

# Governance, Globalization, and Sustainable Development: A Conceptual Framework

Zechariah Langnel<sup>1</sup> & Pairote Pathranarakul<sup>1</sup>

<sup>1</sup> Graduate School of Public Administration, National Institute of Development Administration, Thailand

Correspondence: Zechariah Langnel, Graduate School of Public Administration, National Institute of Development Administration, Thailand. E-mail: langnelzechariah@gmail.com

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## Abstract

This paper proposes some assumptions on the intricate relationship between governance, globalization, and sustainable development. A literature-based analysis was used. We assume that because environmental problems are complex, multi-faced, and transboundary, the relationship between governance and sustainable development may not always be linear. With respect to political institutions, we propose that a democracy is most likely (than autocracy) to promote sustainable development. The paper further signals that though globalization is likely to exert a negative impact on sustainable development, the relationship may be moderated by the level of economic development as well as the institutional quality. These assumptions will help researchers and practitioners in sustainability studies and other allied fields.

**Keywords:** governance, globalization, sustainable development, framework

## 1. Introduction

Sustainable development of economic, social, and environmental outcomes for the next generations requires getting public policies right from today. In 2015, the United Nations' General Assembly adopted 17 Sustainable Development Goals (SDGs) as a purpose vehicle to achieve sustainable development by 2030 (United Nations, 2019). In sync with the Brundtland report, we define sustainable development as the development that meets the needs of the present without compromising the ability of future generations to meet their own needs (WCED, 1987). It emphasizes the need for a balanced development of ecological, social, and economic norms and values (Bifulco et al., 2016; Tomor et al., 2019). Yet, policy makers continue to face problematic trade-offs that must balance the pursuit of economic development, reduce poverty, and ensure environmental sustainability (Byrne, Glover & Alrøe, 2006). In that regard, the SDG 16 urges national governments to ensure *peace, justice, and strong institutions* as essential ingredients for the achievement of other SDG goals. Güney (2017, p. 316) contends that sustainable development requires the participation of the public in the decision-making process on environmental and development issues to achieve such goals as protecting the environment, meeting the needs of the poor, and respecting the welfare of future generations. Consistent with this view, Hu & Mendoza (2013) argue that in countries where governance is poor, public resources suffer from leakages and fail to translate into an improved social investment that could result in desirable social outcomes. Kasuga & Takaya (2017) also argues that countries with weak institutions may fail to regulate pollution activities of firms, which leads to environmental deterioration. Therefore, the concept of governance calls for a need to initiate policies and create institutions required for economic, social, and environmental sustainability. Governance is hereby defined as the approach that "recognizes the role of the state in the economy where the joint participation of state and non-state actors, civil society and private sector, is essential in the process of public governance" (Stojanović et al., 2016, p. 558). The ability to create resilient institutions can reduce economic, social, and environmental uncertainties and increase the welfare of societies (Uzar (2020, p.602). Strong institutional environment may ensure that development activities comply with sound environmental practices, norms, and standards.

Over the past few decades, scholars have raised legitimate questions about whether globalization suffocates or liberates the sustainable development agenda. Globalization is hereby defined 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, 2002:105). It is also conceptualized as the growing integration of markets and

nation-states mediated by a variety of flows including people, information, ideas capital, and goods (Clark & Themudo, 2006), leading to the transformation of political, economic and cultural foundations of societies (Andreas, 2004). While some scholars contend that globalization has positively impacted health, education, human rights, security, gender equality, and the entire political system (Dreher, 2006; Jordá, & Sarabia, 2015), others have argued that it is equally linked to high poverty rates, widening inequality, and worsening environmental conditions such as global warming and climate change (Dreher, 2006:1091). Indeed, the growth of economic activities due to globalization stimulates the use of natural resources - renewable and non-renewable (International Energy Agency, 2019), which is inextricably linked to the (un)sustainable welfare of the current and future generations (Byrne, Glover & Alrøe, 2006).

Moreover, studies on the impact of governance (see Bates et al., 2012; Lewis, 2013; Obeng-Odoom, 2015) and globalization (see Villaverde and Maza, 2011; Colen & Swinnen, 2016) tend to focus on how to increase economic growth. However, evidence suggests that the computation of gross domestic product (a measure of economic growth) does not take into consideration the environmental damages such as global warming, air pollution, forest depletion, and carbon footprint caused by economic activities (Dincer & Rosen, 2005; Dincer, 2000). Therefore, since economic development is about sustainable improvements in human welfare, GDP may correlate with a fall in inter-temporal social welfare when the consequences of future generations are considered (Aidt, 2010).

The main objective of this paper is to offer assumptions on the intricate relationship between governance, globalization, and sustainable development. Therefore, the paper does not contain an empirical analysis – but the purpose is to offer assumptions for future research. The framework is expected to serve as a blueprint for development practitioners in the field of sustainable development. The rest of the paper proceeds as follows: the theoretical and empirical literature are reviewed, brief methodology is proposed, conceptual framework and hypotheses are presented and conclusion as well as recommendations are offered.

