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Forson, Joseph Ato

University of Education, Winneba (UEW)

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A “Recursive Framework” of Corruption and Development: Comparison between Economic and Sustainable outcomes

Joseph Ato Forson¹

*Department of Banking and Finance
University of Education, Winneba,
Winneba – Ghana.*

Abstract

The purpose of this paper is to provide a conceptual framework on the relationship between corruption and development. The paper demonstrates how the impact of corruption on economic development (ED) might vary substantially from sustainable development (SD). A combination of literature-based analysis was employed by considering concepts from corruption and development. A synthesis of these two concepts leads to the development of the conceptual framework. The findings shows that corruption originates from three main sources, and that the effect of corruption on development might differ depending on how it is conceptualized, but the spate of corruption is contingent on institutional quality and gains in previous development trajectory. Relating the concept of corruption and sustainable development and linking it to theories of development brings a sense of novelty. This paper has in its essence contributed to the conceptualization of the relationship between corruption and development which will help deepen understanding on this contentious subject. The framework will help to improve theory, research and practice in development studies and allied fields.

Keywords: Sustainable development (SD); Economic development (ED); Governance; Management.

JEL Code: D6; I3; O1.

1. Introduction

Exactly fifteen (15) years ago, a roadmap to eradicate the world of poverty among others was set at the millennium summit of the United Nations following the adoption of the United Nations Millennium Declaration. All the 189 member states and 23 international organizations at that time, were made to take bold steps by committing to help achieve these goals which eventually

¹ Corresponding Author: Lecturer, Department of Banking and Finance, University of Education, Winneba. P.O. Box 25, Winneba, Ghana. Tel: +233-202672680 Email: datoeagle@yahoo.com

came to be known as the Millennium Development Goals (MDGs). A pragmatic approach was therefore evolved and adopted. The United Nations Millennium Declaration and Monterrey consensus in Mexico in 2002 as a result made conscious effort to commit industrialized countries to grant more overseas development assistance (ODA) on the heels that substantial increases in ODA would be required to push agenda MDGs (UN-DESA, 2003). That notwithstanding, the link between aid and development have also been so contentious that, there are ongoing debate questioning aid effectiveness among disadvantaged economies in the face of corruption (Forson et al. 2015; Ohler et al. 2012). Although there have been some progress in meeting the MDGs, challenges still persist that points to a glaring depiction of disparity among developing economies (UN- MDG, 2013).

One of the key challenges to making head-way in achieving an all-inclusive development outcome which is human-centered has been the conceptualization of progress on the basis of a narrow measure using per capita GDP albeit the flaws it harbors (see Costanza et al. 2009; Smits & Hoekstra, 2011). Yet according to Aidt (2010), development is supposed to be concerned with sustainable improvements in human welfare and not spontaneous improvement. Indeed, development is too broad to be gauged narrowly which may not necessarily be a good measure of such improvements. There is therefore a general call to direct research questions to a broad-based outcome such as sustainable development (Costanza et al. 2009; Sen, 2000, 2001; Smits & Hoekstra, 2011). The emergence of the Sustainable development goals (SDGs) otherwise known as ‘Global Goals’ resonates this claim by building on the MDGs. The adoption of “agenda 2030 for sustainable development” encapsulates seventeen (17) SDGs to fight inequality and injustice, end poverty and tackle climate change by 2030 (UNDP, 2016). One of the existential pillars of the SDGs that warrants further attention in the corruption-development nexus is the sixteenth (16) goal on peace and justice and strong institutions. Strong institutions guarantee peace, stability and human rights and thus enhances governance contingent on the rule of law. In effect, good governance which is the cherished aspiration of all and sundry reflects reduction in corruption, is an indispensable conduit for sustainable development.

This paper therefore seeks to propose a conceptual framework on the relationship between corruption and development. The paper demonstrates how the impact of corruption on economic development (ED) might vary substantially from sustainable development (SD). Two implications can be drawn from such comparison. First GDP per capita may be misleading as opposed to a broad-based measure that encapsulate the dimensions espoused by the concept and principles of sustainability (Brundtland Commission, 1987; Harris, 2000). Secondly, GDP fails to account for the sources and damages a resultant output has on an economy. A higher GDP could possibly imply an unbalanced social welfare. However, when the impact is inferred from genuine wealth per capita, the true state of the economy is known. In other words, the compromises GDP makes in its estimation is accounted for in genuine wealth per capita. This comparison comes at a time when resource-rich economies are fast depleting natural endowments without redress in pursuit of the “GDP is good” phenomenon. The argument and proposition made in this study contributes to the literature of sustainability and at the same time allay all misconceptions regarding the meaning and application of SD (see Bamidele, 2013; Claros, 2013; Nwaobi, 2013).

This is a conceptual paper hence the data presented mostly came from secondary sources that included journal articles, books, working papers, webpages, and reports from reputable databases. With the intuitive and scholarly judgment of the author, there is a refinement to the raw data to make sense. The synthesis of the concepts that emerged proved to be vital in the development of the conceptual framework.

The rest of the paper is organized as follows. The next section takes a quick look at the concept of development by focusing on two development perspectives. A discussion on how these have been conceptualized is outlined. Section three considers the theories of development. Section four examines the contentious subject of corruption and its sources. The fifth section provides a simple framework with the logical linkages on the sources of corruption and how perceived corruption impacts on the two development outcomes taking into account the role of mediating factors. A brief discussion and recommendation for further studies is presented in section six. The final section concludes the paper.

2. Development: a quick review

The term development is a difficult subject to deal with and has remain contentious over the past years. This is due to diverse perception held by both development experts and researchers. In dilating on this subject, the World Bank in one of its seminar contributions put forward a simple question to demonstrate how contentious the subject can be – “are you sure you know what ‘*development*’ really means with respect to different countries?” and can you determine which countries are more developed and which are less? (World Bank, 2004). The relevance of these questions can be inferred from priorities countries set with respect to what constitute their development policies. That notwithstanding, it is quite easy to say which country is richer, and which are poor using contemporary indicators. Yet wealth indicators which reflects resource endowments to society gives no clue on how it is allocated. It is for this reason Myrdal authoritatively defined development as “the movement upward of the *entire* social system” (Myrdal, 1974). Laying more emphasis on the entailment of this social system, he had this to say:

[...] encloses, besides the so-called economic factors, all noneconomic factors, including consumptions by various group of people; consumption provided collectively; educational and health facilities and levels; the distribution of power in society; and more generally economic, social, and political stratification; broadly speaking institutions and attitudes- to which we must add as an exogenous set of factors induced policy measures applied in order to change one or several of these endogenous factors (Myrdal, 1974: p.729-730).

Myrdal’s definition draws important implications. To begin with, development as a concept is broad. Secondly, the term shouldn’t only be equated to economic well-being. In the same vein, it should not be misconstrued as an upward movement in just noneconomic factors, but rather a collective movement in all spheres of the human endeavor. In reality, there is disagreement in the application of the term in contemporary researches. This misunderstanding has indeed given rise to differing perspectives with mainstream research equating development to economic growth

whiles opponents have called for a broader perspective to the concept. This research discusses these perspectives in the section that follows.

2.1 Economic Growth as a criterion of Development

It is a common phenomenon for economists to equate development to economic growth. That is growth in output is indicated by standard measures like Gross National Income (GNI) or Gross Domestic Product (GDP) often expressed on a per capita basis (Ersson & Lane, 1996). According to Cypher and Dietz (2009), GNI is the “total value of all income accruing to residents of a country, regardless of sources of that income” - that is, irrespective of whether such income is derived from sources within or outside the country. GDP on the other hand is the total value of all income (final output) created within the borders of a country, regardless of whether the ultimate recipient of that income resides within or outside the country. Economists often use a nation’s per capita income as a measure for evaluating the overall level of national development and welfare including the progress a nation makes over time (Cypher & Dietz, 2009).

However, both GNI and GDP fail to include some new production and income that adds to the level of well-being of individuals, while at the same time they count some production as income that does not contribute to human welfare. For instance, Cypher and Dietz (2009) argued that output derived from the labor of women and children including value of home production are omitted from the traditional GNI or GDP estimates. Yet these productive activities contribute to well-being and to the social reproduction of the families by putting food on the table.

In addition, not only is GDP not a measure of (current) social welfare, but it also fails to acknowledge the impact on future welfare, which is central to the ideals of sustainability. Current notion of SD is driven by the fact that human kind should not endeavor to create economic and social prosperity at the expense of future generation (Smits & Hoekstra, 2011). For instance, countries with extensive reserve of natural resources can maintain high level of GDP by depleting them as fast as possible. 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 to incorporate the depletion in resources and the critical limits of our planet (Costanza et al. 2009; Smits & Hoekstra, 2011).

