

Nigerian Development and the MDGS: a Theory on the Poverty/Corruption Incidence

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Abstract

This paper examines empirical evidence for the World Bank (2013) country report for Nigeria implying poverty and corruption may be different sides of the same coin. A quantitative Corruption Index theorized to double as poverty rate is developed and its efficacy tested using regression analysis. The results indicate Poverty/Corruption is still endemic and Nigeria could not meet the premier Millennium Development Goal at the target date of 2015. The theorized Corruption Index singly explains 37.9% of variations in RGDP for the whole economy and 33.7% of variations in RGDP for agriculture and the Index is statistically significant at 5 per cent level with expected negative signs. Corruption is still significant when other predictor variables - total public expenditure and cumulative public expenditure on agriculture are added to the growth models. The theory's explanation not only works in principle but also meets with some *quantitative* success and could serve as the basis for further empirical investigations of the corruption/poverty relationship in Nigeria. There is some evidence indicating the dual face of poverty/corruption theorized by this paper and this could support the 2013 World Bank report for Nigeria. The paper therefore recommends government reduce general administrative expenditure and increase agriculture expenditure to enhance development and reduce the poverty/corruption incidence in Nigeria.

Keywords: *Poverty, Corruption, Development, Theory, Public Expenditure.*

Background to the Study

The Concept of Development

Development could be viewed as a physical reality or as a state of mind for attaining a physical reality. Thus, the concept of development is now generally accepted as both a quantitative and qualitative measure and this brings inherent challenges in defining and/or quantifying it. Consequently, there are a multitude of definitions, theories, interpretations and meanings attached to the idea of development and no consensus in sight. For instance, according to Todaro and Smith (2012), “Development is a multi dimensional process involving changes in social structures, popular attitudes, and national institutions, as well as the acceleration of economic growth, the reduction of inequality, and the eradication of poverty” but according to the United Nations Development Programme (UNDP 2007, 2012, 2015), human development is “about expanding the choices people have to lead lives that they value”. The UNDP also defines sustainable development as “development that is likely to achieve lasting satisfaction of human needs and improvement of the quality of life”. **Hence**, different positions in development policies adopted by countries are based on differences in underlying definitions, theories, interpretations and meanings of what constitutes development.

Statement of the Problem

Poverty is an endemic human malady that has many symptoms and several causal factors identified over the years; the list of which is by no means exhaustive. “Poverty is pronounced deprivation in well-being with many dimensions including not only material deprivation (measured by an appropriate concept of income or consumption) and low levels of education and health but also vulnerability and exposure to risk—and noiselessness and powerlessness” (World Bank 1990, 1991, 2000).

In 2000, there was a world Millennium Summit which unanimously adopted the Millennium Declaration, calling on the world community to achieve certain fundamental goals related to global peace, security and sustainable human development. The eight Millennium Development Goals (MDGs) adopted were the first collective steps taken worldwide “to create an environment—at the national and global levels alike—which is conducive to development and the elimination of poverty” (UNDP 2007). The MDGs and their associated targets came out of the Millennium Declaration, signed by 189 countries, including 147 heads of State and Government, in September 2000. The world community considered that progress towards achieving the MDGs is progress towards human development. These MDGs and targets are interrelated but the topmost goal was Eradicate extreme poverty and hunger and the target date was 2015 when Nigeria would be 55 years at independence. The other MDGs adopted with similar target date are:

- MDG 2: Achieve universal primary education
- MDG 3: Promote gender equality and empower women
- MDG 4: Reduce child mortality
- MDG 5: Improve maternal health
- MDG 6: Combat HIV/AIDS, malaria and other diseases
- MDG 7: Ensure environmental sustainability
- MDG 8: Develop a global partnership for development

As the target date for achieving the MDGs drew near and upon series of review of progress by the United Nations (UN-HDR 2005, GSDR 2015), a follow-up Sustainable Development Summit was held in September 2015 for the adoption of 17 Sustainable Development Goals (SDGs) and 169 associated targets to be achieved by the year 2030 - the Agenda 2030. The UN's Global Sustainable Development Report (GSDR) 2015 and Human Development Report (HDR) 2015 flesh out the details of this Agenda 2030. Again the topmost SDG is “End poverty in all its forms everywhere” while SDG2 is “End hunger, achieve food security and improved nutrition and promote sustainable agriculture”. Hence the issue of poverty is now a stable agenda item worldwide.