## **2. Literature Review**

### *2.1 Development: A Conceptual Overview*

Development connotes different things to different people. There is, however, no consensus both in theory and practice what constitutes development. Thus, diverse perceptions are held by both development experts and researchers. The development has traditionally been construed in an economic sense placing a 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 (Dasgupta & Mäler, 2000), regardless of whether such incomes are coming from within or outside the country (Todaro & Smith, 2006), 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. Consequently, researchers especially, the development economists have traditionally focused on economic growth or income as a measure of development (Knack & Keefer, 1995; Nkurunziza & Bates, 2003; Obeng-Odoom, 2015; Bates & Block, 2013). However, literature suggests that the computation of GDP does not discount environmental damages such as global warming, air pollution, forest depletion, and carbon footprint caused by economic activities (Dincer, 2000; Dincer & Rosen, 2005; Kaygusuz & Bilgen, 2009). Therefore, since development is about sustainable improvements in human welfare (Aidt, 2010), GDP is not a good proxy for sustainability. Thus, GDP may correlate with a fall in inter-temporal social welfare when the consequences of future generations are considered.

### *2.2 Limitations of GDP as a Measure 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, 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 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 (Jones & Klenow, 2016).

There is evidence to suggest that economic growth as a measure of development does not trickle-down to the poor

segment of the population as posited by development economists. Thus, GDP fails 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). For example, a critical variable like home consumption has been disregarded in the computation of GNI and the GDP. Cypher and Dietz (2009) contend that 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 considered 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 of 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 the environment as well as the threatening climatic conditions (Costanza et al., 2014). McKibben (2007) argue that 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. 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.

### 3. The Concept of Sustainability

The concept of sustainability assumes that the amount of resources used for today’s needs should not deprive future generations of their needs (United Nations, 1995; 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). As shown in the model below (figure 1), the economy ensures that goods and services are readily available for the benefit of the society by making use of the materials and energy procured from the environment (Armeanu et al., 2017; Apergis et al., 2018).

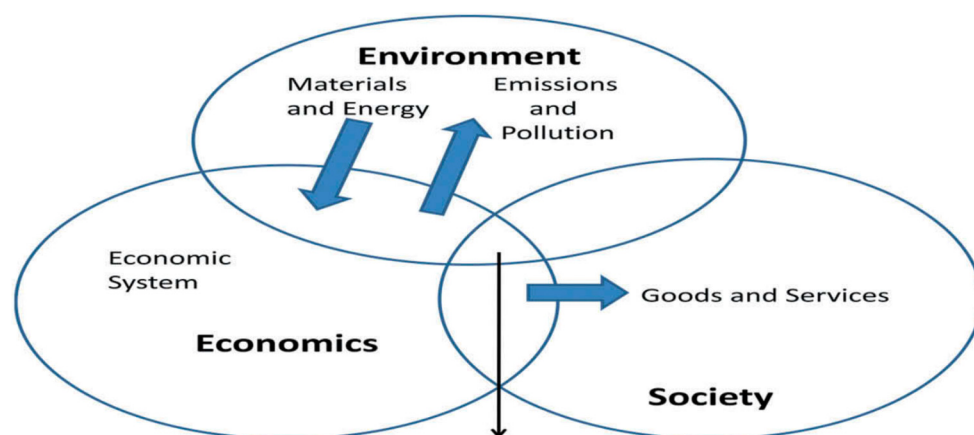


Figure 1. The model of sustainable development (Azapagic & Perdan, 2000: 244)

Consequently, the environment is degraded owing to emissions and pollutions from economic activities (Tiwari et al., 2015). It must be emphasized that the cycle of emissions and pollutions would persist as far as economic activities continue until efforts are made to integrate sustainable practices. It should be noted that the idea of sustainability seeks to explain how human activity can successfully sustain itself without depleting the resources on which it feeds on. Although many scholars agree that the notion of sustainability encompasses constant consumption over time, views about how to meet the needs of the current generation without compromising that of future generations are still hotly contested (Twerefou et al. 2017).