Concerns on the “threshold effect” of GDP as a measure of progress also holds that as GDP increases, overall quality of life often increases up to a point. Beyond this point, increases in GDP are offset by the costs associated with bridging the gap in income inequality, loss of leisure time, and natural capital depletion (Costanza et al. 2009; Talberth et al. 2007). Empirical evidence abounds to suggest that beyond a certain threshold, further increases in material well-being have negative side effects of lowering community cohesion, healthy relationships, knowledge, wisdom, a sense of purpose, connection with nature and other dimension of human happiness. According to Costanza et al. (2009) a strikingly consistent global trend suggests that as material affluences increases, other critical components of psychic income often decline amidst rising social vices like alcoholism, suicide, depression, poor health, crime, divorce and other social pathologies. These shortcomings necessitated for an alternate measure of human well-being.

2.2 Going beyond GDP: a search for Sustainability measure

As the debate on development deepens, the clearer the concept seems to have become. As a result, awareness is being created on the essence of maintaining development that is lasting while providing the needs of the present generation without compromising that of the future. The current discourse has been carved to highlight key elements espoused by the then connoisseurs (World Commission on Environment and Development) formal definition on SD as “meeting the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland Commission, 1987: p.43). Others define the concept more narrowly in relation to the progress made in an economy. For instance, Aidt (2010) explains that an economy is said to be on a sustainable trajectory when the inter-temporal social welfare (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 (see Arrow et al., 2004). In the seminal contribution of Sen (2000), which sought to focus on the social dimension of development interprets the phenomenon as “a process of expanding the real freedoms that people enjoy”. Sen further emphasizes that focusing on human freedoms contrasts with the narrower views of development such as identifying development with the growth of gross domestic product, or with the rise in personal income, or with industrialization, or with social modernization. Development requires the removal of 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). These attributes have been corroborated in recent memoirs. For instance, according to a report published by UNICEF (2013), SD is defined as having “both inter-generational and intra-generational equity”. The report further posit that SD involves fulfilling collective responsibilities to ensure safer, cleaner, healthier and more inclusive world for both today’s children, and for their children. As a result, sustainable human progress will also be determined by the degree to which the principle of human rights, equality and sustainability are upheld throughout all efforts of development (UNICEF, 2013; United Nations, 2012, 2013).

Progress on the sustainability perspectives have led to a number of proxies. These measures according to Costanza et al. (2009) addresses the concern that GDP emphasizes on quantity which invariably encourages depletion of social and natural capital and other policies that threatens the quality of life for future generation. In general, four main level of categorizations can be identified. This study explores these categorizations.

2.2.1 Indexes that “Correct” GDP

The first of these categories encompass indexes that address concerns by making “corrections” to existing GDP and System of National Accounting (SNA). Subservient to the indexes that “correct” GDP are the following: Index of Sustainable Economic Welfare (ISEW), the Genuine Progress Indicator (GPI), Green GDPs, and Genuine Wealth Growth per capita (GW). However, because these measures are based on much of the same economic data as GDP, these measures are still laden with limitations. Costanza et al. (2009) points out three broad shortcomings of these measures. To begin with, there is a lack of consensus on how to value items that are not

regularly reported in monetary terms (e.g. volunteer labor or illegal activities). Secondly, there are lots of subjectivity in deciding which expenses are beneficial and should be added to the total and which are detrimental that need to be subtracted (e.g. junk food and home security systems and lastly the lack of consensus on how to quantify the costs of depleting natural resources (see Costanza et al. 2009; Cypher & Dietz, 2009; Smits & Hoekstra, 2011).

The Index of Sustainable Economic Welfare (ISEW), which was later revised and renamed the Genuine Progress Indicator (GPI), is a measure that uses GDP as a foundation. It was first brought to the fore by Daly and Cobb in their book 'For the Common Good' as means to measure economic progress by providing a guide that promotes economic welfare (Daly & Cobb, 1989). The ISEW measure is an extension to the works of Zolotas on the Index of Economic Aspects of Welfare (EAW) and Nordhaus and Tobin's Measure of Economic Wealth (MEW). Daly and Cobb wanted an index that could account for both current environmental issues and long-term sustainable use of natural ecosystem and resources. In 1995, a group called Redefining Progress issued a revised version of this index and changed the name to Genuine Progress Indicator (Costanza et al. 2009).

The Genuine Savings (GS) measure was developed for the World Bank by Pearce and Atkinson (1993) and is defined as "the true level of saving in a country after depreciation of produced capital; investments in human capital (measured by education expenditures); depletion of minerals, energy, and forests; and damages from local and global air pollutants are taken into account" (Hamilton & Ruta, 2006). GS measures the built, natural, and intangible capital that is required for human society to exist and to thrive. The calculation of GS subtracts amounts for environmental degradation and resource depletion and adds in amounts for investments in human capital. The GS has been calculated for 120 countries. One of the conclusions from the World Bank report by Hamilton and Ruta (2006) asserts that increasing economic activity by selling off natural resources actually results in lower welfare in the long run especially for developing countries (Hamilton et al. 1997). Using this same measure and following the works of other authors led to what has come to be known as "Genuine wealth per capita" (GW) or "Genuine Investment" (GI) (see Aidt, 2010; Arrow et al. 2003; Dasgupta & Maher, 2000). Empirically, this has been used as proxy for SD. Its estimation follows strict adjustments.

Genuine investment is estimated from gross national savings by making four adjustments that reflect investment or disinvestment in the economy's productive base. The first adjustment subtracts an estimate of consumption of fixed capital to factor in depreciation of finished goods (manufactured capital). The second adjustment introduces an estimate of investment in human capital using expenditure on education as proxy. The social cost of environmental pollution is also factored in the adjustment in two different paths. The first captures the cost of global warming (i.e. carbon dioxide emissions deducted from national savings with a basic assumption of US \$30 per ton) and the second meant to capture the impact of local environmental degradation. The World Bank subtracts financially an estimate of the health damages due to pollution from urban population from gross savings. The last and third adjustment, which is also environmentally motivated, factors in all sort of depletions (energy, mineral, forest) and have it deducted from

relevant resource rent from net national savings. The rents are estimated as the market price of the resource minus average extraction cost for the two non-renewable resources (energy and mineral depletion). Renewable forest resources on the other hand are estimated as the market price per unit of harvest in excess of the natural regeneration rate (see Aidt, 2010: p.13). When population dynamism and the ratios of depletions suggested are factored in the adjustments (i.e. subtracting the ratio of 0.15 for industrialized economies and 0.2 for less developed economies, and population growth rates), the resultant measure is the genuine wealth per capita.

2.2.2 Indexes that do not use GDP

The second broad category measures aspects of well-being directly without depending on GDP. It measures environmental or social activities, well-being, or changes in environmental, social or human capital. The Ecological Footprint (EF), Subjective Well-Being (SWB), and Gross National Happiness (GNH) are some of the substantive measures under this category (Costanza et al. 2009).

The Subjective Well-Being (SWB) evaluates human well-being based on self-reporting by individuals and groups. The main thrust of this measure is to investigate people's "satisfaction" in respect to quality of life or even people's moods and emotions (Diener & Suh, 1999). The intent is to measure the extent to which human needs are actually being met. Because this measure is based on subjective judgments of the survey respondents rather than on more easily quantifiable inputs of money and material goods, concerns on its validity have been raised (Costanza et al. 2009), yet according to Costanza and Fisher (2007), the objective measures such as life expectancy, rates of disease, and GDP are only proxies for well-being that have been identified through the subjective judgment of decision-makers; "hence the distinction between objective and subjective indicators is somehow illusory". There is also a concern that there are cultural differences that make it difficult to compare results across different ethnic, gender, age, religion, and other boundaries. The World Database of Happiness is a compilation of studies and data related to happiness and satisfaction (see further Anielski, 2012; Layard, 2011; Veenhoven, 2008).

2.2.3 Composite Indexes including GDP

According to Smits and Hoekstra (2011), the third category of measuring progress are embedded in the composite indexes that combine several different measures into a single number. Exemplar indexes such as Human Development Index (HDI), Living Planet Index (LPI), and Happy Planet Index (HPI) are the most commonly used composite measures of well-being (Costanza et al. 2009).

The United Nations Development Program has since the 1990s used the Human Development Index (HDI) in its annual Human Development Report. The purpose of the report is to bring to the fore how well the management of economic growth and human development is actually improving human well-being across countries. For instance, the inaugural report defined human development as the "process of enlarging people's choices in order to live long and healthy life, to be educated, have access to resources needed for a decent standard of living etc., and to

have political freedom, guaranteed human rights and personal self-respect”. However, as of that time, the authors acknowledged the challenges of quantifying some of the components highlighted in the definition (UNDP, 1990). Yet, longevity is measured using life expectancy at birth. The same measure is used as proxy for other aspects of well-being such as adequate nutrition and good health. Knowledge is measured using literacy rate and school enrollment, which mirrors the level of knowledge of the adult population as well as the investment in the youth. Access to decent standard of living on the other hand is measured using GDP adjusted to reflect purchasing power parity and the threshold effect using logarithm of real GDP per capita. The initial coverage using this index was on 14 countries in the 1990s, but as of 2007, 177 countries have been covered (UNDP, 1990, 2007).

