

Corruption Perception and Government Consumption Expenditure in Sub- Saharan Africa

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ABSTRACT

This study investigated Corruption Perception and Government Expenditure in a cross-section of 10 selected sub-Saharan African countries in a panel data framework. The Aim of the study was to determine if Corruption Perception has any effect on Government Expenditure. The data analyzed were sourced from the World Bank Development Indicators and Transparency International covering a period of 12 years (2009 to 2020). We created a model of General Government Final Consumption Expenditure estimated with random effect estimator. The Random Effect Model result indicates that Corruption Perception Index (CPI) is positive but not statistically different from zero. Conclusively, Corruption Perception Index is positive and statistically weak with General Government Final Consumption Expenditure. Generally, one can be misled when thinking that corruption perception index influences the degree at which the government makes expenditures on final consumption. From the findings the following suggestions may be evaluated for relevance in policy formulation in the nearest future. Since corruption perception index does not satisfactorily influence general government final consumption expenditure, using such index to explain changes in any of government final consumption expenditure will not be useful; what could theoretically influence government decision is rising state activities.

Keywords: Corruption perception, Government final consumption expenditure,

INTRODUCTION

Studies on the effects of corruption on government expenditure at national, sub-regional and regional levels, had gained momentum in recent times (Ovat and Basse 2014; Hashem 2014; Jajkovic and Drobiszova 2015; Ogunlana 2016; Nelson and Yebimodei 2018; Hanif and Ahmed 2018; Jahnke&Weisser2019) with some arriving at similar outcomes and others, offering conflicting outcomes. At the level of Sub-Sahara Africa (SSA), there is a consensus in the literature that the region had been beleaguered with several challenges, ranging from ineffective government institutions, weak democratic ideals, warfare, drought, diseases (Asongu 2013) and very startling corruption perception statistics (Mulinge and Lesetedi 2002; Asongu 2013). Attempts at adopting various fiscal strategies, particularly, huge government expenditures, to overcome these challenges, had not been successful, as the economies of these countries had remained underdeveloped. The impact of government expenditures in these countries had been abysmal, with unemployment, income inequality and low standard of living remaining serious concerns within and outside the sub-region (Lawal 2007; Bose, Haque and Osborn, 2007; Jelilove and Musa 2016; Hanif and Ahmed 2018). According to Hanif and Ahmed (2018), in keeping with the Keynesian hypothesis, government expenditure is undertaken to better the living standards of citizens, reduce income inequality and achieve economic growth and development. Painfully, the experience in SSA countries is that corruption, as measured by its perception, had not allowed the impact of its government expenditures to be felt as expected (Transparency International 2019); and this has left the