### 3.1 Beyond GDP: A Search for Sustainability Measure

Though it is difficult to get an indicator that can capture the three dimensions of sustainable development, scholars and policy makers alike have suggested different measures. Several concepts exist that attempt to capture global environmental constraints including ‘carrying capacity’, ‘sustainable consumption and production’, ‘guardrails’, ‘tipping point’, ‘ecological overshoot’, the earth’s ‘biocapacity’, ‘footprint’, ‘safe operating space’ or planetary boundaries (Rockström et al., 2013, p. 3). Wackernagel and Rees (1997) developed the ecological footprint to measure the rate of depletion regarding grazing land for animals for meat, cropland for growing crops for food, forest area for harvesting timber/wood fiber for timber, built-up for accommodation infrastructure for housing, water resources, mineral resources, and energy land for abating excess CO<sub>2</sub> emissions from fossil fuels. The interest in the ecological footprint is because it is arguably the only metric that comprehensively captures the amount of biologically productive land and sea required to produce resources to support human lifestyle while absorbing the waste generated in the process (Rees & Wackernagel, 1999; Rees & Wackernagel, 2008). The ecological footprint seeks to ensure that production and consumption activities do not exceed the earth’s biocapacity. Already, The Global Footprint Network (GFP) reports that over 85% of the world population is currently living in a state of ecological overshoot (GFP, 2020). However, Costanza et al., (2009). argue that the EFP only measures the environmental sustainability to the neglect of the social and economic dimensions of sustainable development.

Another important index that attempts to measure sustainability is planetary boundaries. In 2009, the former director at the Stockholm Resilience Centre – Rockström Johan - led 28 renowned scientists drawn across the globe to analyze nine processes that regulate the stability and resilience of the Earth System. Like the EFP, the concept of planetary boundaries seeks to address the challenge of environmental deficit by outlining a safe “operating space for humanity that carries a low likelihood of harming the life support systems on earth to such an extent that they no longer are able to support economic growth and human development (Rockström et al., 2009, p. 3). The nine planetary boundaries can be put into three groups: the first discusses the rate of human action in view of the capacity of the earth to sustain it (Steffen et al. 2015). It considers a safe level of depleting non-renewable fossil resources such as energy - coal, oil and gas, and fossil groundwater (O’Neill et al., 2018). Second, planetary boundaries set the safe level for using the living biosphere including exploitation of ecosystem, protection of biodiversity and consuming renewables resources such as land use (Randers et al., 2019). Lastly, planetary boundaries also define the safe level of the earth’s capacity to absorb and dissipate human waste flows such as carbon, nitrogen, phosphorus, and toxic chemicals such as pesticides (Rockström et al., 2009). By setting an upper limit to the Earth System impacts of human activities in the long run, the underpinning idea is that the achievement of the 14 socio-economic SDGs may trigger pressure on planetary boundaries thus moving the world away from the other three environmental SDGs (Randers et al., 2019). Nevertheless, though the concept of planetary boundaries is a modest contribution towards sustainable development, Lewis (2012) argues that the main challenge of the planetary boundaries is that they don’t address social problems including extreme poverty, gender inequality, health, and education.

However, some other indices exist that attempt to capture the three dimensions of sustainable development. Developed by Daly and Cobb (1989), the Sustainable Economic Welfare (ISEW) or Genuine Progress Indicator (GPI) seeks to promote economic welfare by accounting for environmental concerns due to the depletion of the ecological resources. The index of ISEW uses GDP as the foundation. It was, however, revised to GPI in 1995 (Hanley, 2000). Furthermore, other composite indices such as Living Planet Index and Happy Planet index are computed to address environmental and social well-being concerns. The Living Planet Index (LPI) is an indicator of the state of the world’s biodiversity (Loh & Wackernagel, 2004). It measures trends in populations of vertebrate species living in terrestrial, freshwater, and marine ecosystems around the world ((Loh & Wackernagel, 2004). It also measures the world’s forests, freshwater and marine ecosystems, specifically on the extent and severity of biodiversity loss (Hails, 2006). The LPI seeks to conserve biodiversity by tracking the populations of 1,313 species of fish, amphibians, reptiles, birds, and mammals (Hails, 2006). On the other hand, 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 (Costanza et al., 2007). It compares the average change in abundance for each year with the preceding year (Collen et al., 2013). The Happy Planet Index is published by the New Economic Foundation (NEF).

Genuine savings (GS), which was developed for World Bank by Pearce and Atkinson (1993). GS measures the true level of saving in a country after depreciation of produced capital; investments in human capital (captures education expenditures); depletion of minerals, energy, and forests; and damages from local and global air pollutants are taken into accounts (Hamilton & Ruta, 2006). In this regard, GS measures the amount of built, natural, and tangible capital that is needed by the current generation without harming that of the future (Güney &

Kantar, 2020). By its computation, amounts for environmental degradation and resources depletion (environmental dimension) are subtracted from the national income (economic dimension), but adds amounts for investments in human capital (social dimension). Drawing insights from GS, the Genuine Investment (GI) or Adjusted-net savings (ANS) can be derived from the standard national accounting measure of gross national savings by making four adjustments reflecting genuine investment in the productive base of an economy (Arrow et al. 2013). 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, suggesting 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 a figure of genuine investment (adjusted-net savings) as a percentage of gross national income (GNI). In short, ANS reflects the rate of gross national savings as a percentage of gross national income (GNI) after taking into account the depletion of fixed capital, education expenditure, depletion of natural resources (energy, minerals, and forest resources) and pollution damages (Hamilton, 2003). 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 continues to sustain current levels of consumption (Hamilton, 2003). ANS has been employed in the recent literature as a measure of sustainable development (see Aidt, 2010; Boța-Avram et al., 2018; Spaiser et al., 2019; Güney, 2017, 2019, 2020). Aidt (2010) also proposed Genuine wealth (GW) per capita as a measure of sustainable development. The computation of GW follows the four steps of ANS as recommended by Arrow et al. (2004), however, Aidt (2010) suggests that population growth rate and net wealth ratio of countries should be considered.