2.2.4 Indicator Suites

The fourth category is the indicator suites. The first three indicators discussed so far including GDP, are based on the aggregation of a large number of variables into a composite index. Costanza et al. (2009) points out that many of these new measures of progress do not attempt this final aggregation stage, but simply report indicators separately. The final aggregation step is left to the user. There are a very large number of these indicator suites in use at a variety of scales from municipal to national. For instance, the UN Division for Sustainable Development and other state institutions like the Statistics Netherlands Division of Macro-Economic Statistics and Dissemination have listed a wide variety of indicators along with guidelines and methodologies (see Smits & Hoekstra, 2011; UN- DESA, 2013). The National Income Satellite Accounts (SNA), the Calvert- Henderson Quality of Life Indicators, the Millennium Development Goals (MDGs) and Indicators, the Sustainable Development Indicators (SDI), and the Millennium Ecosystem Assessment (MA) are some of the examples (see further MA, 2005; Santos-Martin et al. 2013; Yang et al. 2013).

In summary, although there are problems with GDP as a measure of economic progress, the emerging alternatives highlighted have not also been spared of its own challenges and criticisms. There are still significant bottlenecks in operationalizing these new measures. Costanza et al. (2009) categorizes these bottlenecks (criticisms) into two: data/methodological issues and social/institutional issues. The former deals with barrier issues concerning data availability and reliability on timely basis including appropriate scale and scope (see Costanza et al. 1992; Fox, 2008; Parris & Kates, 2003). 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 (Dietz & Neumayer, 2005; Lawn, 2005; Neumayer, 1999, 2000). The social and institutional barriers are primarily based on resistance to change, precisely spearheaded by the “growth is good” syndrome or paradigm, lack of leadership, and the power of those with a vested interest in maintaining the status quo (Costanza et al. 2009). For instance, China in 2004 developed a methodology to measure Green GDP. The first report came out in 2006 with a finding that estimated that 20 percent of China’s GDP growth was counterbalanced by depletion of natural resources and degrading the environment (Jun, 2007; Liu, 2006). Subsequent years saw the

cancellation of the project in 2007 due to political concerns and in part on how the results reflected on the performance of specific regions in China.

3. Theories of Development

With most countries being assessed on the basis of economic criterion, mainstream theories have been developed in that direction. Therefore, the growth nexus has received lot of attention partly due to the cyclical nature of most countries' growth path, usually saddled with swings of peaks and troughs. For this reason, the concept of economic growth and the factors thereof has changed over time. Historically, theories on economic growth can be divided into a number of major trends, with the emergence of the discipline in the 1950s and 1960s. This phase was dominated by a structuralist approach which emphasized on the role of government in economic growth. However, the failure of government triggered a split into three schools of thought: the neoclassical approach, the reformist approach and the dependency approach. The 1980s saw the dominance of the neoclassical strand, which gave much credence to market mechanism.

It should be pointed out that the theories of development are significantly linked to the spate of corruption through the incentive and disincentive it creates in the buildup to entrenched corruption. When the economic fundamentals are not favorable, the incentive to fight corruption would not be there as the means to do so would be unlikely. The theories presented here spells out the ingredients needed to foster sustained growth through the effort of strong institutions.

3.1 Neoclassical Growth Theory

The neoclassical growth theory stands for the seminal contribution to the classical theory of growth. Robert Solow is credited for his immense contribution to the neoclassical growth theory, which eventually won him a Nobel Prize in economics in 1987. Solow's (1956) growth model is an extension of the Harrod-Domar formulation with the addition of a second factor- labor with an introduction of a third independent variable (technology) to the growth equation. Solow stress in his model that “ if there were no technological progress, then the effects of diminishing returns would eventually cause economic growth to cease” (Cypher & Dietz, 2009). The neoclassical growth theory is of the view that output growth is a consequence of one or more of three factors: increases in capital (through savings and investment) and technological improvement (Todaro & Smith, 2003).

The neoclassical growth theory assumes that the rate of technological progress is determined by scientific progress that is different and independent of economic forces. Thus, it points out that economists can take the long run growth rate as given exogenously from outside the economic system. That is to say, the long run growth potential or rate is determined by an outside force, which may be outside the model. Howitt (2008) explains that one of the common predictions of the neoclassical growth model is that, for an economy to converge towards a steady state rate of growth will greatly depend on the role of technological progress and the growth rate

of labor force. The neoclassical strand is in variants with the power-balance theory being a notable subclass of this group. The power-balance theory stresses on international power balance as an important factor in development, including the terms and patterns of trade which tend to keep some countries while other countries get richer (Cypher & Dietz, 2009; Dowling & Valenzuela, 2010).

3.2 Endogenous Growth Theory

Following the non-satisfactory performance of the neoclassical theory in explaining long-term growth have led to widespread discontent among development economists. The empirical research on growth using the neoclassical framework typically found that a significant portion of the growth rate of a country which was in excess of over 50 percent, could not be accounted for by changes in the use of physical capital and labor. The left behind eventually came to be known as “Solow residual”. The endogenous growth theory (also known as “*new growth theory*” tries to endogenize technical progress) provides a theoretical framework for analyzing long-run economic growth that is determined by forces that are internal to the economic system rather than by forces outside that system (Cypher & Dietz, 2009; Dowling & Valenzuela, 2010; Todaro & Smith, 2003). In the words of Cypher and Dietz (2009), it was not only the question as to whether economies could maintain rapid growth rates over the long term that infuriated many development economists, but there was also the relative slow progress of most Sub-Saharan economies as well as the somewhat lagging growth of rates in regions like Latin America among others. The supposedly convergence thesis proposed by the neoclassical group on the basis of economies with the same fundamentals like rate of saving or investment was thought to be a vague axiom of policy discussions on economic growth and development.

The strength of the endogenous growth theory is imbued in the fact that it does not assume, nor does it find, physical capital accumulation to be dominant factor in spurring economic growth or in explaining differences in income levels among nations (Cypher & Dietz, 2009). In addition, it also jettisoned the assumption of diminishing returns for at least some of the inputs of production. With this, there is the chance for nations to effectively turn their short run production into a dynamic, constantly evolving relationship, as opposed to being “fixed-in-time” functions where given quantities of physical inputs imposes a constraint on how much can be produced and on income levels. Interestingly, the rate of growth per capita income is not constrained by exogenous technological change but is internally, that is, endogenously, determined forces specific to each economy (Cypher & Dietz, 2009).

Cypher and Dietz (2009), further point out that in endogenous growth models, there is the possibility that countries will continue to grow quickly for long periods, even when they have already achieved relatively high incomes. Rapid growth rates can be sustained without an increase in the rate of saving or investment, something which is impossible in the neoclassical model. In most endogenous growth models, the rate of accumulation, initial stock of human capital as well as “research” capital (creation of knowledge) are key to the production contribution to growth (Azariadis et al. 2012; Laincz & Peretto, 2006; Maré, 2004; Takao, 2013).

3.3 New Institutional Theory

The new institutional theory builds on the weaknesses of existing economic theories. As inferred from the explanation of North (1993) that contrary to many attempts to replace the neoclassical theory, “the new institutional economics builds on, modifies and extends the neoclassical theory to permit it to come to grips and deal with an entire range of issues heretofore beyond its ken”. However, it abandons the suppose assumption of instrumental rationality and retains the fundamental assumption of scarcity. He continues to support this assertion by highlighting on the limitations of the old institutional framework by emphasizing that instrumental rationality has taking over the course of the world. Human beings are cognitively limited which imposes a constraint on human interaction in order to structure exchange. In sum, with human cognitive limits, there is yet a breakthrough in cognitive science. To him and others, the new additions are embedded in the intergenerational transfer of values, knowledge, and norms which vary radically among different ethnic groups and societies (Forson et al. 2013; North, 1993). Additionally, “it recognizes high incidence of market imperfections in the economy, especially in the early stages of development” (Yanagihara & Sambommatsu, 1997). This recognition leads to its adoption of market enhancing-government policy aimed at facilitating the private sector’s capacity to overcome coordination problems and other market imperfections. Another key point that distinguishes the new institutional theory from the neoclassical one is its treatment of the firm as an organization with internal coordination mechanisms. In this way, the new institutional theory allows one to draw on the connection among the ingredients of each economic agent to its behavior.

Nabli and Nugent (1989) explicated on the new institutional theory and maintained that its main goal is to overcome the limitations of conventional neoclassical theory in economics. According to the neoclassical perspective, considerable attention has been paid to four main types of constraint: individual preferences, technological opportunities, physical and human capital endowments together with market opportunities. Most analyses take the institutional inputs for granted with some even disregarding its essence by omitting it. It is without doubt the analyses of non-economists are rich and laden with much descriptive details with touching insights. 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” (Nabli & Nugent, 1989).

