Lfwip-z9MEAAAAA:vDUEbUEGZmIaqEZeQPz-lS24cxJ5e3PaRO19p-cpfiEs30JZE9VPDHPZOQ6mRu7U8nYYJ3a&collection=journals
- North. (1993). The new institutional economics and development. *Economic History*, 9309002. Retrieved from <http://hdl.handle.net/10535/4397>
- North. (1995). The new institutional economics and third world development. In J. H. Jane Haapiseva-Hunter, Janet Hunter, Colin M. Lewis (Ed.), *The new institutional economics and third world development* (pp. 31-40). United Kingdom: Routledge.
- North. (2003). *The Role of Institutions in Economic Development: Gunnar Myrdal Lecture* (Vol. 1): United Nations Publications.
- North, & Weingast, B. R. (1989). Constitutions and commitment: the evolution of institutions governing public choice in seventeenth-century England. *The Journal of Economic History*, 49(4), 803-832. doi:10.1017/S0022050700009451
- North, D. (1992). *Transaction costs, institutions, and economic performance*. San Francisco, CA: ICS Press
- Nussbaum, M. (2002). Capabilities and social justice. *International Studies Review*, 4(2), 123-135. doi:10.1111/1521-9488.00258
- Obeng-Odoom, F. (2014). Green neoliberalism: Recycling and sustainable urban

- development in Sekondi-Takoradi. *Habitat International*, 41, 129-134.
doi:10.1016/j.habitatint.2013.07.009
- Obeng-Odoom, F. (2015). *Africa: On the rise, but to where?* Paper presented at the Forum for Social Economics.
- Obeng-Odoom, F. (2020). Why inequality persists in Africa. *Review of African Political Economy*, 47(163), 1-9. doi:10.1080/03056244.2020.1728244
- Olson, M. (1971). *The logic of collective action: Public goods and the theory of groups*, Second printing with a new preface and appendix (Vol. 124). Massachusetts: Harvard University Press.
- Ortega, B., Sanjuán, J., & Casquero, A. (2017). Determinants of efficiency in reducing child mortality in developing countries. The role of inequality and government effectiveness. *Health care Management Science*, 20(4), 500-516.
doi:10.1007/s10729-016-9367-1
- Ostrom, E. (1990). *Governing the commons: The evolution of institutions for collective action*. New York: Cambridge university press.
- Ott, J. C. (2010). Good governance and happiness in nations: Technical quality precedes democracy and quality beats size. *Journal of Happiness Studies*, 11(3), 353-368.
doi:10.1007/s10902-009-9144-7
- Oyefara, J. L. (2013). Good governance and environmental sustainability in Lagos state, Nigeria: Can the state achieve goal seven of millennium development goals (MDGS)? Retrieved from <https://ir.unilag.edu.ng/handle/123456789/4986>
- Ozturk, I., & Acaravci, A. (2011). Electricity consumption and real GDP causality nexus: Evidence from ARDL bounds testing approach for 11 MENA countries. *Applied Energy*, 88(8), 2885-2892. doi:10.1016/j.apenergy.2011.01.065
- Pallant, J. (2013). *SPSS survival manual: Step by Step guide to data analysis using IBM SPSS* (5 Ed.). England: McGraw-Hill Education
- Panayotou, T. (2016). Economic growth and the environment. In A. H. Nora Haenn, Richard (Ed.), *The Environment in Anthropology* (2 ed., pp. 140-148). New York: NYU Press.
- Persson, T., & Tabellini, G. (2006). Democracy and development: The devil in the details. *American Economic Review*, 96(2), 319-324.

doi:10.1257/000282806777212396

Petras, J., & Veltmeyer, H. (2001). Are Latin American peasant movements still a force for change? Some new paradigms revisited. *The Journal of Peasant Studies*, 28(2), 83-118. doi:10.1080/03066150108438767

Phillips, P. C., & Sul, D. (2007). Transition modeling and econometric convergence tests. *Econometrica*, 75(6), 1771-1855. doi:10.1111/j.1468-0262.2007.00811.x

Phongpaichit, P. (2016). Inequality, wealth and Thailand's politics. *Journal of Contemporary Asia*, 46(3), 405-424. doi:10.1080/00472336.2016.1153701

Pinkovskiy, M., & Sala-i-Martin, X. (2016). Lights, camera... income! Illuminating the national accounts-household surveys debate. *The Quarterly Journal of Economics*, 131(2), 579-631. doi:10.1093/qje/qjw003

Plosser, C. (1993). *The search for growth, in: Policies for Long-Run Growth*. Paper presented at the The Federal Reserve Bank of Kansas City symposium series.

Plümper, T., & Martin, C. (2003). Democracy, government spending, and economic growth: A political-economic explanation of the Barro-effect. *Public Choice*, 117(1-2), 27-50. doi:10.1023/A:1026112530744

Presbitero, A. F. (2006). Institutions and geography as sources of economic development. *Journal of international development*, 18(3), 351-378. doi:10.1002/jid.1225

Prescott, E. C. (1988). Robert M. Solow's neoclassical growth model: An influential contribution to economics. *The Scandinavian Journal of Economics*, 90(1), 7-12. doi: 10.2307/3440145

Próchniak, M., & Witkowski, B. (2013). The analysis of the impact of regulatory environment on the pace of economic growth of the world countries according to the Bayesian Model Averaging. (*NBP Working Paper No. 165*). doi:10.2139/ssrn.2367254

Putnam, R. D. (2000). Bowling alone: The collapse and revival of American community. In (illustrated, reprint ed.): Simon and schuster.