Furthermore, indicators such as human development index (HDI) and life expectancy were developed in the 1990s to measure human progress. However, Hickel (2020) argues that with respect to a growing crisis of climate change and ecological breakdown, the ability to move towards a more sustainable measure of progress is critical. The HDI thus places much emphasizes on high levels of income and neglects the ecology – thereby violating the principles of sustainability. In fact, most developed countries with higher level of HDI are noted to be the highest emitters of carbon emissions. In this regard, Hickel (2020) proposes an alternative - sustainable development index (SDI)– by taking into consideration the carbon dioxide emissions and ecological footprint per capita consumption-based terms within planetary boundaries. The SDI is supposed to be an indicator of strong sustainability that captures countries' ecological efficiency in delivering human development.

Though the problems with GDP as a measure of economic progress have been known since its inception and numerous alternative measures have been proposed, there are still significant barriers to developing, implementing, and using an indicator(s) that appropriately capture the sustainability (Costanza et al., 2009). These can be generally categorized as data/methodology issues and social/institutional issues (Hamilton & Ruta, 2006). The data/methodology barriers are common to all indicators, including GDP, and can be dealt with technically. However, the social/institutional barriers may ultimately be more difficult to overcome. Also, the methodology-related barriers on the other hand involves standardization issues and values implied by what is actually measured which is laden with subjective interpretation (Costanza et al., 2009).

#### **4. Governance for Sustainable Development**

Governance has been conceptualized variously by scholars and practitioners. The 2017 World Development Report (WDR) assessed governance in terms of its capacity to deliver three development outcomes – minimize threat to violence (security), promoting prosperity (growth), and ensuring that such prosperity is shared (equity). From these conceptualizations, governance can be understood in terms of rules approach - which refers to rules for conducting public affairs and the steering approach - which discusses the administration of state (Hyden, 2007). Though the measurement of governance has been a contested issue, scholars and some organizations have made efforts over the last few decades to gauge all dimensions of governance. Governance also contains vital features such as being tolerant to diversity and gender equality, fighting corruption, participation, efficiency and effectiveness, accountability, transparency and access to information, and rule of law (Keefer, 2004; Kraay et al., 2010). Therefore, governance has crucial implications for sustainable development.

However, governance for sustainable development denotes “processes of socio-political governance oriented towards the attainment of sustainable development” (Meadowcroft, 2007, p.299). An elaborate definition of governance in the context of sustainable development is seen as “the interrelated and increasingly integrated system of formal and informal rules, rule-making systems, and actor-networks at all levels of human society that are set up to steer society towards preventing, mitigating, and adapting to global and local environmental change and, in particular, earth system transformation with the normative context of sustainable development” (Biermann

et al., 2009). Sustainable development is not a spur-of-the-moment concept – but requires goal-direction by governments and other actors (Lange et al., 2013). In that regard, a collaborative effort amongst state, market, and civil society actors is crucial for sustainable development. Consistent with this view, Meadowcroft (2007) argues that governance for sustainable development encapsulates societal self-steering – where a determinate action is required by the society as a whole to cause a change. This is articulated through three modes of governance: polity – institutional structures and norms, policy – involving policy instruments and objectives, and politics – political processes, actors, and resources (Lange et al., 2013). Since the concept of sustainable development hovers around sustainable environment, Griggs et al. (2013) point out six universal objectives in 2030 post-2015 agenda that are conditional on governance framework. Firstly, the ability to improve social welfare and individual living conditions in the community by ending persistent poverty and inequality. Thus, by establishing an inclusive economy through sustainable production and consumption mechanisms, national income should be evenly distributed, social welfare should improve through the provision of quality education and access to health and shelter, and access to decent work (Güney, 2017). Second, the post-2015 sustainable development agenda seeks to ensure food safety, which implies that long-term food safety, developing nutritional conditions and ending hunger in the world are achieved by 2030 through sustained efforts of production, distribution, and consumption chains under an effective institutional environment. Thirdly, maintaining safe water is one of the key objectives of sustainable development, which calls for the creation of necessary facilities for universal access to clean water, and ensuring that basic health services are made accessible to all individuals through sustained water resources use and management. The fourth objective is to ensure global access to affordable and reliable state-of-the energy infrastructure, increase the share of renewable energy mix, ability to double energy efficiency across the globe, promote international cooperation to facilitate unfettered access to clean energy, and expand the needed innovative technology to achieve sustainable energy services especially in developing world (United Nations, 2015). It is estimated that energy is the principal cause of climate change and responsible for over 60% of total greenhouse gas emissions on the global scale (United Nations, 2019). Scholars have argued that because government institutions are seen to wield legitimate power, they have the locus to see to the enforcement and implementation of sustainable-related legislations and policies including renewable energy consumption. Nonetheless, it follows that where institutions are weak, the activities of firms and corporations may go unregulated, leading to unsustainable practices (Kasuga & Takaya, 2017). Fifth, sustainable development seeks to ensure that ecosystems function in a healthy and productive way. A healthy and sustainable ecosystem depends on the actions of people. When people perform their duties, such as providing better governance, effective evaluation, accurate and reliable data to track and measure progress, greater protection and conservation of ecosystem, the SDGs can be achieved (Güney, 2017:319). The sixth and final objective of sustainable development is to create public administration system or resilient institutions that will be in the position to drive sustainability agenda.