4. Corruption: definition and manifestation

One of the challenges of combating corruption is the struggle with defining it. Finding a more acceptable definition for corruption has been a tall order to overcome (Foster et al., 2012; Heinrich & Hodess, 2012). This is partly because, without an internationally agreed definition, operationalizing anti-corruption strategies is problematic. Meanwhile, one of the ways corruption may be differentiated is by discussing it within the enclave of public and private corruption. In the public domain, corruption could occur when a member of the tax-paying public is given poor service or ask to pay a bribe by one engaged in public service, which may either be a judge, a policeman, a civil servant etc. On the contrast, private corruption occurs when public company managers, whose duty is to safeguard the interests of shareholders, engage in side deals or even

make decision that benefits them as an individual as oppose to the company as a whole (Pellegrini, 2011; Yan, 2009). Yan (2009) further posits that corporate corruption generally takes two forms: engaging in bribe-making, thus acting as a supplier of bribes and the violations of ethical and professional standards with the intent to deceive and defraud investors.

Thus, all definitions of corruption include political corruption. Common phrases like “government for sale” have been used in several instances to describe corruption where government property or services are privatized (Eicher, 2009; Schleifer & Vishny, 1993). Other literature commonly define corruption as the “abuse of public power for private benefit” (Amundsen, 2000; Gerring & Thacker, 2004; Jonston, 2005; Kurer, 2005). Meanwhile, the World Bank and the International Monetary Fund (IMF) on the other hand define corruption in a slightly different manner as “the use of public office for private gain” (IMF, 1997; World Bank, 2013).

A more formal definition has been mainstreamed by Transparency International (TI). It defines corruption as “the abuse of entrusted power for private gain. Corruption hurts everyone whose life, livelihood or happiness depends on the integrity of people in a position of authority” (Hardoon & Heinrich, 2013). When corruption is understood this way, it allows one to look at abuses of power rather than which type of actors are engaged in corrupt behavior (Yan, 2009). There is also an attempt to make it more uniform and applicable in all facets of human endeavors. On the basis of this, transparency international further describes corruption under sixteen dimensions: Access to information, international convention, health, education, intergovernmental bodies, defense and security, oil and gas, forestry, climate change, sport, whistle-blowing, water, humanitarian assistance, private sector, politics and government, and poverty and development (Hardoon & Heinrich, 2013). More elaborations have emerged due to international and transnational dynamism of corruption and its implication to sustainable development in recent times. As a consequence, issues such as tax evasion and tax haven, transnational organized crimes such as money laundering, arms smuggling among others and corruption in sports have all emerged (Sanders, 2016; Transparency International, 2016; Unger, 2016).

4.1 Theories on the sources of corruption

Theories on the sources of corruption are in manifold and have widely been used based on economic and socio-cultural principles. Yet with the increasing importance attached to understanding the sources, others have contributed in extending these factors in both inductive and deductive studies. For instance, Dimant (2014) categorizes the sources of corruption into *economic* and *social* factors. Other instrumental writers such as Wang (2005) in an attempt to diagnose the causes of corruption in China used two terminologies – ‘social structural system’ and ‘social cultural character’. Though these categorizations are commendable, this research believes such delineations fails to acknowledge the impact of anticorruption policies on corruption which are subjectively inclined. These policies by extension shape social behavior.

Moreover, it is important to note that social behavior are the antecedents of existing set of rules. Rules according to North (1990) originates from institutions. Put formally, institution is generally understood as a representation of regularity in social behavior agreed by members of a

society, which specifies behavior in specific recurrent situations, and is either self-policed by some external authority (Schotter, 1981). By extension, institution affects human activities by defining what they can do or interact with each other. Based on this rationalization, the study classifies some of the determinants under the so-called social factors within the institutional perspectives. This allows the study to group the theories of corruption under three perspectives – historical roots, contemporary causes and institutional causes.

The historical connection primarily focuses on current administrative and political landscape that were inherited through colonization. Its key tenets includes legal codes, judicial system, religious sects, and ethno-linguistic fractionalization.

The second source known as contemporary causes provides more entrance for anti-corruption policy. Sources often discussed includes income levels of countries, the level of education, urbanization, access to media, resource abundance, trade monopoly, size of government, foreign aid inflows, and contemporary democracy.

The third source of corruption is categorized under the institutional perspective. It focuses on set of rules that shape human behavior and interaction. Its primary point of emphases is on political turnover, bureaucrats wage levels, and the quality of institutions that has to do with rule of law, government effectiveness, bureaucratic quality, property right protection, regulatory quality.

4.2. Corruption – development perspectives

4.2.1. *Sand vs. Grease*

Since 1987 when the official definition of SD became known as meeting the needs of the present without compromising the ability of future generations to meet their own needs (Brundtland Commission, 1987), it has suffered from operational challenges due to variation in living standards across countries. Consequentially, research activities have increasingly been tied to ED rather than SD, thus allowing considerable number of research publications brought out on the former. Early proponents of this relationship such as Leff (1964) and others controversially posits that where the institutional framework is not appropriate, especially where there is bureaucratic restrictions, corruption facilitates trade that would not have occurred without it (Saha & Mallik 2012). Various researchers have responded to this assumption, with both theoretical and empirical studies. Mauro was among the early scholars who was able to demonstrate the existence of significant negative correlation between corruption and private investment; with a consequential result that suggested that corruption reduces economic growth (Mauro, 1995). This created a fertile ground for other researchers to wade into the debate which has given rise to divisions between supporters of the positive effect of corruption on economic development on one side, who apparently came to be known as the “grease-in-the-wheel” strand, and proponents of the negative effect, also known as the “sand-in-the-wheel” strand.

Thus the sympathizers of these perspectives document extensive relationship between corruption and economic growth but with divergent views. Some researchers argue that corruption may serve to ensure that projects are awarded to the most efficient firms, who may cut their way

through bribe payment (Bardhan, 1997). Yet competing arguments point out that existing practice in more corrupt societies tend to encourage the most able to engage in rent-seeking activities. There is therefore an assumption that the most successful in rent-seeking in the society are the beneficiaries of corrupt practices, and not the most economically efficient. The reallocation of talents from productive to rent-seeking activities is seen to impact negatively on economic growth. Other literature further documents that corruption reduces both investment and growth (Murphy et al., 1993). Furthermore, Romer (1994) suggested that corruption, by imposing a tax on ex-post profits may in general reduce the flow of new goods and technology, particularly in a situation where an initial fixed cost investment is a prerequisite. In other words, there is a general assumption that suggests that corruption poses as an uncertainty in itself which ultimately serve to reduce investment flows. Mo in his seminal paper shares this analogy and concludes that corruption reduces the level of human and private investment (Mo, 2001). Corruption could be a barrier to investors, with less investment leading to slower economic growth. Likewise, a high level of corruption negatively affects foreign direct investment. In other circles, corruption could introduce an element of competition for government resources, and such competition could lead to government services being offered more efficiently (Wang & You, 2012).

When we consider the impact of corruption directly on SD, there are few studies to that effect. For instance, Venard (2013), using genuine wealth growth per capita as a proxy of SD concludes that corruption has a negative effect on sustainable development, but was quick to also point out that such a negative effect was well understood when institutional variables such as democracy and governance was used as control variables. Similar finding has been reported by Aidt (2010) in which a negative correlation was found between a range of wider corruption indices and growth in genuine wealth per capita. In investigating the relationship between corruption, resource curse and genuine savings, Dietz et al. (2007) points out that institutional quality depresses growth. When genuine and gross saving is regressed on three indicators of institutional quality (rule of law, bureaucratic quality and corruption), the finding reported suggest that reducing corruption has a positive impact on genuine saving in interaction with resource abundance.

5. A simple framework of corruption and Development outcomes

The focus of this section is to develop a simple conceptual framework on the corruption – development connection. This framework may be used as a guide by academicians and practitioners in understanding the mechanisms through which corruption evolves and affects ED and SD. It also elucidate how this impact may differ depending on how development is conceptualized and applied on the field of development studies. Note should be taken of the fact that a conceptual framework is a representation of an abstract idea. According to Chinn and Kramer (1999), a framework can be seen as a complex mental formulation of experience. They further elucidate by distinguishing it from a theoretical framework. They assert that, while theoretical framework is the theory on which the study is based, the conceptual framework deals with the operationalization of the theory. In other words, it represents the position of the researcher on the problem at hand and at the same time gives direction to the study. It may be entirely new, or an

adoption of, or adaptation of, a model used in previous research with modification to fit the context of the inquiry (Chinn & Kramer, 1999).

The framework developed in this study has three parts: the sources of corruption, perceived corruption and development outcomes. The in-depth literature survey on corruption and development provides the necessary ingredients for the construction of the framework. First, the extant literature shows that corruption originates from three main sources - historical roots, contemporary causes and institutional causes.

The second component of the framework deals with the question of “*what*” is corruption. From the literature it was established that one of the key challenges to combating corruption is understanding what it is from the perspective of an internationally agreed definition (Eicher, 2009a; Foster et al. 2012; Heinrich & Hodess, 2012). The TI index helps in overcoming this challenge by providing a proxy that captures perceived corruption. In the literature, there are evidence to suggest corruption thrives in a dysfunctional institutional environment and thus governance plays a key mediating role to the spate of corruption.