Furthermore, a World Bank Country Survey FY 2013 Report for Nigeria highlighted how Nigerians regarded general issues facing Nigeria. In this report, 43% of respondents (mostly private sector, media and academia) indicated that Nigeria was headed in the right direction, 34% of respondents (mostly civil servants, trade unions and NGOs/CBOs) indicated that Nigeria was headed in the wrong direction while 22% of respondents (including the National Assembly and World Bank staff) were not sure where Nigeria was headed. Also, Nigerians ranked their development priorities to be economic growth (42%) followed by poverty reduction (27%) and eradicating corruption (27%). In addition, respondents indicated that poverty reduction in Nigeria would be best tackled by agricultural development (47%), increasing employment (39%), and reducing corruption (36%). This World Bank (2013) report indicates that eradication of poverty and corruption are of equal importance to Nigerians and that reducing corruption would reduce poverty. This could imply Nigerians perceive poverty and corruption to be different names for the same malady given their joint ranking of 27%. Going by this report, Nigerians consider agricultural development to be the best remedy for endemic poverty.

This study brings some empirical perspectives to the implications of this World Bank country report for Nigeria and employs a peculiar yardstick for measuring corruption and/or poverty in Nigeria. This peculiar approach to deprivation is expected to enable a better characterization of poverty incidence in Nigeria and increase our understanding of its causes. This deeper understanding in turn should bring up more policy and action areas for the poverty reduction agenda in Nigeria.

Hypotheses Tested by the Paper

These are that:

- (a) Corruption is synonymous to poverty in Nigeria and that it directly mirrors the poverty incidence;
- (b) Nigerian poverty incidence is closely tied to government financial policies and attendant fiscal expenditure;
- (c) Nigerian development is closely tied to the poverty incidence aka corruption incidence in this paper; and
- (d) Corruption in Nigeria can be measured by the ratio of government recurrent expenditure to total expenditure.

The underlying theoretical reasoning is that Nigeria is still largely an extractive (primary) economy and any disproportional growth in recurrent expenditure capable of growing the service ([tertiary](#)) sector which has little value addition hampers growth in production by making funding and its usage along the production chain scarce and more costly. Because production requires capital, production must decline along with capital. Hence, output falls as productive inputs fall. The output contraction induces a rise in poverty incidence failing any remedial measures. Furthermore, growth in the service sector with little value addition fed by disproportional recurrent expenditure breeds corruption since the underlying fundamentals for this growth is non-creative or non-productive. Thus, positive co-movement of recurrent expenditure and poverty incidence occurs in response to capital price shocks.

Objectives of the Study

The main objective is to develop an appropriate index for corruption/poverty in Nigerian and test the efficacy of such index on growth and development in Nigeria. The paper also examines empirical evidence for the World Bank (2013) country report for Nigeria implying poverty and corruption may be different sides of the same coin. Following this introduction, Section Two presents some literature review. Section Three presents the methodology while Section Four discussed the results. Section Five concludes with some policy recommendations.