Radin, D. (2008). World Bank funding and health care sector performance in Central and Eastern Europe. *International Political Science Review*, 29(3), 325-347. doi:10.1177/0192512107088392

- Rajkumar, A. S., & Swaroop, V. (2008). Public spending and outcomes: Does governance matter? *Journal of Development Economics*, 86(1), 96-111. doi:10.1016/j.jdeveco.2007.08.003
- Rao, B. B., Tamazian, A., & Vadlamannati, K. C. (2011). Growth effects of a comprehensive measure of globalization with country-specific time series data. *Applied Economics*, 43(5), 551-568. doi:10.1080/00036840802534476
- Redmond, W. H. (2005). A framework for the analysis of stability and change in formal institutions. *Journal of Economic Issues*, 39(3), 665-681. doi:10.1080/00213624.2005.11506839
- Reed, D. (2002). *Poverty and the environment: Can sustainable development survive globalization?* Paper presented at the Natural Resources Forum.
- Rees, W., & Wackernagel, M. (2008). Urban ecological footprints: why cities cannot be sustainable—and why they are a key to sustainability. In *Urban Ecology* (pp. 537-555). Boston, MA: Springer.
- Rivera-Batiz, F. L. (2002). Democracy, governance, and economic growth: theory and evidence. *Review of Development Economics*, 6(2), 225-247. doi:10.1111/1467-9361.00151
- Robeyns, I. (2005). The capability approach: a theoretical survey. *Journal of Human Development*, 6(1), 93-117. doi:10.1080/146498805200034266
- Rodríguez-Pose, A., & Storper, M. (2006). Better rules or stronger communities? On the social foundations of institutional change and its economic effects. *Economic Geography*, 82(1), 1-25. doi:10.1111/j.1944-8287.2006.tb00286.x
- Rodrik, (2000). Institutions for high-quality growth: what they are and how to acquire them. *Studies in Comparative International Development*, 35(3), 3-31. doi:10.1007/BF02699764
- Rodrik. (2005). Growth Strategies. In S. N. D. Philippe Aghion (Ed.), *Handbook of Economic Growth* (Vol. 1, pp. 967-1014). Cambridge, USA: Elsevier.
- Rodrik, & Subramanian, A. (2003). The primacy of institutions. *Finance and Development*, 40(2), 31-34.
- Rodrik, Subramanian, A., & Trebbi, F. (2004). Institutions rule: the primacy of institutions over geography and integration in economic development. *Journal of*

- Economic Growth*, 9(2), 131-165. doi:10.1023/B:JOEG.0000031425.72248.85
- Rodrik, D. (1997). *Globalization, social conflict and economic growth*. Paper presented at the Conferencia de Raúl Prebisch. Ginebra.
- Rodrik, D. (2004). Institutions and economic performance-getting institutions right. *CESifo DICE report* 2, 2(2), 10-15.
- Rodrik, D. (2008). Second-best institutions. *American Economic Review*, 98(2), 100-104. doi:10.1257/aer.98.2.100
- Rodrik, D. (2016). Is liberal democracy feasible in developing countries? *Studies in Comparative International Development*, 51(1), 50-59. doi:10.1007/s12116-016-9218-6
- Romer, P. M. (1994). The origins of endogenous growth. *Journal of Economic perspectives*, 8(1), 3-22. doi:10.1257/jep.8.1.3
- Roodman, D. (2009). How to do xtabond2: An introduction to difference and system GMM in Stata. *The Stata Journal*, 9(1), 86-136. doi:10.1177/1536867X0900900106
- Rosenberg, D. (2018). Political Economy of Infant Mortality Rate: Role of Democracy Versus Good Governance. *International Journal of Health Services*, 48(3), 435-460. doi:10.1177/0020731418774226
- Ross, M. (2006). Is democracy good for the poor? *American Journal of Political Science*, 50(4), 860-874. doi:10.1111/j.1540-5907.2006.00220.x
- Rothstein, B., Charron, N., & Lapuente, V. (2013). *Quality of government and corruption from a European perspective: a comparative study on the quality of government in EU regions*. Cheltenham, UK: Edward Elgar.
- Rothstein, B. O., & Teorell, J. A. (2008). What is quality of government? A theory of impartial government institutions. *Governance*, 21(2), 165-190. doi:10.1111/j.1468-0491.2008.00391.x
- Routley, L. (2014). Developmental states in Africa? A review of ongoing debates and buzzwords. *Development Policy Review*, 32(2), 159-177. doi:10.1111/dpr.12049
- Rudra, N., & Haggard, S. (2005). Globalization, democracy, and effective welfare spending in the developing world. *Comparative Political Studies*, 38(9), 1015-1049. doi:10.1177/0010414005279258

- Ruffin, R. (2002). David Ricardo's discovery of comparative advantage. *History of Political Economy*, 34(4), 727-748.
- Sachs, I. (2004). Inclusive development strategy in an era of globalization. doi:10.2139/ssrn.908233
- Samimi, P., & Jenatabadi, H. S. (2014). Globalization and economic growth: Empirical evidence on the role of complementarities. *PloS One*, 9(4). doi:10.1371/journal.pone.0087824
- Santiso, C. (2001). Good governance and aid effectiveness: The World Bank and conditionality. *The Georgetown Public Policy Review*, 7(1), 1-22.
- Sartori, G. (1991). Comparing and miscomparing. *Journal of Theoretical Politics*, 3(3), 243-257. doi:10.1177/0951692891003003001
- Schotter, A. (1981). *Why take a game theoretical approach to economics? Institutions, economics and game theory*. Retrieved from <https://nyuscholars.nyu.edu/en/publications/why-take-a-game-theoretical-approach-to-economics-institutions-ec>
- Sen. (2000). Social exclusion: Concept, application, and scrutiny. Retrieved from <https://www.think-asia.org/bitstream/handle/11540/2339/social-exclusion.pdf>
- Sen. (2013). The ends and means of sustainability. *Journal of Human Development Capabilities*, 14(1), 6-20. doi:10.1080/19452829.2012.747492
- Sen, A. (1991). Welfare, preference and freedom. *Journal of Econometrics*, 50(1-2), 15-29. doi:10.1016/0304-4076(91)90087-T
- Sen, A. (2004). What's the Point of Democracy. *American Academy of Arts Sciences Bulletin*. Retrieved from <https://scholar.harvard.edu/sen/publications/what%E2%80%99s-point-democracy>
- Seputiene, J., & Skunciene, S. (2011). The relationship between economic development and economic freedom: The case of Transition economies. *Economics, Management and Financial Markets*, 6(1), 790. Retrieved from <https://www.ceeol.com/search/article-detail?id=90657>
- Seth, S. (2009). Inequality, interactions, and human development. *Journal of Human Development Capabilities*, 10(3), 375-396. doi:10.1080/19452820903048878