The third component of the framework is development outcomes. Part of the component is adopted from the growth literature (Cypher & Dietz, 2009) on the use of GDP per capita as a measure of ED. The other part is from the comprehensive review on the emerging measures of sustainability by Costanza et al. (2009). Genuine wealth per capita is an offshoot of the first category and is used as a measure of SD (see Figure 1). A distinctive feature of this framework is that it brings to the fore the strengths and shortcomings of each development outcome for policy makers to decide which of the outcomes of well-being should be given priority in the pursuit of a particular trajectory.

Sources of Corruption

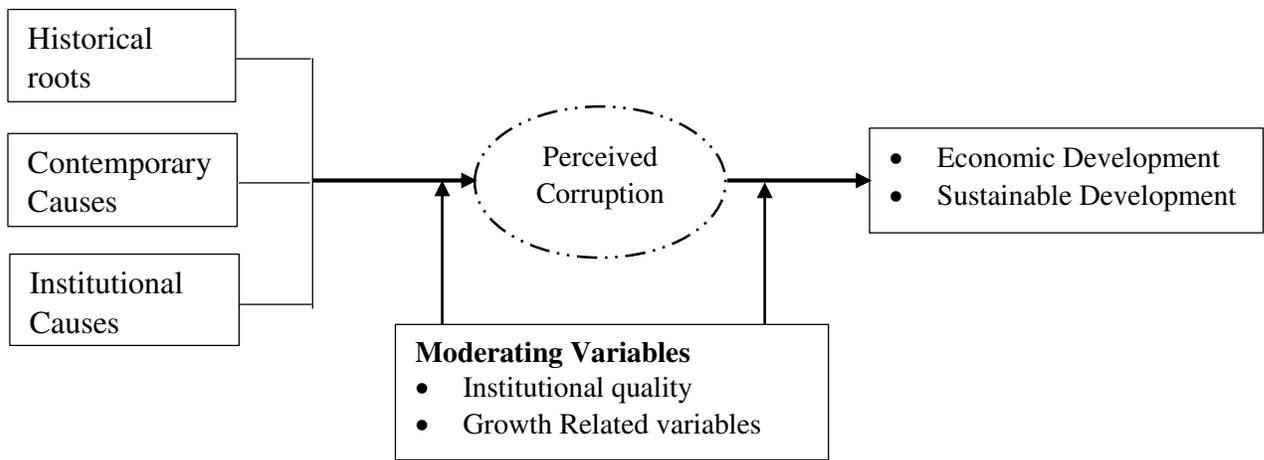


Figure 1. A simple framework of corruption and development

It can be observed from Figure 1, that corruption originates from three main sources. The implication here is that the historical background of a country could significantly have a telling

effect on current state of corruption. For instance, Glaeser and Shleifer (2002) documents that historical antecedents largely traces the effort of property owners to limit the discretionary power of the monarch as the origin of common law or legal codes. La Porta et al. (1999) suggests that the actions of independent judicial system in countries that adopted the British legal code will be conducive to better governance with lower levels of corruption than those of the French origin. British civil structure is premised on procedural aspects of the law which enhances the capability of subordinates and judges to challenge hierarchies in order to enforce the law (Treisman, 2000). Mauro (1995) pointed out that a more ethnically fractionalized country tend to be more corrupt.

The contemporary causes more or less measures the effectiveness of anticorruption policies. The fight against corruption is helped by the reduction of non-generic state regulation and that corruption would be associated to the size of government activities (Acemoglu & Verdier, 2000; Chaufen & Guzman, 1999b; Kotera et al. 2012). Monopoly or restriction on import creates opportunities for corruption by limiting the ability of citizens to choose from other goods and services (Vian, 2008). corruption is associated to the size of government activities (Acemoglu & Verdier, 2000). Other theories also suggest at the higher income levels or additional income obtained through legitimate means, corrupt practices could be less tempting because of decreasing marginal utility of income (Forson & Opoku, 2014; Schulze & Frank, 2003). According to Alesina and Dollar (2000), foreign aid inflow is weakly correlated with the development of beneficiary countries, but is strongly related to other elements such as cultural and historical proximity between donor and recipient countries. The level of education attainment significantly affects the state of corruption (Asongu, 2015; Kaffenberger, 2012).

The institutional perspective posits that in stable administrations, politicians and bureaucrats face less chances of dismissal and have more opportunity for long-run advancement in their careers (Treisman, 2000). Corruption scandals freely enquired and exposed by the mass media act as a deterrent for bureaucrats and politician to engage in corrupt practices (Camaj, 2013; Färdigh, 2012). Based on this discussion, I propose that:

H1. There is significant and positive relationship between the sources of corruption (*historical, contemporary and institutional*) and the state of corruption.

The second component of the framework is the perceived level of corruption. What the framework sought to articulate here is that, the level of corruption (perceived or experienced) is a representation of institutional inefficiencies. The implication here is that institutional quality and the state of an economy plays a mediating role in defining human interaction and behavior (North, 1990; Schotter, 1981). With this in mind, I propose that:

H2. The spate of corruption and development is contingent on existing institutions and the state of the economy.

The third component of the framework focuses on the link between corruption and the two development outcomes. The following implications can be drawn here. First, corruption comes at

a cost irrespective of the source. Economic development doesn't necessarily take into account this cost component as it primarily pride itself with the gains measured in per capita income. There are several empirical evidences that supports this assertion. Meanwhile, it should be noted that until Ugur's comprehensive meta-analysis on this linkage (see Ugur, 2014), it was thought the corruption-development relationship have always supported the notion of promoting economic growth (Leff 1964; Wang & You 2012). Bardhan (1997) and Saha and Mallik (2012) collectively elucidates that corruption facilitates trade and enhances efficiency that would not have occurred without it. Similar assertion is made by Aghion et al. (2016) who demonstrate in their endogenous growth model that political corruption governs the efficiency with which tax revenues are translated into infrastructure. Based on these analogy, I propose that:

H3. There is significant positive relationship between corruption and economic development.

Contrasting this view with sustainable development, the compromises such as environmental damages, pollution, the social cost of corruption among others are estimated and deducted from the wealth acquired to indicate the true state of investment or disinvestment in an economy (see Arrow et al. 2003; Hamilton & Clemens, 1999; Hamilton et al. 1997; Hamilton, 1999). However there are dearth studies on the corruption-sustainability dichotomy. For instance, Aidt (2010) and Venard (2013) using genuine wealth per capita as a measure of sustainability finds a negative relationship between corruption and sustainable development. Dietz et al. (2007) corroborates this claim by emphasizing that corruption depresses sustainable growth. I therefore propose that:

H4. There is significant negative relationship between corruption and sustainable development

The proposed framework shows that the level of corruption in an economy is contingent on the progress made by the economy which determines the quality of institutions. It also argues the impact of corruption on development can substantially vary depending on how it is conceptualized.

6. Discussion and Recommendation

The central goal of policy makers across the globe is to deal with poverty, inequality and deprivation among disadvantaged economies. To be able to do that, one has to have a better grasp of what leads to these challenges. A cursory look at existing literature points to a number of factors that includes corruption. But variations in cultural values makes formalization of what corruption exactly is challenging (Bardhan, 1997; Eicher, 2009) until the emergence of TI definition. Dealing with corruption equally means understanding where it originates. Note should be taken that corruption cuts across all dimensions of the human endeavor. In the same way, its impact on development can be as contentious as the subject itself. Yet inferring from the corruption – development literature, one is made to believe at certain point, corruption greases the wheels of

development while at another point is damaging. Corruption might seem to be a necessary evil. Therefore it requires a much deeper thinking to assess how it impacts on development. This is what the framework in this article seeks to articulate. This paper has contributed in the conceptualization of corruption and development and will enhance theory, research and practice on the field of development studies and allied areas.

As noted by Myrdal, development is broad and thus requires a much broader intervention to deal with it. Such intervention must meet the demands of the entire social system thesis advanced in his definition (see Myrdal 1974).

From this framework, several areas of research can be pursued to benefit research and practice on the corruption – development nexus. To begin with, it is suggested future research will have to determine empirical support for this simple framework. The contentious nature of the subjects of corruption and development implies more research is needed to deepen understanding regardless of what already exist. Moreover, there are dearth studies on the sustainability strand of development. It is also observed most of the studies on corruption and development have mainly been done in the advanced world due to data challenges. It is therefore suggested that, research be conducted on developing countries especially at the micro level to shed more light on country-level experience. The framework in this paper is also applicable to emerging international and transnational dynamism of corruption in which areas such as tax evasion and tax havens, transnational organized crimes (e.g. money laundering, arms smuggling, human trafficking and forced labour etc.), and corruption in sports have emerged. It is also observed corruption is difficult to objectively measure. Critics argue the use of perception doesn't really help, hence the need to come out with measure based on experience either at the micro or macro level to augment existing ones. For this framework to be tested, future studies should try as much as possible to come out with valid and reliable measurements.