Given that environmental problems are complex, multi-faceted, and often transboundary (Ingold et al., 2019), it is important to determine a governance mode that addresses or aligns with environmental change. For instance, Guerrero et al (2015) argue that environmental problems have the character of spatial dimension and exist in multi-levels - suggesting that while some emerge from the sub-national level (e.g., noise pollution), the others are transboundary in nature (e.g., water quality and safety) or with global dimension (Ingold et al., 2019, p. 1824). Nonetheless, some causes at the local level can have global dimension. Therefore, how to identify the appropriate levels and address them through policy instruments lies at the heart of governance.

Figures 1 and 2 below show the governance situation for developing countries – particularly for Asian and sub-Saharan Africa between 1996-2015 have been consistently negative, suggesting bad governance in the region. However, with the exception of voice and accountability, the other dimensions of governance for Asian countries have been positive between the period of 1996-2015. This implies that Asian countries seem doing better than sub-Saharan African countries with respect to governance.

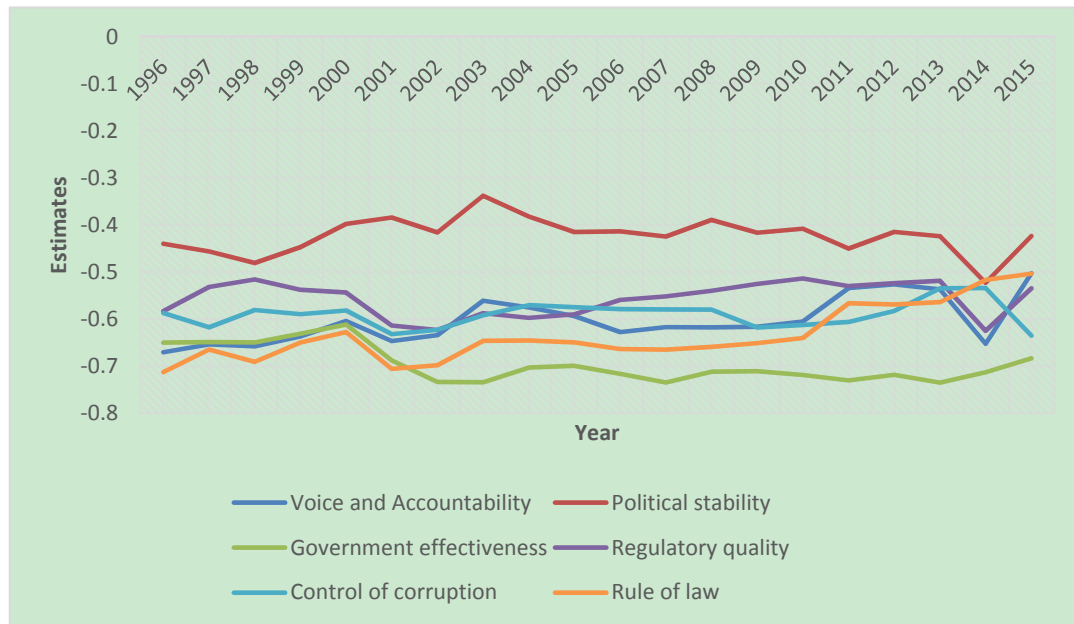


Figure 1. The average governance progress in sub-Saharan Africa (1996-2015)