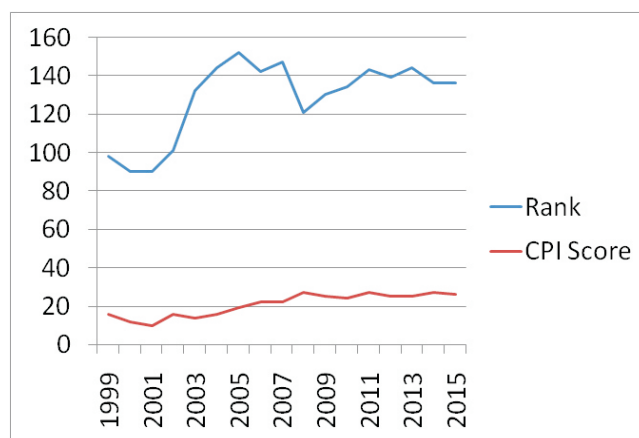
Review of Literature

Corruption Perception in Nigeria

Corruption is a vice that has to do with dishonesty, bribery, illegality, immorality, abuse of power and fraud; and not one country is free of it. Berlin based Transparency International (TI) which describes itself as a global movement with a singular vision to rid the world of corruption has developed the Corruption Perceptions Index (CPI). Countries and territories are ranked based on how corrupt their public sector is perceived to be on a scale from 0 (highly corrupt) to 100 (very clean). A country's rank indicates its position relative to the other countries and territories included in the index. Transparency International (2014; 2015) indicates more than 6 billion people live in countries with a serious corruption problem threatening economic growth for all. Also, more than two-thirds of countries worldwide score below 50 and not one single country anywhere in the world is corruption-free. In this respect, Nigeria was rated one of two most corrupt countries worldwide on several occasions in the last fifteen years as depicted in Figure 1 below. Nigeria in 2015 is ranked 136 out of 168 countries with a score of 26 on a scale of 100. Hence, Nigeria continues to be considered a very corrupt country. Transparency International in its reports recommends urgent and renewed crack down on money laundering, illegal political finance, pursue the recovery of stolen assets and more transparent public institutions. It also recommends Countries ranked at the bottom (i.e. most corrupt) such as Nigeria adopt radical anti-corruption measures in favor of their people while Countries at the top of the index (less corrupt) should make sure they do not export corrupt practices to underdeveloped countries.

However, we note that perception as a measure could be rather qualitative or subjective; hence attempts to develop some quantitative/objective measure of corruption for Nigeria given national antecedents.

Fig.1: Nigeria's Corruption Perception



Concepts of Poverty

Many competing approaches for the definition of poverty and the approach to reducing poverty have evolved over time in response to deeper appreciation of the complexity of development. Classic study of poverty is based on household income and expenditure surveys and conceives poverty to be low consumption and low achievement in education and health. This concept emphasizes the income perspective and associate poverty with income-deficiency thereby defining poverty as the deprivation of financial resources. Thus, poverty reduction from this viewpoint is understood as income-boosting and economic growth.

For instance, the World Bank (1990) presented a two-part strategy for poverty reduction on a framework for action derived from its concept of poverty, its analysis of the causes of poverty, the experience of the 1970s and 1980s, and the state of the world economy at the end of the 1980s. The World Bank viewed poverty as low consumption and low achievement in education and health and presented as key to reducing poverty a labor-intensive growth pattern and investment in the human capital of the poor. The contrasting experience in the 1970s and 1980s of East Asia, where poverty had fallen sharply, and of Africa, Latin America, and South Asia, where poverty had declined less or even risen was behind this two-part strategy for poverty reduction. The World Bank had determined that Indonesia outperformed Brazil in the 1970s and 1980s in reducing income and non-income (education and health) poverty by means of labor-intensive growth and broad provision of social services—the two-part strategy (World Bank 1991, 1993). The Bank's approach to reducing poverty continues to evolve and given the changed global context, the World Bank (2001) proposed a follow up strategy for alleviating poverty in three ways: promoting opportunity, facilitating empowerment, and enhancing security.

In addition, given the changed global context, significant academic effort has been applied to improve the definition of poverty and to search for more appropriate measurements giving rise to studies that explore the multidimensionality of poverty (Ravallion 1996, Bourguignon and Chakravarty 2003). In this respect, the most prominent approaches to defining multidimensional poverty are the basic needs approach and capability approach discussed below.

Basic Needs Approach Concept of Poverty

The basic needs approach focuses on consumption under the philosophy that people should achieve minimum subsistence. It works by identifying a package of basic consumption and evaluates whether the people have sufficient access to it. This approach considers that such package essentially guarantees a person's subsistence. If a person has insufficient access to the commodities of the package, then he/she is considered as poor, and vice versa. However, there are no universal agreements on what the package should precisely contain (Streeten 1979).

This approach therefore defines poverty as deprivation of consumptions and its strategy for poverty reduction is to ensure adequate access to consumptions. The policy objective is subsistence with policies aiming to make public services more reachable for the poor and the control relationship is paternal. The application of this approach is generalized but regional diversities are accommodated.

Capability Approach Concept of Poverty

This approach reinvented the concept of poverty by integrating it into the wider issues of human development, rather than behind a subjective poverty line. The capability approach focuses on people's values and choices under the philosophy that people should have equal freedom to choose their valued ways of life. It works by seeing people as "Change Agents" who should be given the opportunity to shape their own destiny in the development process and evaluates whether the people are sufficiently empowered. If a person has insufficient empowerment, then he/she is considered as poor, and vice versa. The capability approach has two main elements: 'functionings' (what people want to do and what they aspire to be) and freedom with the broad idea that people should achieve valuable functionings and also have the freedom to pursue those values. The well-being of an individual is seen as an evaluation of the functionings achieved by that individual (Sen 1999; Alkire 2002; Robeyns 2005; Alkire 2005).