7. Conclusion

This paper fundamentally proposes a conceptual framework on the relationship between corruption and development. The paper demonstrates how the impact of corruption on economic development (ED) might vary substantially from sustainable development (SD). The paper discusses the challenges with measuring development on economic dimension as opposed to a broad-based approach that entails the dimensions and principles espoused by the concept of sustainability. It further suggest GDP fails to account for the sources and damages a resultant output has on an economy. A higher GDP could possibly imply an unbalanced social welfare. However, when the impact is inferred from genuine wealth per capita (sustainability), the true state of the economy is known. In other words, the compromises GDP makes in its estimation is accounted for in genuine wealth per capita. This comparison comes at a time when resource-rich economies are fast depleting natural endowments without redress in pursuit of the “GDP is good” phenomenon. The argument and proposition made in this study contributes to the literature of sustainability and at the same time allay all misconceptions regarding the meaning and application

of SD. A conscious attempt is hereby made to strike a comparison between the concept of ED and SD.

The paper also discusses corruption and identifies three broad areas where corruption originates. On the corruption- development connection, two strand of literature becomes the focal point (i.e. grease vs. sand). The concepts in this study are driven by theories of development. These strand of literature are used as basis for the development of the conceptual framework. The framework shows that the spate of corruption is contingent on existing institution and previous gains in development trajectory. It also suggest corruption has a negative relationship with sustainability, whiles on economic well-being, the impact might be positive. The hypothesized relation is possible as corruption comes at a cost irrespective of the source and how it is rationalized. Its effects on economic growth may not necessarily take into account this cost component as it primarily pride itself with gains that are spontaneous (Aghion et al. 2016; Bardhan, 1997; Saha & Mallik, 2012; Wang & You, 2012). Contrasting this view with sustainable development, the compromises such as environmental damages, pollution, the social cost of corruption among others are incorporated and thus the consequence of corruption on sustainability could be negative (Aidt, 2010; Dietz et al. 2007; Venard, 2013). The paper concludes by reechoing the need to adopt a broad-based approach to the conceptualization of well-being. This paper believes such an approach will be more efficient in directing policy interventions to desirable outcomes whiles mitigating the negative externalities associated with the former approach of development.

References

- Acemoglu, D., & Verdier, T. (2000). The Choice between market failures and corruption. *America Economic Review*, 1(90), 194–211. <http://doi.org/10.1257/aer.90.1.194>
- Aghion, P., & Howitt, P. (1997). *Endogenous Growth Theory*. Cambridge: Massachusetts: MIT Press.
- Aghion, P., Akcigit, U., Cage, J., & Kerr, W. (2016). Taxation, corruption, and growth. *European Economic Review*, 86, 24–51. <http://doi.org/10.1016/j.euroecorev.2016.01.012>
- Aidt, T. S. (2010). *Corruption and Sustainable Development* (No. CWPE 1061). Cambridge. Retrieved from <https://www.repository.cam.ac.uk/bitstream/handle/1810/242086/cwpe1061.pdf;jsessionid=33A12327621029A0EF0B686DD27C5E5C?sequence=1>
- Alesina, A., & Dollar, D. (2000). Who Gives Foreign Aid to Whom and Why? *Journal of Economic Growth*, 5(1), 33–63. <http://doi.org/10.1023/A:1009874203400>
- Amundsen, I. (2000). *Political Corruption: An Introduction to the Issues*. Bergen: Chr. Michelsen Institute. Retrieved from <http://www.cmi.no/publications/1999/wp/wp1999-7.pdf>
- Anielski, M. (2012). *Genuine Wealth: Building Flourishing Economies of Well-Being*. Retrieved from <http://www.genuinewealthinc.com/download/whitepapers/Building Economies of Wellbeing.pdf>

- Arrow, K., Dasgupta, P., & Maher, K.-G. (2003). The Genuine Savings Criterion and the Value of population. *Economic Theory*, 21(2), 217–225. <http://doi.org/10.1007/s00199-002-0335-2>
- Arrow, K., Dasgupta, P., Maher, K-G., Goulder, L., Daily, G., Ehrlich, P., Heal, G., Levin, S., Schneider, S., Starrett, D., & Walker, B. (2004). Are We Consuming Too Much? *The Journal of Economic Perspectives*, 18(3), 147–172. <http://doi.org/10.1111/j.1523-1739.2007.00770.x>
- Asongu, S. (2015). The incremental effect of education on corruption : evidence of synergy from lifelong learning. *Economics Bulletin*, 35(4), 2288–2308.
- Azariadis, C., Chen, B.L., Lu, C.H. & Wang, Y. C. (2012). *A Two-sector Model of Endogenous Growth with Leisure Externalities*. St. Louis. Retrieved from <http://research.stlouisfed.org/wp/2012/2012-045.pdf>
- Bamidele, O. (2013). Corruption, Conflict and Sustainable Development in African States. *The African Symposium*, 13(1). Retrieved from http://www.ncsu.edu/aern/TAS13.1/TAS13.1_Bamidele.pdf
- Bardhan, P. (1997). Corruption and Development: A Review of Issues. *Journal of Economic Literature*, 35(3), 1320–1346. Retrieved from <http://www.e-jel.org/archive/sept1997/Bardhan.pdf>
- Brundtland Commission. (1987). *Our Common Future*. New York: Oxford University Press. Retrieved from http://conspect.nl/pdf/Our_Common_Future-Brundtland_Report_1987.pdf
- Camaj, L. (2013). The Media’s Role in Fighting Corruption: Media Effects on Governmental Accountability. *International Journal of Press/Politics*, 18(1), 21–42. <http://doi.org/10.1177/1940161212462741>
- Chaufen, A.A., & Guzman, E. (1999). *Economic freedom and Economic*. In G.P.O’Driscoll, K. R. Holmes & Kirkpatrick (Eds.), *2000 index of economic freedom*. Washington: Heritage Foundation.
- Chinn, P.L., & Kramer, M. K. (1999). *Theory and Nursing: Integrated Knowledge Development* (5th ed.). St. Louis: Mosby Inc.
- Claros, A. L. (2013). *Removing Impediments to Sustainable Economic Development: The Case of Corruption* (No. 6704). New York. Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2355623
- Costanza, R., Fisher, B., &. (2007). Quality of Life: An Approach Integrating Opportunities, Human Needs, and Subjective Well-Being. *Ecological Economics*, 61(2-3), 267–276. <http://doi.org/10.1016/j.ecolecon.2006.02.023>
- Costanza, R., Funtowics, S.O., & Ravetz, J. R. (1992). Assessing and Communicating Data Quality in Policy relevant Research. *Environmental Management*, 16(1), 121–131. <http://doi.org/10.1007/BF02393914>
- Costanza, R., Hart, M., Posner, S., & Talberth, J. (2009). *Beyond GDP: the Need for New Measures of Progress*. Boston MA. Retrieved from

<http://www.bu.edu/pardee/files/documents/PP-004-GDP.pdf>

- Cypher, J. M. & Dietz, J. L. (2009). *The process of Economic Development* (3rd ed.). London and New York: Routledge.
- Daly, H.E., & Cobb, J. B. (1989). *For the Common Good: Redirecting the Economy Toward Community, the Environment, and a Sustainable Future*. Boston: Beacon Press.
- Dasgupta, P., & Maher, K.-G. (2000). Net National Products, Wealth, and Social-Well Being. *Environment and Development Economics*, 5(1), 69–93. Retrieved from http://journals.cambridge.org/abstract_S1355770X00000061
- Diener, E., & Suh, E. M. (1999). National Differences in Subjective Well-Being. In *Well-Being: The Foundations of Hedonic Psychology*. Kahneman, Diener & Schwarz (pp. 434–450). New York: Russell Sage Foundation.
- Dietz, s., & Neumayer, E. (2005). *Some Constructive Criticisms of the Index of Sustainable Economic Welfare*. Retrieved from [http://personal.lse.ac.uk/dietzs/Some constructive criticisms of the index of sustainable economic welfare.pdf](http://personal.lse.ac.uk/dietzs/Some%20constructive%20criticisms%20of%20the%20index%20of%20sustainable%20economic%20welfare.pdf)
- Dietz, S., Neumayer, E., & De Soysa, I. (2007). Corruption, the resource curse and genuine saving. *Environment and Development Economics*, 12(1), 33–53. <http://doi.org/doi:10.1017/S1355770X06003378>
- Dimant, E. (2014). *The Nature of Corruption: An Interdisciplinary Perspective* (No. 2014-06). Germany. Retrieved from <http://groups.uni-paderborn.de/fiwi/RePEc/pdf/wpaper/WP79.pdf>
- Dowling, J.M., & Valenzuela, M. R. (2010). *Economic Development in Asia* (2nd ed.). Singapore: CENGAGE Learning.
- Eicher, S. (2009). *Corruption in International Business: the Challenges of Cultural and Legal Diversity*. Burlington: Farnham, England ; Burlington, VT : Gower,.
- Ersson, S. & Lane, J. (1996). Democracy and Development: A Statistical Exploration. In *Democracy and Development: Theory and Practice*. Adrian, L. (pp. 45–73). Cambridge: Polity Press.
- Färdigh, M. A. (2012). *Free Media and Quality Of Government: The role of media in promoting quality of government institutions in the European Union*. (No. 2012:13). *Quality of Government Institute working conference*. Nice. Retrieved from www.qog.pol.gu.se/digitalAssets/1385/1385069_2012_13_f--rdigh.pdf
- Forson, J.A., & Opoku, R. A. (2014). Government's Restructuring Pay Policy and Job Satisfaction: The Case of Teachers in the Ga West Municipal Assembly of Ghana. *International Journal of Management, Knowledge and Learning*, 3(1), 79–99. <http://doi.org/10.2139/ssrn.2457629>
- Forson, J.A., Buracom, P., Baah-Ennumh, T.Y., Chen, G., & Carsamer, E. (2015). Corruption, EU Aid Inflows and Economic Growth in Ghana : Cointegration and Causality Analysis. *Contemporary Economics*, 9(3), 299–318. <http://doi.org/10.5709/ce.1897-9254.171>
- Forson, J.A., Janrattanagul, J., & Carsamer, E. (2013). Culture Matters: A Test of Rationality on