Source: World Governance Indicators, World Bank, 2018

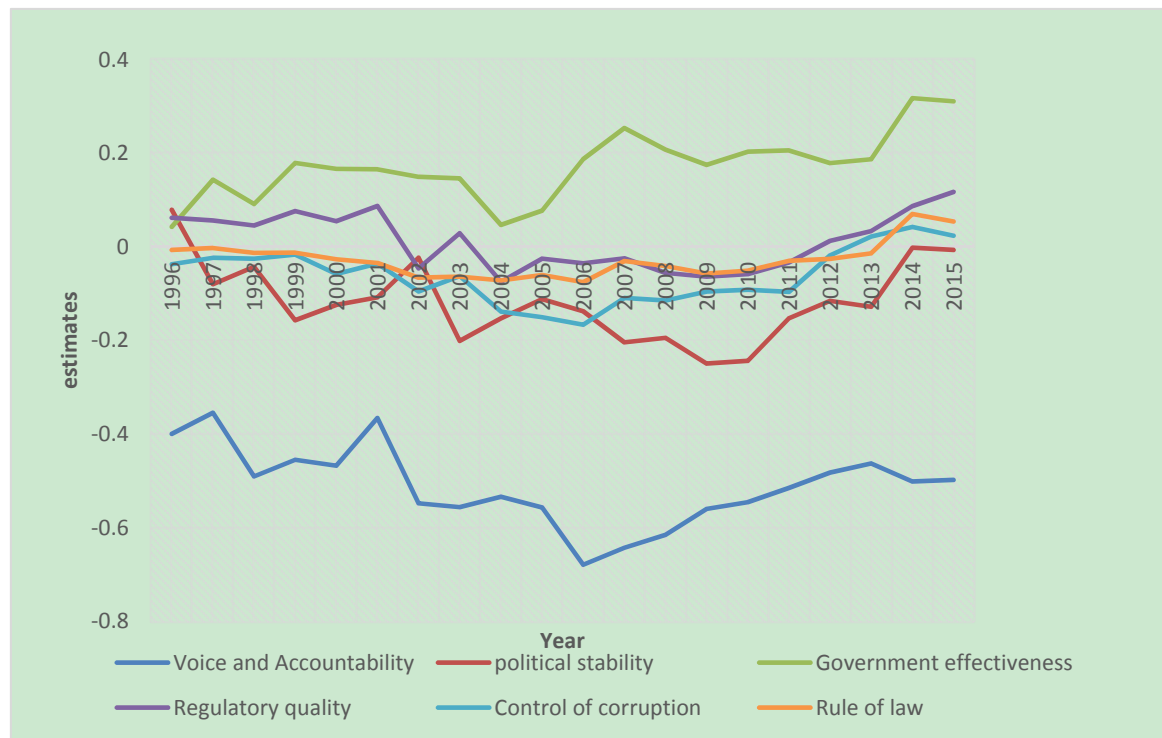


Figure 2. The governance progress in South-East and East Asia (1996-2015)

Source: World Governance Indicators, World Bank, 2018

## 5. Globalization and Sustainable Development

There is no doubt that globalization is a controversial topic and its economic, social, and environmental consequences remains unclear. Over the past few decades, scholars have become concerned about whether an increasing level of economic, social, and political integration suffocates or liberates the environment. Concerning the economic aspect of globalization, environmental quality may be theoretically influenced by foreign direct



investment and the volume of trade channels. In this regard, the neoliberal school of thought contends that globalization encourages technological transfer, innovation, research, and scientific advancements, which engender productive efficiency and sustainable growth (Greenes, 2003; Tsai, 2007). Thus, cleaner technology may be employed by foreign investors to expand their businesses (Farazmand & Moradi, 2015), may be diffused to other sectors of the economy engendering more environmentally efficient production and consumption patterns (Gallagher, 2009; Tamazian & Rao, 2010). Analogous to this argument, Dinda (2004) points out that global economic integration improves the allocative efficiency of the domestic economy and stimulates the internationalization of ecological externalities. This further supports the hypothesis that economic globalization may allay human demands on ecological resources. This view resonates with the popular notion of the Environmental Kuznets Curve (EKC) hypothesis which posits a U-shape relationship between income per capita growth and environmental pollution (Stern, 2004). The underpinning idea of the EKC hypothesis is that economic growth at the initial stages of development tends to correlate positively with environmental deterioration resulting in higher emissions of carbon dioxide (Alam et al., 2016). Thus, at the initial stages of the economic development, the path of rapid economic growth is characterized by natural resource depletion (renewable and non-renewable) and emission of pollutants – *scale effect*. However, as incomes grow due to structural changes in the economy – *composition effect* – people begin to demand for cleaner activities that arguably produce less pollution (Dinda, 2004). At higher economic development, dirty and obsolete technology are replaced with upgraded new and cleaner technology particularly from renewable energy sources – *technique effect* – which may improve the quality of the environment as a consequence (Bano et al., 2018). However, economic liberalization may lead to the growth of more pollution-intensive industries in developing countries where environmental laws are barely enforced (Dinda 2004). Thus, developing countries may risk being ‘pollution haven’ (Dasgupta et al., 2001) in situations where environmental standards may be relaxed to attract foreign direct investments. Dasgupta and Mäler (2000) have argued that emerging and transitional economies rely on technological transfer through foreign firms from industrialized economies and tend to grant some compliance relieves. Therefore, in a situation where foreign firms adopt non-renewable energy sources or obsolete technology, pollution level increases, and eventually deteriorates the quality of the environment.