This approach therefore defines poverty as deprivation of opportunities and its strategy for poverty reduction is to ensure equal opportunity to make choices. The policy objective is empowerment with public policy focus aiming to reduce inequalities in capabilities rather than the reduction of monetary inequalities and hence the control relationship is deliberative. The application of this approach is on multiple levels but emphasis is on local diversities. The emergence of this approach in the 1980s substantially guided the advent of the United Nations Development Programme – UNDP's first *Human Development Report* in 1990 introducing the concept of Human Development Index (HDI).

Human Development Models and Poverty Perspectives

Historically, the focus of development was on industrialization and investments as means of achieving growth, while the role of people in change was undervalued. However, in our recent history, many countries have achieved economic growth, although the well-being of a majority of their people did not improve and Nigeria is a prime example. For instance, Nigerian economic growth averaged about 6.0 percent in the past decade peaking at about 6.8 percent in 2014 and is expected to average 5.7 percent over the 2015 through 2017 period according to the National Bureau of Statistics (NBS, 2011, 2015). However, the country's poverty rate averaged 62 percent with 30 percent of the population in severe poverty over the same period (UNDP_HDR 2015) and Nigeria is categorized as one of the poorest countries in the world. Also, according to a Central Bank of Nigeria Governor Sanusi (2012), "The Nigerian economy has grossly underperformed relative to her enormous resource endowment and the achievements of her peers/other developing nations with similar characteristics". Furthermore, despite recent statistics rating the country's economy as the largest in Africa and the 26th largest in the world (NBS, 2014), Nigeria in 2015 had a Human Development Index (HDI) rank of 152 out of 188 countries (UNDP_HDR 2015).

Hence, the emphasis on growth in development theories based on the assumption that its benefits will automatically "trickle down" to the poor is being reviewed increasingly. Development thinkers now question the legitimacy of economic growth as the only measure of development having realized over the years of history that the economic growth paradigm does not capture some aspects of development now seen to be important. The trickle down growth paradigm is being challenged on the basis that poverty is not purely a deprivation of income or basic needs but that it is a human development problem since human beings are both agents and beneficiaries of development. This study aligns with the current thinking.

Methodology and Data

Definition of Variables

The variables are defined and specified as follows:

Table 4.1: Definition of Variables

Variable	Definition
RGDP	Real Gross Domestic Product (Economy)
RGDPA	Real Gross Domestic Product (Agriculture)
TOX	Total Public Expenditure
REX	Total Recurrent Expenditure
CSAGX	Cumulative Sum of Agric Expenditure
GCI	General Corruption-Poverty Index
CID	Dummy of 3 Categories for GCI; 3 (Poor) if below 50%; 2 (Very Poor) if 50%-70% and 1 (Abject Poverty) if above 70%

Developing the Poverty-Corruption Index

Based on the key ideas of the theory, an index for measuring corruption/poverty in terms of public expenditure pattern is developed as follows:

$$GCI = \frac{REX}{TOX} \times 100 \dots \dots (1)$$

This index is computed and tested as a dummy of three categories as defined above to investigate the double edged effect of corruption and poverty on growth and development in Nigeria.

Specification of OLS Regression Models

To measure the relationship between corruption/poverty, other explanatory variables and their impact on growth and development, a time-series linear equation regression analysis is adopted and the functional forms of the growth models estimated is as follows:

$$RGDP = \alpha + \beta_1 CID + \varepsilon \dots \dots (2)$$

$$RGDPA = \alpha + \beta_1 CID + \varepsilon \dots \dots (3)$$

$$RGDP = \alpha + \beta_1 CID + \beta_2 TOX + \varepsilon \dots \dots (4)$$

$$RGDPA = \alpha + \beta_1 CID + \beta_2 CSAGX + \varepsilon \dots \dots (5)$$

Data

Secondary data is obtained from the Central Bank of Nigeria; National Bureau of Statistics and pertinent derivatives there from. The data is for the period 1999 when democracy was restored to 2015 when the MDGs were to have been achieved and when Nigeria became 55 years at independence.