- Shandra, J. M., Nobles, J., London, B., Williamson, J. B., & medicine. (2004). Dependency, democracy, and infant mortality: a quantitative, cross-national analysis of less developed countries. *Social science*, 59(2), 321-333. doi:10.1016/j.socscimed.2003.10.022
- Shirley, M. M. (2005). Institutions and development. In *Handbook of new institutional economics* (pp. 611-638): Springer.
- Sirgy, M. J., Lee, D.-J., Miller, C., & Littlefield, J. (2004). The impact of globalization on a country's quality of life: Toward an integrated model. *Social Indicators Research*, 68(3), 251-298. doi:10.1023/B:SOCI.0000033577.34180.4b
- Smith, A. (2010). *The Wealth of Nations: An inquiry into the nature and causes of the Wealth of Nations*. London, UK: Harriman House Limited.
- Smith, B. C. (2007). *Good governance and development*. In Smith (Ed.). UK: Macmillan International Higher Education.
- Solow's, R. M. (1956). A contribution to the theory of economic growth. *The Quarterly Journal of Economics*, 70(1), 65-94. doi:10.2307/1884513
- Solow, R. M. (1956). A contribution to the theory of economic growth. *The Quarterly Journal of Economics*, 70(1), 65-94. doi:10.2307/1884513
- Stewart, F. (2013). Capabilities and Human Development: Beyond the individual-the critical role of social institutions and social competencies. *UNDP-HDRO Occasional Papers No. 2013/03*(2013/03). doi:https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2344469
- Stigler, G. J. (1989). Two notes on the Coase theorem. *Yale Law Journal* 99(3), 631-633. doi:10.2307/796758
- Stiglitz, J. (2002). Globalization and its Discontents. *International Affairs*, 500. doi:10.1111/1468-2346.00238
- Stiglitz, J. (2019a). The end of neoliberalism and the rebirth of history. 1, 2019. Retrieved from <https://www.economics.utoronto.ca/gindart/2019-11-04%20-%20The%20end%20of%20neoliberalism%20and%20the%20rebirth%20of%20history.pdf>
- Stiglitz, J. (2019b). *People, power, and profits: Progressive capitalism for an age of discontent*: Penguin UK.

- Stiglitz, J. (2019b). Neoliberalism must be pronounced dead and buried. Where next. *The Guardian*. Retrieved from https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=Neoliberalism+m ust+be+pronounced+dead+and+buried.+Where+next&btnG=
- Stiglitz, J., Sen, A., & Fitoussi, J.-P. (2009). The measurement of economic performance and social progress revisited. Retrieved from <https://hal-sciencespo.archives-ouvertes.fr/hal-01069384/>
- Stock, J., & Yogo, M. (2005). Asymptotic distributions of instrumental variables statistics with many instruments
In J. H. S. Donald W. K. Andrews (Ed.), *Identification Inference for Econometric Models: Essays in Honor of Thomas Rothenberg* (pp. 109-120). Cambridge, UK: Cambridge University Press, 2005.
- Stromquist, N. (2002). Education as a means for empowering women. *Rethinking empowerment: Gender development in a global/local world*. In S. M. R. Jane L. Parpart, Kathleen (Ed.), *Rethinking empowerment: Gender development in a global/local world* (pp. 22-38). United States: Routledge.
- Talberth, J., Cobb, C., & Slattery, N. (2007). The genuine progress indicator 2006. *Redefining Progress*. Retrieved from <https://d3pcsg2wj9izr.cloudfront.net/files/24200/articles/12128/GPI202006.pdf>
- Tavares, J., & Wacziarg, R. (2001). How democracy affects growth. *European Economic Review*, 45(8), 1341-1378. doi:10.1016/S0014-2921(00)00093-3
- Tchamyau, V. S. (2018). Education, lifelong learning, inequality and financial access: Evidence from African countries. *Contemporary Social Science*, 1-19. doi:10.1080/21582041.2018.1433314
- Teddlie, C., & Tashakkori, A. (2009). *Foundations of Mixed Methods Research: Integrating quantitative and qualitative approaches in the social and behavioral sciences*. In. London: Sage.
- Tiba, S., & Omri, A. (2017). Literature survey on the relationships between energy, environment and economic growth. *Renewable and Sustainable Energy Reviews*, 69, 1129-1146. doi:10.1016/j.rser.2016.09.113
- Todaro, M. P., & Smith, S. C. (2006). Economic development 8th edition. In T. Smith