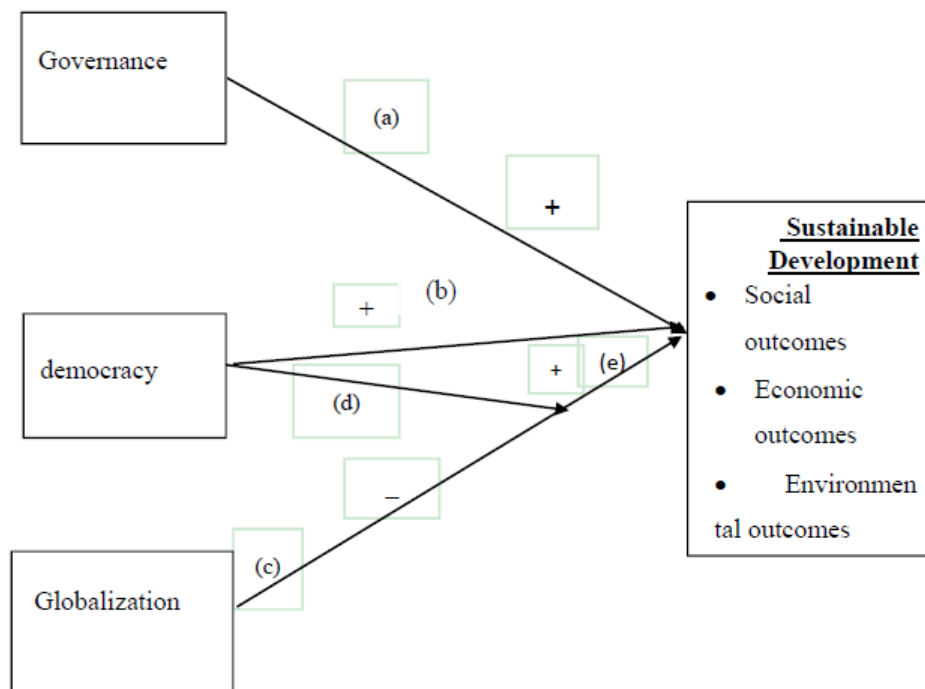
## 6. Methodology

The paper involves a desk review or a literature-based analysis by drawing concepts from governance, globalization, and sustainable development. Based on the syntheses of these concepts, some assumptions are made on how governance and globalization influence sustainable development.

## 7. A Simple Framework of the Nexus between Governance, Globalization, and Sustainable Development

The focus of this section is to develop a simple conceptual framework on the relationship between governance, globalization, and sustainable development. Nonetheless, it provides insight for subsequent researchers and practitioners in the field of development studies on the relationship between institutions, regime type, and sustainable development. The conceptual framework in figure 1 above shows the relationship 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), and (c) show separate associations between governance, democracy, globalization, and sustainable development. Channel (c) relates to the direct effect of globalization on sustainable development. Channel (d) indicates the interaction between the processes of democratization and globalization. And channel (e) 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 sustainability. It also raises the critical question of ‘what’ is sustainable development (SD) and how it can be derived.





A framework showing the nexus between governance/institutions, level of democracy, globalization, and sustainable human development

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

### 7.1 Governance and Sustainable Development

Extant studies have examined the nexus between governance and development process. Olson et al., (2000) examine the effect of governance on economic growth. In their model, rule of law, corruption, and bureaucratic quality were employed with a panel data of 68 countries. Authors observed that countries with good governance practices such as an improved bureaucratic quality, low level of corruption, and the principles of rule of law are entrenched as the norm to guide the behaviour of economic agents, government stimulates economic growth. Gani (2011) analyzed whether governance matters for economic growth in developing countries. Six World Governance Indicators were used and find that whereas political stability and government effectiveness improve economic growth, voice and accountability and corruption reduces economic growth potential. It should be noted that previous studies have generally established that good governance practices stimulate economic growth (eg. Acemoglu et al., 2001, 2004; Easterly & Levine, 2003; Rodrik et al., 2004). Nevertheless, the weakness in these papers is that gross domestic product (GDP) is used as a measure economic development. However, the computation of GDP does not take into consideration environmental damages such as global warming, air pollution, forest depletion, carbon dioxide emission caused by economic activities (Dincer, 2000; Dincer & Rosen, 2005; Kaygusuz & Bilgen, 2009). Therefore, recent studies begin to incorporate sustainability indices into the governance-development model. Davis (2017) examines the nexus between governance and the measures of sustainable human development outcomes such as percentage of the population below national poverty line, life expectancy, human development index and gender inequality/parity index. The findings show that good governance practices stimulate human development. Aidt (2011) investigates the effect of corruption on sustainable development. Genuine wealth per capita was employed as a measure of sustainable development. The author observed that corruption reduces sustainable development. Güney, (2017) also analyzed the effect of governance on sustainable development. The six indices from World Governance Indicators and the measures of governance from the International Country Risk Guide (ICRG) were employed. The author found that governance positively influences Adjusted-net savings (ANS) as a measure of sustainable development. Recently, Uzar (2020) establish that the institutional quality positively stimulates renewable energy consumption. Sun et al. (2019) also observe that institutional quality has a positive impact on green innovation and energy efficiency. Consistent with