- Economic Growth. *Asian Social Science*, 9(9), 287–300.
<http://doi.org/10.5539/ass.v9n9p287>
- Foster, J. E., Horowitz, Andrew, W., & Méndez, F. (2012). An Axiomatic Approach to the Measurement of Corruption : Theory and Applications. *The World Bank Economic Review*, 47(2), 207–231. Retrieved from <http://www.econ.puc-rio.br/pdf/seminario/2009/Foster-Horowitz-Mendez.pdf>
- Fox, J. (2008, April). Don't Ditch the GDP. *Time Magazine*. Retrieved from http://business.time.com/2008/04/11/new_column_dont_ditch_gdp/
- Gerring, J. & Thacker, S. C. (2004). Political Institutions and Corruption: The Role of Unitarism and Parliamentarism. *British Journal of Political Science*, 34(2), 295–330.
<http://doi.org/10.1017/S0007123404000067>
- Glaeser, E. L., & Shleifer, A. (2002). Legal Origins. *Quarterly Journal of Economics*, 117(4), 1193–1229. <http://doi.org/10.3386/w8272>
- Hamilton, K., & Clemens, M. (1999). Genuine Savings Rates in Developing Countries. *World Bank Economic Review*, 13(2), 333 – 356. <http://doi.org/10.1093/wber/13.2.333>
- Hamilton, K., & Ruta, G. (2006). *Where is the Wealth of Nations? Measuring Capital for the 21st Century*. Washington DC. Retrieved from <http://siteresources.worldbank.org/INTEEI/214578-1110886258964/20748034/All.pdf>
- Hamilton, K., Atkinson, G., & Pearce, D. (1997). *Genuine Savings as and Indicator of Sustainability* (No. GEC 97-03). London.
- Hamilton, K. (1999). *Sustaining Economic Welfare: Estimating Changes in Per Capita Wealth*. Washington DC. Retrieved from <http://elibrary.worldbank.org/doi/book/10.1596/1813-9450-2498>
- Hardoon, D., & Heinrich, F. (2013). *Global Corruption Barometer*. Berlin: Transparency International. Retrieved from http://www.transparency.org/whatwedo/pub/global_corruption_barometer_2013
- Harris, J. M. (2000). *Basic Principles of Sustainable Development* (No. 00-04). Medford. Retrieved from http://ase.tufts.edu/gdae/publications/working_papers/Sustainable_Development.PDF
- Heinrich, F., & Hodess, R. (2012). Measuring Corruption. In *Handbook of Global Research and Practice Corruption: Adam Graycar and Russell G. Smit*. Canberra: Edward Elgar Publishing.
- Howitt, P. (2008). Endogenous Growth. In S. D. & L. Blume (Ed.), *The New Palgrave Dictionary of Economics* (2nd ed.). New York: Palgrave Macmillan.
- Ickes, B. W. (1996). Endogenous Growth Models, (1), 1–26. Retrieved from <http://econ.la.psu.edu/~bickes/endogrow.pdf>
- IMF. (1997). *Good Governance: the IMF's Role*. Washington DC: IMF Publication. Retrieved from <http://www.imf.org/external/pubs/ft/exrp/govern/govern.pdf>

- Jonston, M. (2005). *Syndromes of Corruption: Wealth, Power and Democracy*. Cambridge. Retrieved from http://www.untag-smd.ac.id/files/Perpustakaan_Digital_1/CORRUPTION_Syndromes_of_Corruption.pdf
- Jun, M. (2007). After Green GDP, What Next? Retrieved December 4, 2013, from <https://www.chinadialogue.net/article/show/single/en/1219-After-green-GDP-what-next>
- Kaffenberger, M. (2012). *The Effect of Educational Attainment on Corruption Participation in Sub-Sahara Africa*. Graduate School of Vanderbilt University. Retrieved from <http://etd.library.vanderbilt.edu/available/etd-03222012-205534/unrestricted/Kaffenberger.pdf>
- Kotera, G., Okada, K., & Samreth, S. (2012). Government size, democracy, and corruption: An empirical investigation. *Economic Modelling*, 29(6), 2340–2348. <http://doi.org/10.1016/j.econmod.2012.06.022>
- Kurer, O. (2005). Corruption: An Alternative Approach to Its Definition and Measurement. *Political Studies*, 53(1), 222–239. <http://doi.org/10.1111/j.1467-9248.2005.00525.x>
- La Porta, R., Lopez-De-Silanes, F., Shleifer, A., et al. (1999). The Quality of Government. *Journal of Law Economics & Organisation*, 15(1), 222–279. <http://doi.org/10.3386/w6727>
- Laincz, C. A., & Peretto, P. F. (2006). Scale effects in endogenous growth theory : an error of aggregation not specification. *Journal of Economic Growth*, 263–288. <http://doi.org/10.1007/s10887-006-9004-9>
- Lawn, P. A. (2005). An Assessment of the Valuation Methods Used to Calculate the Index of Sustainable Economic Welfare (ISEW), Genuine Progress Indicator (GPI), and Sustainable Net Benefit Index (SNB). *Environment, Development, and Sustainability*, 7(2), 185–208. <http://doi.org/10.1007/s10668-005-7312-4>
- Layard, R. (2011). *Happiness: Lessons from a New Science* (2nd ed.). Penguin.
- Leff, N. H. (1964). Economic Development Through Bureaucratic Corruption. *American Behavioral Scientist*, 8(3), 8–14. <http://doi.org/10.1177/000276426400800303>
- Liu, J. (2006). China Releases Green GDP Index, Tests New Development Path. Retrieved December 4, 2013, from <http://journal.probeinternational.org/2006/09/28/china-releases-green-gdp-index-tests-new-development-path/>
- MA. (2005). *Ecosystems and Human Well-Being: Synthesis (Millennium Ecosystem Assessment)*. Washington DC. Retrieved from www.unep.org/maweb/documents/document.356.aspx.pdf
- Maré, D. C. (2004). *What Do Endogenous Growth Models Contribute ?* New Zealand. Retrieved from http://motu-www.motu.org.nz/wpapers/04_04.pdf
- Mauro, P. (1995). Corruption and Growth. *Quarterly Journal of Economics*, 110(3), 681–712. <http://doi.org/10.1007/s12117-997-1097-9>
- Mo, P. H. (2001). Corruption and Economic Growth. *Journal of Comparative Economics*, 29(1), 66–79. <http://doi.org/10.1006/jceec.2000.1703>
- Murphy, K., Shleifer, A., & Vishny, R. (1993). Why is Rent-Seeking so Costly to Growth?