- (Ed.). United States: TBS.
- Tsai, M.-C. (2007). Does globali zation affect human well-being? *Social Indicators Research*, 81(1), 103-126. doi:10.1007/s11205-006-0017-8
- Twerefou, D. K., Danso-Mensah, K., & Bokpin, G. A. (2017). The environmental effects of economic growth and globalization in Sub-Saharan Africa: A panel general method of moments approach. *Research in International Business Finance*, 42, 939-949. doi:10.1016/j.ribaf.2017.07.028
- United Nations Development Programme. (1990). Human development report. 2, 22-25. Retrieved from <http://www.hdr.undp.org/en/reports/global/hdr1990>
- United Nations Development Programme. (1995). *Human Development Report 1995*. Retrieved from http://hdr.undp.org/sites/default/files/reports/256/hdr_1995_en_complete_nostats.pdf
- United Nations Development Programme. (2014). Sustainaing Human Progress: Reducing Vulnerabilities and Building Resilience. Retrieved from <http://hdr.undp.org/sites/default/files/hdr14-report-en-1.pdf>
- United Nations Development Programme. (2018). Human Development Report Database. Retrieved from <http://hdr.undp.org/en/data>
- Van den Bergh, J. (2009). The GDP paradox. *Journal of Economic Psychology*, 30(2), 117-135. doi:10.1016/j.joep.2008.12.001
- van den Bergh, J. (2017). *Green agrowth: removing the GDP-growth constraint on human progress*. In P. A. V. a. B. Dolter (Ed.), *Handbook on Growth and Sustainability*. United Kingdom: Edward Elgar
- Vandemoortele. (2013). Inequality and Gresham's Law-the Bad Drives Out the Good. *Background paper prepared for the UN Country Team in China*. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.393.9747&rep=rep1&type=pdf>
- Vanitcharearnthum, V. (2017). Top income shares and inequality: Evidences from Thailand. *Kasetsart Journal of Social Sciences*. doi:10.1016/j.kjss.2017.07.010
- Villaverde, J., & Maza, A. (2011). Globalisation, growth and convergence. *The World Economy*, 34(6), 952-971. doi:10.1111/j.1467-9701.2011.01359.x

- Vollmer, S., & Ziegler, M. (2009). *Political institutions and human development - does democracy fulfil its constructive and instrumental role?* . In M. Z. Sebastian Vollmer (Ed.), *Policy Research Working Paper* (Vol. 4818). World Bank.
- Wade, R. (2010). After the crisis: industrial policy and the developmental state in low-income countries. *Global Policy*, 1(2), 150-161. doi:10.1111/j.1758-5899.2010.00036.x
- Wang, T.-Y., & Liu, H. (2018). An emerging Asian model of governance and transnational knowledge transfer: an introduction. *Journal of Asian Public Policy*. doi:10.1080/17516234.2018.1477030
- Watson, E. (2007). Who or what creates? A conceptual framework for social creativity. *Human Resource Development Review*, 6(4), 419-441. doi:10.1177/1534484307308255
- Welander, A., Lyttkens, C. H., & Nilsson, T. (2015). Globalization, democracy, and child health in developing countries. *Social Science Medicine*, 136, 52-63. doi:10.1016/j.socscimed.2015.05.006
- Welsch, H. (2004). Corruption, growth, and the environment: a cross-country analysis. *Environment and Development Economics*, 9(5), 663-693. doi:10.1017/S1355770X04001500
- Wennekers, S., & Thurik, R. (1999). Linking entrepreneurship and economic growth. *Small Business Economics*, 13(1), 27-56. doi:10.1023/A:1008063200484
- Winslow, M. (2005). Is democracy good for the environment? *Journal of Environmental Planning Management*, 48(5), 771-783. doi:10.1080/09640560500183074
- Wolf, S. (2016). Dark sides of anti-corruption law: A typology and recent developments in german anti-bribery legislation. *German Law Journal*, 17(1), 7-18. doi:10.1017/S2071832200019659
- Wong, S. Y. (2012). Understanding poverty: Comparing basic needs approach and capability approach. doi:10.2139/ssrn.2066179
- Woo, C. (2018). Good governance and happiness: Does technical quality of governance lead to happiness universally in both rich and poor countries? *Journal of International Area Studies*, 25(1), 37-56.
- Wooldridge, J. (2002). *Econometric analysis of cross section and panel data* MIT press.

- In J. M. Wooldridge (Ed.), (Vol. 108). United States: MIT Press, 2010.
- World Bank. (1992). *Governance and Development*. Retrieved from <http://documents1.worldbank.org/curated/en/604951468739447676/pdf/multi-page.pdf>
- World Bank. (2016). The cost of air pollution: Strengthening the economic case for action. Retrieved from <https://openknowledge.worldbank.org/bitstream/handle/10986/25013>
- World Bank. (2017). World Development Report: Governance and the Law. Retrieved from <https://www.worldbank.org/en/publication/wdr2017>
- World Bank. (2018). World Development Indicators. Retrieved from <https://databank.worldbank.org/source/world-development-indicators>
- Yilmaz, K. (2013). Comparison of quantitative and qualitative research traditions: Epistemological, theoretical, and methodological differences. *European Journal of Education*, 48(2), 311-325. doi:10.1111/ejed.12014
- York, R., & Rosa, E. A. (2003). Key challenges to ecological modernization theory: Institutional efficacy, case study evidence, units of analysis, and the pace of eco-efficiency. *Organization & Environment*, 16(3), 273-288. doi:10.1177/1086026603256299
- Younsi, M. a., & Nafla, A. (2019). Financial stability, monetary policy, and economic growth: panel data evidence from developed and developing countries. *Journal of the Knowledge Economy*, 10(1), 238-260. doi:10.1007/s13132-017-0453-5
- Zahonogo, P. (2018). Globalization and economic growth in developing countries: evidence from Sub-Saharan Africa. *The International Trade Journal*, 32(2), 189-208. doi:10.1080/08853908.2017.1333933
- Zurick, D. (2006). Gross national happiness and environmental status in Bhutan. *Geographical Review*, 96(4), 657-681. doi:10.1111/j.1931-0846.2006.tb00521.x



Appendix A

Test for Autocorrelation and Heteroskedasticity

Autocorrelation and heteroskedasticity in sub-Saharan Africa

Wooldridge test for autocorrelation/serial correlation

Ho: no first-order autocorrelation	
F = (1, 25) =	25.625
Prob > F =	0.0000

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

Ho: Constant variant	
Variables: fitted values of Genuine wealth per capita	
chi2(5) =	990.07
Prob > chi2 =	0.0000

Autocorrelation and heteroskedasticity in Asia

Table 1: Wooldridge test for autocorrelation/serial correlation

Ho: no first-order autocorrelation	
F = (1, 25) =	33.718
Prob > F =	0.0002

Table 2: Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

Ho: Constant variant	
Variables: fitted values of Genuine wealth per capita	
chi2(5) =	36.64
Prob > chi2 =	0.0475

Appendix B

Scatter Plot of the Relationship between variables of Governance, Democracy, Globalization and Sustainable Development in Sub-Saharan Africa.