the existing literature, Boğa-Avram et al. (2018) argue that country-level factors such as good governance practices improve sustainable development. However, since environmental problems are complex, multi-faceted, and interwoven, it requires different governance modes should be implemented to address it. Ingold et al. (2019) specifically argue that environmental problems have the character of spatial dimension, and thus different governance modes must align with or address specific environmental change. This line of reasoning suggests that the relationship between governance and sustainable may be non-linear. Based on these arguments the following hypotheses can be adopted:

H1: There is significant and direct positive relationship between good governance practices and sustainable development (SD).

H2: The relationship between governance and sustainable development is non-linear.

Furthermore, some scholars have raised legitimate questions with respect to whether political institutions particularly the regime type influence sustainable development. Mak 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 the 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 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). However, some scholars (e.g., Lijphart, 2012) argues that the relationship between democracy and development outcomes is not monolithic but diverse in its form and processes: suggesting a non-linear relationship. From this discussion, the study proposes the following hypotheses:

H3: There is significant and positive relationship between democracy and sustainable development

H4: The relationship between democracy and sustainable development is non-linear.

### 7.2 Globalization and Sustainable Development

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. In a time-series analysis of the effect of globalization on economic growth, Rao et al., (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 relationship between globalization and economic growth is not linear for sub-Saharan African countries.

Analyzing the effect of globalization on life expectancy, Bergh and Nilsson (2010a) 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 (Bergh and Nilsson, 2010b). 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, 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. These findings appear to refute the skeptical view that the current wave of globalization is the key driver of inequality in developing countries (Stiglitz, 2002). It further buttressed Bhagwati's (1999) view that greater integration is opposed by developed countries, rather than developing countries. According to 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 et al. (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.

Figge et al., (2017) investigated the effect of various measures of globalization on ecological footprints. The authors observe that the overall index of globalization significantly impacted on ecological footprints. However, the decomposition of globalization into different domains (political, economic, and social) revealed that apart from the political dimension, all dimensions drive human pressures and demands on the environment. Twerefou et al. (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 and Moradi (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 and Moradi (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.

Scholars have generally converged 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 (Dreher, 2006; Tsai, 2007). Globalization ensures that goods and services (which are not produced in the domestic economy) are made available (Byrne, & Glover, 2002). 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, consistent trend of economic growth logically has a positive effect on the emission of greenhouse gases which negatively affect the environment (Akpan et al., 2015). 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 with the Ecological Modernization theory (EMT) which proposes the regulation of free trade (economic globalization) to safeguard ecosystem (Byrne & Glover, 2002). 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. Nevertheless, under the popular notion of the environmental Kuznets Curve (EKC) hypothesis, the environmental quality is likely to improve at a high level of income growth (Alam et al., 2016). This means that globalization is likely to improve the quality of the environment at a higher level of economic development on the assumption that people with higher income may exhibit pro-environmental behaviors including showing fidelity to taxes, policies, and regulations (Stern, 2004). Consequently, the following hypotheses is proposed:

H5: There is significant and negative relationship between globalization (economic, social, political, total globalization) and sustainable development (SD).

H6: The impact of globalization on the sustainable development is contingent on the level of economic development.

### *7.3 Does the Level of Democracy Moderate the Negative Impact of 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 et al., 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 (Mak & Lew, 2011) 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:

H7: There is likely to be a positive relationship between globalization and sustainable development if a high level of democracy is present.

## 8. Concluding Remarks

As the world has barely 10 years to achieve United Nations sustainable development goals, concerns are rife that many countries particularly in developing countries are likely to miss out. Based on the survey of the existing literature, this paper makes some assumptions on the intricate nexus between governance, globalization, and sustainable development. This framework extrapolates the following urgent policy implications towards the achievement of sustainable development agenda. From the governance perspective, for countries to make significant progress on the path of sustainable development, government may have to make strong commitment to good governance including the consolidation of peace, stability, and security. Specifically, political commitment should aim at improving government effectiveness, ensure administrative reforms to control corruption, and strengthening regulatory quality. Indeed, globalization creates both threats and opportunities. Based on this framework, it is critical for countries to remain 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. 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 seen to be relevant to the post-2015 sustainable development agenda. Thus, membership in international and regional organizations may help 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.

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