- American Economic Review*, 83(2), 409–414. <http://doi.org/10.2307/2117699>
- Myrdal, G. (1974). What Is Development? *Journal of Economic Issues*, 8(4), 729–736. Retrieved from <http://www.jstor.org/stable/4224356>
- Nabli, M.K. & Nugent, J. B. (1989). *The New Institutional Economics and Development: theory and applications in Tunisia*. Amsterdam: Elsevier Science Ltd.
- Neumayer, E. (1999). The ISEW-Not an Index of Sustainable Economic Welfare. *Social Indicators Research*, 48(1), 77–101. <http://doi.org/10.1023/A:1006914023227>
- Neumayer, E. (2000). On the Methodology of ISEW, GPI and Related Measures: some Constructive Suggestions and some Doubt on the “Threshold” Hypothesis. *Ecological Economics*, 34(3), 347–361. [http://doi.org/10.1016/S0921-8009\(00\)00192-0](http://doi.org/10.1016/S0921-8009(00)00192-0)
- North, D. C. (1990). *Institutions, Institutional Change, and Economic Performances*. New York: Cambridge university press.
- North, D. C. (1993). The New Institutional Economics and Development. Retrieved October 10, 2013, from [http://www.deu.edu.tr/userweb/sedef.akgungor/Current topics in Turkish Economy/north.pdf](http://www.deu.edu.tr/userweb/sedef.akgungor/Current%20topics%20in%20Turkish%20Economy/north.pdf)
- Nwaobi, G. (2013). *Global Insecurity, Transparency and Sustainable Development: African Challenges* (No. 48752). Munich. Retrieved from http://mpra.ub.uni-muenchen.de/48752/1/MPRA_paper_48752.pdf
- Ohler, H., Nunnenkamp, P., & Dreher, A. (2012). Does conditionality work ? A test for an innovative US aid scheme. *European Economic Review*, 56, 138–153. <http://doi.org/10.1016/j.euroecorev.2011.05.003>
- Parris, T.M., & Kates, R. W. (2003). Characterizing and Measuring Sustainable Development. *Annual Review of Environment and Resources*, 28(13), 559–586. <http://doi.org/10.1146/annurev.energy.28.050302.105551>
- Pearce, D.W., & Atkinson, G. (1993). Capital Theory and the Measurement of Sustainable Development: An Indicator of Weak Sustainability. *Ecological Economics*, 8, 103–108. [http://doi.org/10.1016/0921-8009\(93\)90039-9](http://doi.org/10.1016/0921-8009(93)90039-9)
- Pellegrini, L. (2011). Economic Analysis of Corruption. In *Corruption, Development and the Environment* (pp. 13–26). Berlin: Springer. <http://doi.org/10.1007/978-94-007-0599-9>
- Romer, P. (1994). New Goods, Old Theory, and the Welfare Costs of Trade Restrictions. *Journal of Development Economics*, 43(1), 5–38. [http://doi.org/10.1016/0304-3878\(94\)90021-3](http://doi.org/10.1016/0304-3878(94)90021-3)
- Saha, S., & Mallik, G. (2012). Is Corruption Always Growth-Inhibitory? A Cross-National Study in Non-Linear Frame Work. Retrieved April 29, 2014, from <http://ace2012.org.au/ACE2012/Documents/038.pdf>
- Sanders, C. (2016). Transparency International calls for immediate action by world leaders to stop secret companies. Retrieved June 11, 2016, from http://www.transparency.org/news/pressrelease/transparency_international_calls_for_immediate_action_by_world_leaders_to_s

- Santos-Martin, F., Martin-Lopez, B., Garcia-Llorente, M., Aguado, M., Benayas, J., & Montes, C. (2013). Unraveling the Relationships between Ecosystems and Human Wellbeing in Spain. *PLoS ONE*, 8(9). <http://doi.org/10.1371/journal.pone.0073249>
- Schleifer, A., & Vishny, R. (1993). Corruption. *Quarterly Journal of Economics*, 108(3), 599–617. Retrieved from <http://www.jstor.org/stable/2118402>
- Schotter, A. (1981). *The Economic Theory of Social Institutions*. New York: Cambridge university press.
- Schulze, G. G., & Frank, B. (2003). Deterrence versus intrinsic motivation: Experimental evidence on the determinants of corruptibility. *Economics of Governance*, 4(2), 143–160.
- Sen, A. K. (2000). *Development as Freedom*. New York: Anchor Books. Retrieved from <http://blog.lib.umn.edu/ipid/ipid/Dev.asFreedom-Sen-Ch.1.pdf>
- Sen, A. K. (2001). Democracy and Social Justice. In *Democracy, Market Economics and Development: An Asian Perspective*. Farrukh, I., & Jong-Ii, Y. (pp. 7–24). Washington DC: The World Bank.
- Smits, J.P., & Hoekstra, R. (2011). *Measuring Sustainable Development and Societal Progress: Overview and Conceptual Approach*. Den Haag. Retrieved from <http://www.cbs.nl/NR/rdonlyres/C32647F1-1EBB-4CDF-861C-F80A8BD99CF3/0/measuringustainabledevelopment.pdf>
- Solow, R. M. (1956). A Contribution to the Theory of Economic Growth. *The Quarterly of Journal Economics*, 70(1), 65–94. Retrieved from <http://www.jstor.org/stable/1884513>
- Takao, K. (2013). Dynamic Analysis of an Endogenous Growth Model with Investment-Specific Technological Change. *Japanese Economic Review*, 64(3). <http://doi.org/10.1111/jere.12018>
- Talberth, D.J., Cobb, C., & Slattery, N. (2007). *The Genuine Progress Indicator 2006: A Tool for sustainable Development*. Retrieved from http://web.pdx.edu/~kub/publicfiles/MeasuringWellBeing/Talberth_2006_GPI.pdf
- Todaro, M.P., & Smith, S. C. (2003). *Economic Development* (8th ed.). Boston: Addison Wesley.
- Transparency International. (2016). Corruption in Sport Initiative. Retrieved June 11, 2016, from http://www.transparency.org/news/feature/sport_integrity
- Treisman, D. (2000). The causes of corruption: A cross-national study. *Journal of Public Economics*, 76(3), 399–457. [http://doi.org/10.1016/S0047-2727\(99\)00092-4](http://doi.org/10.1016/S0047-2727(99)00092-4)
- Ugur, M. (2014). Corruption's Direct Effects on Per-Capita Income Growth: a Meta-Analysis. *Journal of Economic Surveys*, 28(3), 472–490. <http://doi.org/10.1111/joes.12035>
- UN- DESA. (2013). *The Millennium Development Goals: We Can End Poverty-2015*. New York. Retrieved from <http://www.un.org/millenniumgoals/pdf/report-2013/mdg-report-2013-english.pdf>
- UN- MDG. (2013). *The Millennium Development Goals Report*. Washington DC. Retrieved

- from <http://www.un.org/millenniumgoals/pdf/report-2013/mdg-report-2013-english.pdf>
- UN-DESA. (2003). *Monterrey Consensus of the International Conference on Financing for Development*. Washington DC. Retrieved from <http://www.un.org/esa/ffd/monterrey/MonterreyConsensus.pdf>
- UNDP. (1990). *Human Development Report: Overview*. New York: Oxford Press. Retrieved from http://hdr.undp.org/en/media/hdr_1990_en_front.pdf
- UNDP. (2007). *Human Development Report 2007/2008: Fighting Climate Change: Human Solidarity in a Divided world: Summary*. Washington DC. Retrieved from http://hdr.undp.org/en/media/HDR_20072008_Summary_English.pdf
- UNDP. (2016). Sustainable Development Goals (SDGs). Retrieved June 10, 2016, from <http://www.undp.org/content/undp/en/home/sdgoverview/post-2015-development-agenda.html>
- Unger, D. (2016). FIFA: Another own Goal? Retrieved June 11, 2016, from <http://blog.transparency.org/2016/05/20/fifa-another-own-goal/>
- UNICEF. (2013). *Sustainable Development Starts and Ends with Safe, Healthy and Well-Educated Children*. Retrieved from http://www.unicef.org/ceecis/Sustainable_Development_post_2015.pdf
- United Nations. (2012). *The Millennium Development Goals Report*. New York. Retrieved from http://www.un.org/millenniumgoals/pdf/MDG_Report_2012.pdf
- United Nations. (2013). *The Millennium Development Goals Report*. New York. Retrieved from <http://www.un.org/millenniumgoals/pdf/report-2013/mdg-report-2013-english.pdf>
- Veenhoven, R. (2008). *World Data Base of Happiness: Continuous Register of Scientific Research on Subjective Appreciation of Life*. Rotterdam. Retrieved from <http://www1.eur.nl/fsw/happiness/>
- Venard, B. (2013). Institutions, Corruption and Sustainable Development. *Economic Bulletins*, 33(4), 2545–2562. Retrieved from <https://hal-audencia.archives-ouvertes.fr/hal-00874275>
- Vian, T. (2008). Review of Corruption in the Health Sector: Theory, Method and Interventions. *Health Policy and Planning*, 23(2), 83–94. <http://doi.org/10.1093/heapol/czm048>
- Wang, Y., & You, J. (2012). Corruption and firm growth: Evidence from China. *China Economic Review*, 23(2), 415–433. <http://doi.org/10.1016/j.chieco.2012.03.003>
- Wang, Y. (2005). Corruption and Anti-Corruption Policy in Today's China. *Hitotsubashi Journal of Law and Politics*, (33), 1–5. Retrieved from <http://hdl.handle.net/10086/8134>
- World Bank. (2004). *What is Development?* Washington DC. Retrieved from http://www.worldbank.org/depweb/english/beyond/beyondco/beg_01.pdf
- World Bank. (2013). Helping countries combat corruption: The role of the World Bank. Retrieved October 17, 2013, from <http://www1.worldbank.org/publicsector/anticorrupt/corruptn/cor02.htm>

- Yan, Q. (2009). An Institutional Approach to understanding Corruption in BRIC Countries. In S. Eicher (Ed.), *Corruption in International Business: The Challenge of Cultural and Legal Diversity* (p. 143). England: Gower Publishing Company.
- Yanagihara, T. (1997). Economic System Approach and its Applicability. In *East Asian Development Experience: Economic Systems Approach and its Applicability*. (Eds, pp. 1–35). Tokyo: Institution of Development Economies.
- Yang, W., Dietz, T., Kramer, B.D., Chen, X., & Liu, J. (2013). Going Beyond the Millennium Ecosystem Assessment: An Index System of Human Well-Being. *PLoS ONE*, 8(5). <http://doi.org/10.1371/journal.pone.0064581>