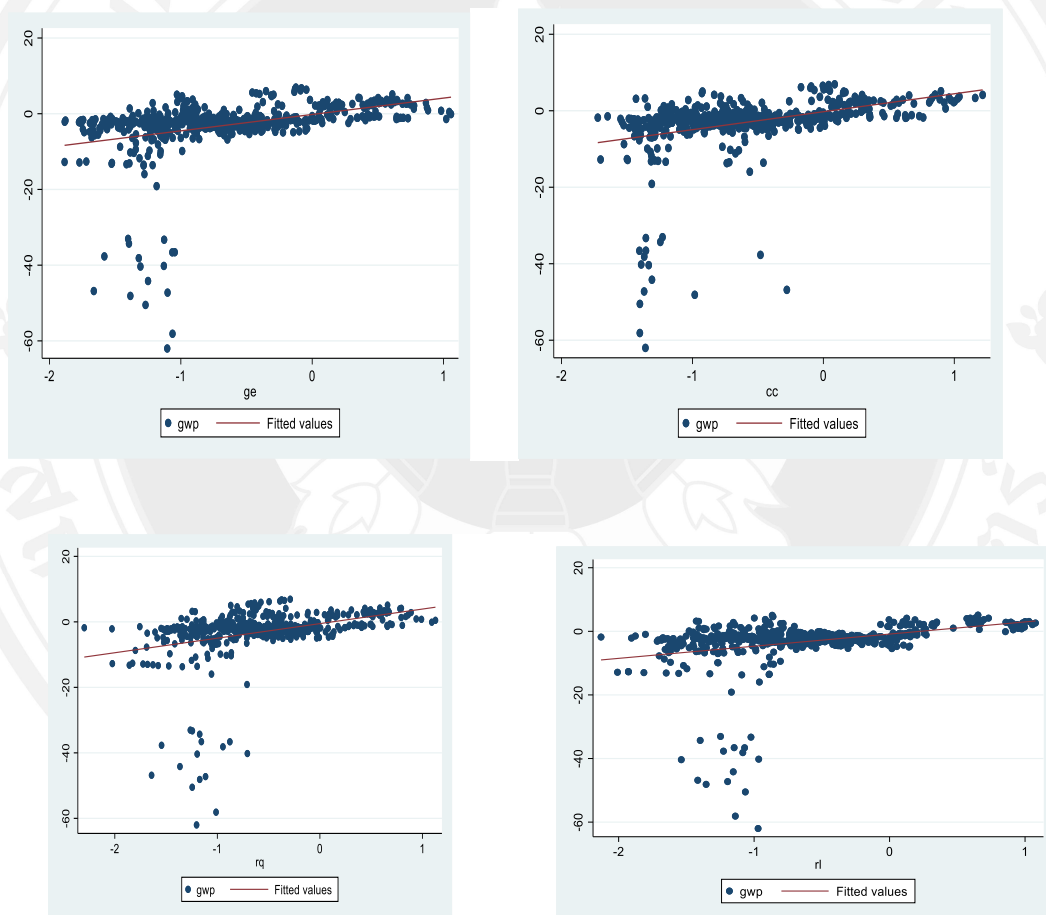


Figure B.1 Relationship between genuine wealth (sustainable development) and government effectiveness (ge), control of corruption (cc), regulatory quality(rq), and rule of law(rl) in sub-Saharan Africa.

Source: Author's construct.