Results and Discussions

Tables 4.1 below summarize details of the four growth model estimations. The results show all the models are highly significant and the corruption-poverty index is found to singly explain 37.9% of variations in real gross domestic product for the economy (Model 1; equation 2) and 33.7% variations in the real gross domestic product for agriculture (Model 2; equation 3).

Model 3 (equation 4) estimates indicate corruption (CID) and total public expenditure (TOX) account for 90.6% of variations in the real gross domestic product for the economy (RGDP). However, the heightened DW statistic of 1.474 indicates the variable relationship may not be exactly linear and is a source for further research. The results of Model 4 (equation 5) show that corruption index together with cumulative agricultural expenditure (CSAGX) account for 79.8% of variations in the real gross domestic product for agriculture (RGDPA). Moreover, all the results indicate poverty/corruption is still endemic going by the level of statistical significance. Hence, Nigeria could not meet the premier Millennium Development Goal at the target date of 2015.

Table 4.1: Model Summaries of OLS Regression Results

Model	DV _s	R ² %	DW	IV _s		
				CID	TOX	CSAGX
1	RGDP	37.9	.511	-177.3* (.011)***	NA	NA
2	RGDPA	33.7	.442	-61.9* (.018)***	NA	NA
3	RGDP	90.6	1.474	-59.1* (.056)***	0.09* (.000)***	NA
4	RGDPA	79.8	.954	-26.7* (.094)***	NA	0.38* (.000)***

Notes:

***Sig values; * B Coefficient s NA Not Applicable

Table 4.2: Correlations

	RGDP	TOX	RGDPA	CSAGX	CID
RGDP	1.000	.935	NA	NA	-.616
TOX	.935	1.000	NA	NA	-.493
RGDPA	NA	NA	1.000	.865	-.581
CSAGX	NA	NA	.865	1.000	-.438
CID	-.616	-.493	-.581	-.438	1.000

Notes: NA Not Applicable

Furthermore, the following sets of correlations are observed from Table 4.2 of these results:

1. The theorized corruption/poverty index has a strong negative relationship with all the other variables whether dependent or explanatory. The first, third and fourth relationships from the correlations table are normal and expected by our theory but the negative co-movement between total public expenditure and the theorized corruption/poverty index is baffling.
2. It is expected that an increase in corruption would naturally decrease real gross domestic product for either the agricultural sector or the economy as a whole by our theory since less resources are channeled to production generally. Also, the negative co-movement is expected between corruption and cumulative agricultural expenditure and this can be similarly explained that an increase in corruption hampers growth in funding agricultural production by making funding and its usage along the production chain scarce and more costly.
3. Furthermore, it is expected that an increase in total public expenditure would naturally increase corruption by our theory due to the disproportional increase in the recurrent expenditure component and there should be positive co-movement. However, a situation where there is negative co-movement between corruption and total public expenditure could indicate that when it comes to total public expenditure, the index is more of a poverty index and less of a corruption index

because as total public expenditure increases, it's likely more resources will be applied to production with a trickledown effect in poverty alleviation. This may indicate some evidence of the dual face of the index theorized by this paper and could support the World Bank (2013) country report for Nigeria implying poverty and corruption may be different sides of the same coin.

Conclusions and Policy Recommendations

Conclusions

This paper develops a new theory to investigate the poverty/corruption incidence in Nigeria and develops an index for measuring corruption/poverty in terms of government recurrent expenditure and based on knowledge of the Nigerian economy. The results of estimating growth models based on real gross domestic product (RGDP) show the theorized Corruption Index singly explains 37.9% of variations in RGDP for the whole economy and 33.7% of variations in RGDP for agriculture and the Index is statistically significant at 5 per cent level with expected negative signs. Corruption is still significant when other predictor variables - total public expenditure and cumulative public expenditure on agriculture are added to the growth models. The results also show poverty/corruption is still endemic and Nigeria could not meet the premier Millennium Development Goal at the target date of 2015. There is some evidence indicating the dual face of poverty/corruption theorized by this paper and this could support the World Bank (2013) country report for Nigeria implying poverty and corruption may be different sides of the same coin.

Policy Recommendations

The theory's explanation not only works in principle but also meets with some *quantitative* success and could serve as the basis of further empirical investigations of the corruption/poverty relationship in Nigeria. The paper therefore recommends government's reduction of general administrative expenditure and increase of agriculture expenditure to enhance development and reduce the poverty/corruption incidence in Nigeria.

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