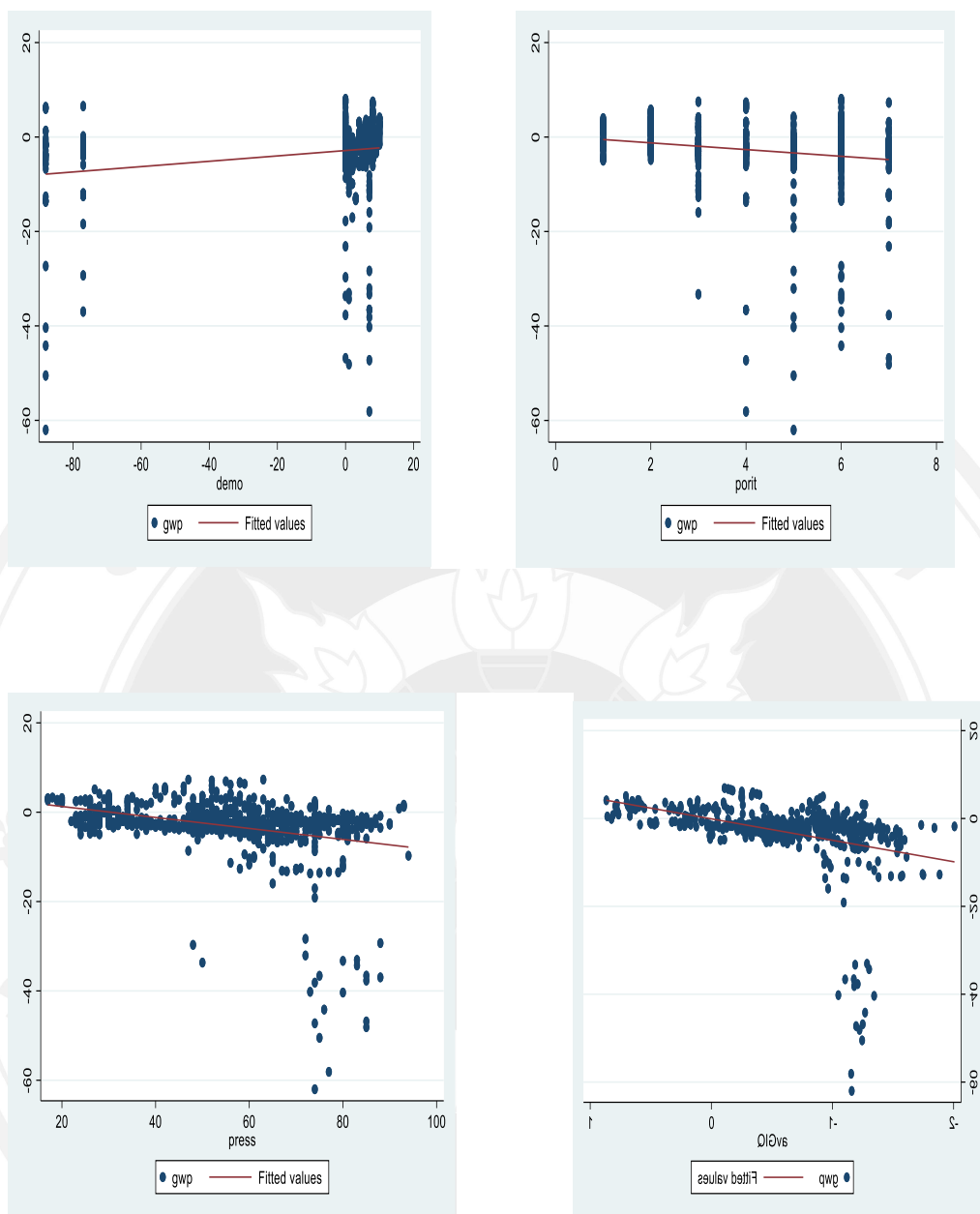


Figure B.2 Relationship between genuine wealth (sustainable development) and democracy (demo), political rights (porit), press freedom (press), and regulatory quality (ivqty) in sub-Saharan Africa.

Source: Author's construct

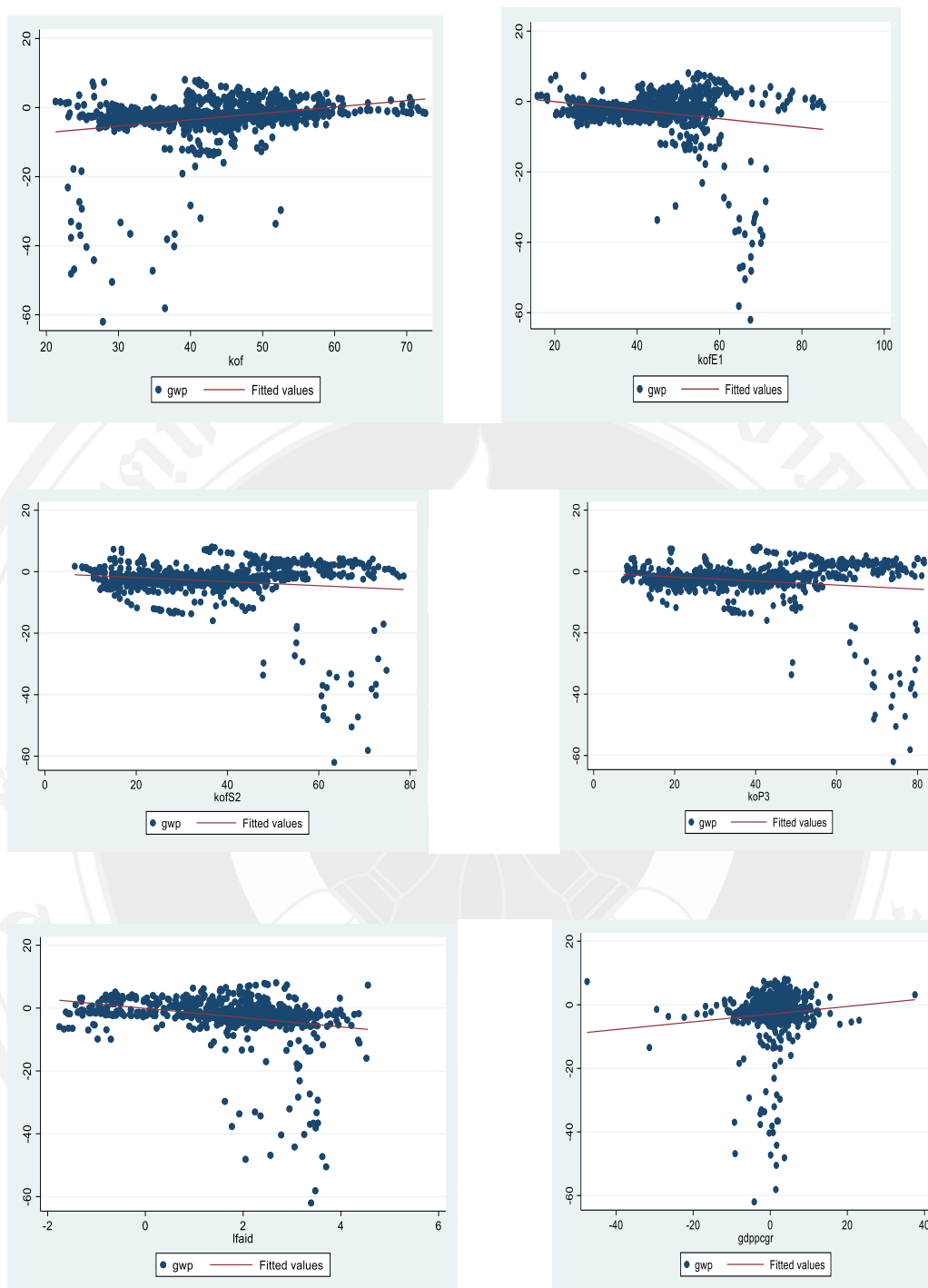


Figure B 3 Relationship between genuine wealth (sustainable development) and economic globalization (KOF1), social globalization (KOF2), political globalization (KOF3), foreign aid, and GDP per capita in sub-Saharan Africa.

Source: Author's construct

Appendix C

Scatter Plot of the Relationship Between Variables of Governance, Democracy, Globalization and Sustainable Development in Asia.

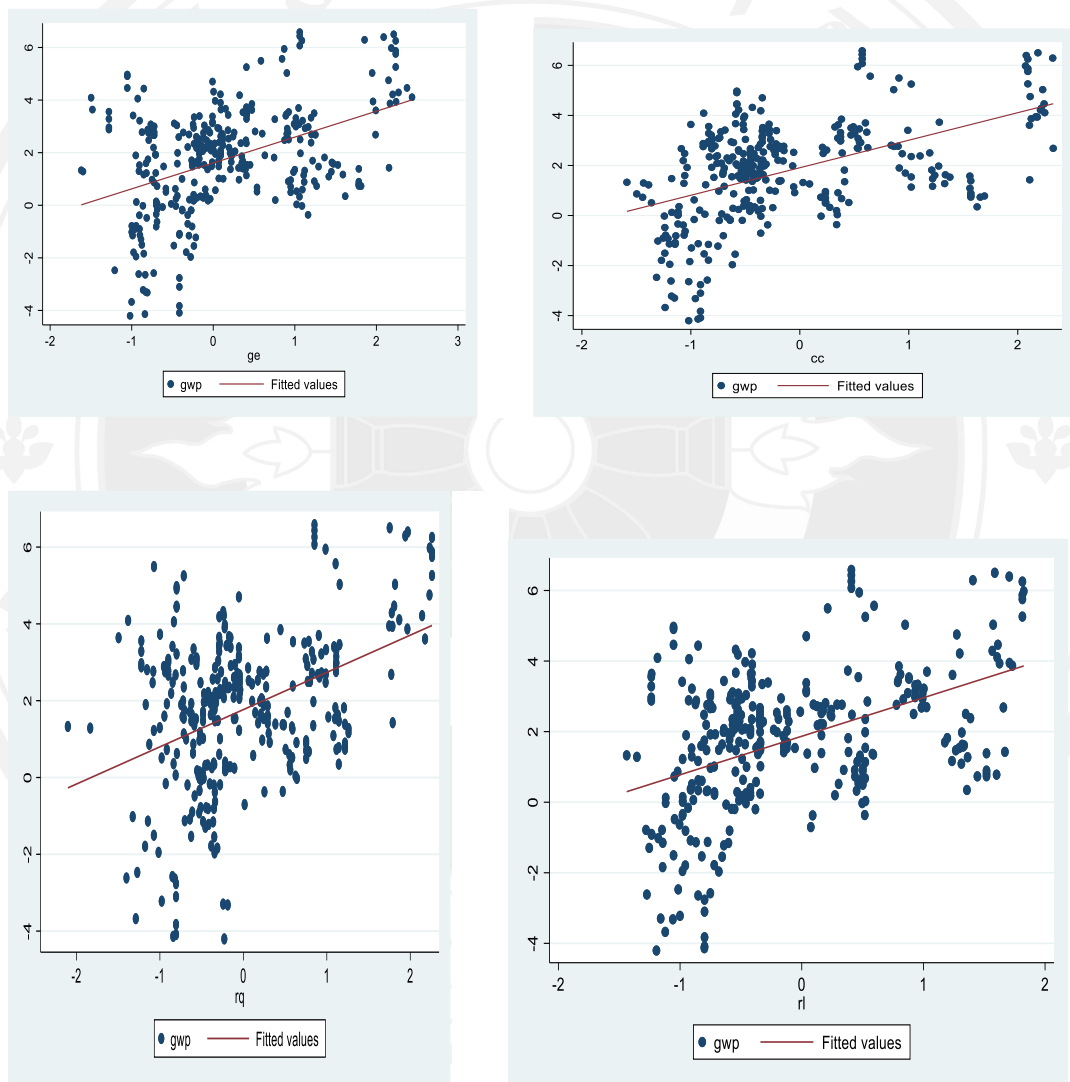


Figure C.1 Relationship between genuine wealth (sustainable development) and government effectiveness, control of corruption, regulatory quality, and the rule of law in East and South-East Asia. **Source:** Author's construct.

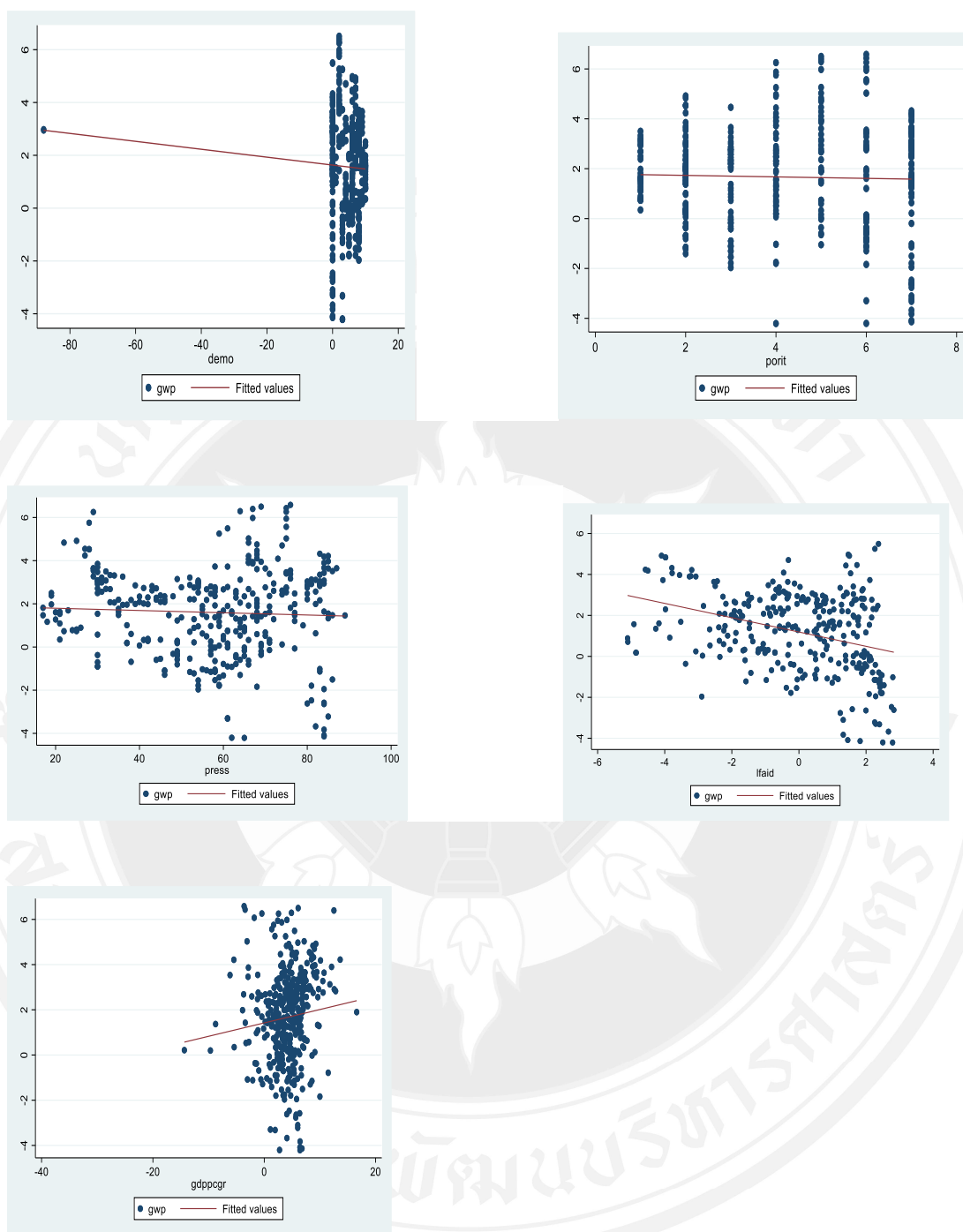


Figure C.2 Relationship between genuine wealth (sustainable development) and democracy, political rights, press freedom, foreign aid and GDP per capita in East and South-East Asia

Source: Author's construct.

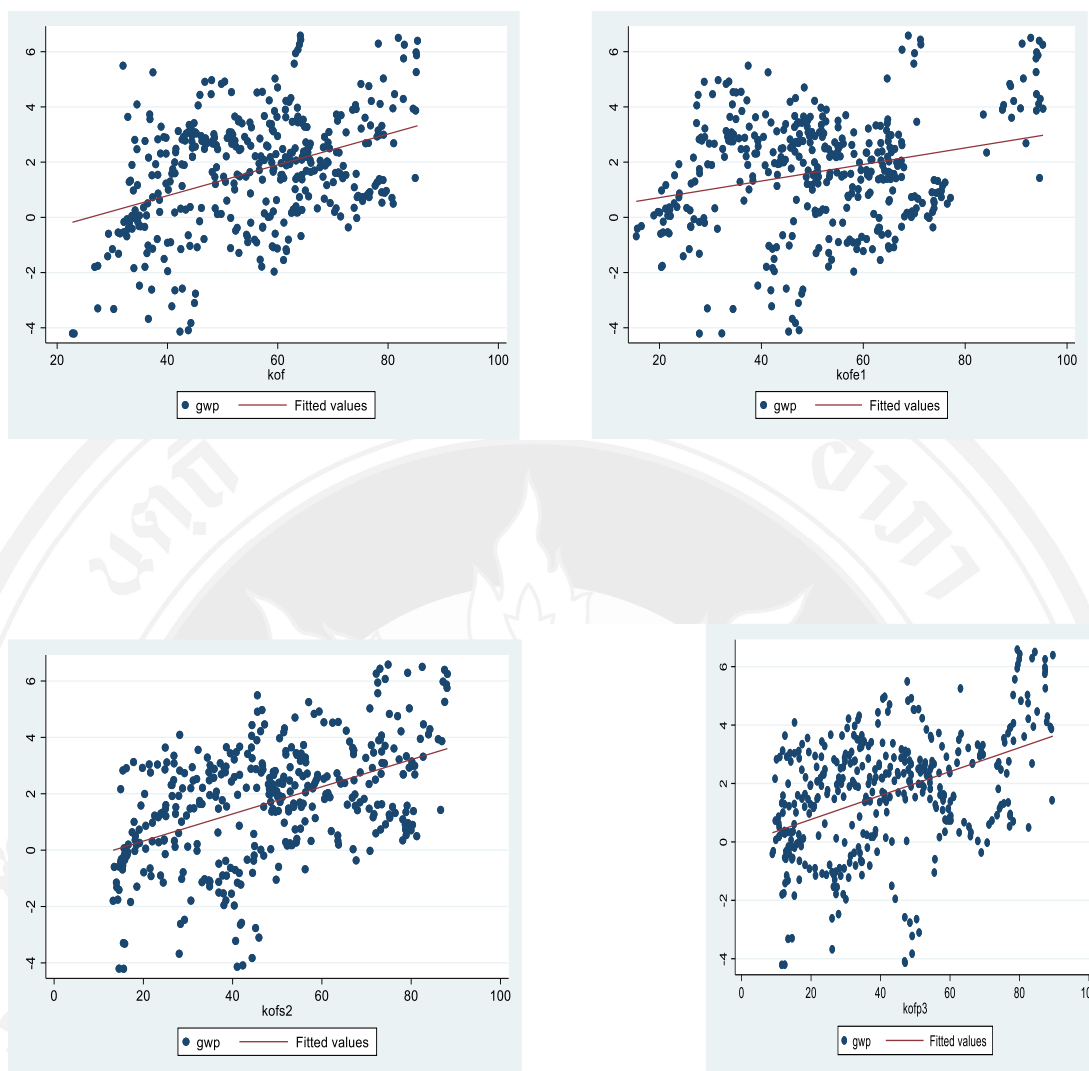


Figure C.3 Relationship between genuine wealth per capita and economic globalization, social globalization, and political globalization in East and South-East Asia.

Source: Author's construct.

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