citizens highly impoverished with inadequate basic necessities of life. In Nigeria for instance, the general government final consumption expenditure from year to year, runs into trillions of Naira (billions of dollars) and yet, the economy had remained in the doldrums. According to the World Bank Group (2018), general government final consumption expenditure for Nigeria in 2009 was about US\$ 27282 million but rose to about US\$ 32954 million in 2012 and by 2015, it was US\$ 27379 million. In the case of Botswana, in 2009, its general government final consumption expenditure was US\$ 13593 million and in 2012, it became US\$ 18283 million and in 2015, it was US\$ 17382 million. Similarly, for South Africa, in 2009, its general government final consumption expenditure was US\$ 73745 million while it was US\$ 80762 million and US\$ 83996 million in 2012 and 2015 respectively. For Ghana, its general government final consumption expenditures for 2009, 2012 and 2015 were US\$1937 million, US\$3662 million and US\$3484 million respectively. In the case of Rwanda, its general government final consumption expenditure rose from US\$744 million in 2009 to US\$ 988 million in 2012 and became US\$1251 million in 2015. Ironically, these huge public expenditures by the government of the various countries in the region had not yielded the desired results because of the whittling effect of corruption in which, sometimes, even foreign collaborators have been found culpable. A report by Thabo Mbeki records that about US\$50 billion is lost through illicit outflows of funds out of Africa (Louw-Vaudran, 2017). Foreign businesses have been spotted as being involved in bribery activities that result in the outflow of funds that would otherwise be applied to improve education and health. A recent incident of questionable business transaction in Nigeria involving a foreign company, P and ID had led to a judgment against Nigeria that will see her paying compensation to the tune of over \$9 billion (Boyo, 2019). This is just one of the many ways corruption hits the region and by extension, the citizens. In fact, according to (Asongu, 2013), corruption, poverty and unemployment are the three most serious problems confronting African countries, with corruption being in the lead. Out of the eight groupings of countries (the Americas, the European Union & Western Europe, the Eastern Europe & Central Asia, the Middle East and North Africa, Asia Pacific and finally, the Sub-Sahara Africa) in its corruption perception report, the SSA had remained the worst hit by corruption (Transparency International 2019). The Association of Certified Fraud Examiners (ACFE) in its 2018 edition of Report to the Nations reported that corruption is the most prevalent occupational fraud and abuse in Sub-Saharan Africa. Out of the eleven types of Occupational Fraud and Abuse examined, corruption alone had 49% occurrence rate in the region (ACFE 2018). According to Norman and Aviisah (2015), Corruption is seen as a social virus disease, which has become ubiquitous and insidious; most nations in the world have cases of corruption but in the case of Sub-Saharan Africa, institutional and official corruption appear more systemic and intransigent (Agbodohu and Quarmyne, 2014).

Thus, the aim of this study is to determine the effect of corruption perception index on general government final consumption expenditure of countries in Sub-Saharan Africa.

Literature Review

What becomes known or regarded as corruption, are the views, opinions, assessments and perceptions of people or organisations about the word, "Corruption". Often times therefore, when corruption is mentioned, it is actually the perception of corruption that is being referred to. Thus, corruption perception refers to the way corruption is assessed or measured and which had been argued to be subjective (Jajkovicz and Drobiszova 2015), although the methodology and reputation of some rating agencies gives some objectivity to the measures established. For instance, there is the problem of determining if the measure will reflect the actual act of corruption, or the number of persons involved or even the amount involved in the act. Following these difficulties, there is a seeming consensus amongst a few rating agencies, that what can be measured is a perception of corruption and not the actual act of corruption. According to Jajkovicz and Drobiszova (2015), at present, there are few institutions such as Transparency International (TI), the PRS Group and the World Bank, which provide criteria for measuring corruption. For instance, the World Bank uses what it calls the Worldwide Governance Indicator (WGI), which covers 212 countries in 6 different aspects that relate to governance, one of which

is on control of corruption. The PRS Group uses its International Country Risk Guide (ICRG), which has 22 variables of assessment, grouped into political, financial and economic risks indices (Kotlánová, Kotlán, 2012). Transparency International uses what it calls the Corruption Perception Index (CPI) to measure the “perceived” level of corruption in a country. Although Transparency International started this rating in 1995, the scope of the analysis and application had grown over the years. At present, with this index, countries are ranked from 0 to 100, where a zero score indicates the highest level of corruption. To come up with a country’s rating, Transparency International collects data from 13 sources on the following corrupt behaviour in the public sector: bribery, diversion of public funds, use of public office for private gain, nepotism in the civil service and state capture. In this study, the measurement of corruption as conveyed through CPI would be applied and such data used for the analysis for the relevant years and countries selected.

Types of Corruption

Just as there is no consensus in the definition of the concept of corruption, there is no consensus on the various kinds of corruption. While Hope 2000; Hutchinson 2005; and Soreide 2014) agree on three types of corruption, Caiden and Caiden (1994); Mbaku (2007); and UNDP (2008) agree on four types of corruption. The categories stated by first set of scholars are:

- (i) **Petty Corruption:** This involves small cash or favors, which are given in exchange for speeding up (private or state) transactions. It refers to everyday forms of corruption, usually in the forms of bribes and extortions, when citizens, businesses, and officials make exchanges. It is usually practiced by public servants who may be grossly underpaid, and depend on small rents from the public to feed their families and pay school fees.
- (ii) **Grand Corruption:** This refers to large-scale corruption that takes place at the highest levels of government, usually at the policy formulation level. Grand corruption is often used synonymously with political corruption and is often practiced by the elites. Grand corruption relates to irregularities that occur in public procurement contracts, or in revenue-collection rebates, or write-offs (that could amount to several hundreds of thousands of dollars), with some political cover.
- (iii) **Looting:** It involves acts that may be sanctioned or created for political purposes; e.g., government would place contracts with non-existent organizations, or goods are never delivered. Looting is damaging to the national economy, and, usually, proceeds are externalized quickly (e.g., into Swiss or other tax haven accounts).

In Sub-Saharan Africa, both petty and grand corruptions take place in the process of delivering public services of various types (UNDP 2008; UNECA 2011).

The types of corruption as stated by the second set of scholars are:

- (i) **Political corruption:** This is the type perfected by politicians using their official capacity, not in their personal or, where applicable, administrative/bureaucratic capacity. It refers to the misuse of political power for private gain. This misuse can be for the preservation or strengthening of power, personal enrichment, or both. Political corruption can take place while entering public office, during the policy making process, or in the allocation of state resources. Common forms of political corruption include: vote-buying, election-rigging, non-transparent or illegal political campaign financing, abuse of public property, or simply biased decision-making for personal interest.
- (ii) **Administrative/bureaucratic corruption:** This is the type perpetrated by administrators in their official capacity, not in their personal or, where applicable, political capacity. It refers to corruption that takes place in public administration or at the implementation end of the policies. In most countries, the two forms of corruption (political and bureaucratic) go hand-in-hand and reinforce one another. In most systems of one-party rule, the two typologies of corruption are intertwined, as there is no clear separation between elected politicians and bureaucratic officials.
- (iii) **Individual corruption:** This type refers to the individual who strays from a prevailing norm of official public behaviour, for example, informal organizational short-cuts, personal

accommodations and mutual understandings. Individual corruption is more isolated and sporadic than political and bureaucratic corruption.

- (iv) **Systemic corruption:** This is sometimes referred to as ingrained or endemic corruption and occurs where corruption has become an integral part of the system. It refers to a situation in which corruption is an integrated aspect of the economic, social, and political system. The major institutions and processes of the state are routinely dominated and used by corrupt individuals and groups. Systemic corruption is a situation where wrong-doing has become the norm, and the standard accepted behaviour necessary to accomplish organizational goals according to notions of public responsibility and trust has become the exception not the rule. In this situation, corruption has become so regularized and institutionalized that organizational supports back wrongdoing and actually penalize those who live up to the old norms. Corruption can be so endemic that people do not know how to contain it.

Bureaucratic corruption, administrative corruption and petty corruption are often being used synonymously in the anti-corruption literature (UNDP 2008; UNECA 2011).

General Government Final Consumption Expenditure (GGFCE)

General government final consumption expenditure is sometimes known as general government consumption and includes all government current expenditures for purchases of goods and services (including compensation of employees). It also includes expenditure on national defense and security, but does not include government military expenditures that are part of government capital formation. According to OECD (2014), General Government final consumption expenditure refers to those expenditures by government to produce non-market final goods and services with exclusion of Gross capital formation. It is a significant component of the Gross domestic product because it directly measures the consumption of final goods and services. General government final consumption expenditure can be broken down into two; expenditures for individual consumption and expenditure for collective consumption. For instance, expenditures on defence, justice, etc, are classified as general government final consumption expenditure for collective purposes, while expenditures on items such as health care, housing, education etc are regarded as general government final consumption expenditure for individual consumption because they are made on behalf of individual households. The goods and services provided by government, whether for individual or collective use, do not usually carry market prices but are stated at the cost needed to produce those goods and services which consist of employee compensation, depreciation and intermediate consumption. It can therefore be reasonably stated that General Government final consumption expenditure is the difference government output and the payments made to produce goods and services (OECD 2014).

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Empirical Review

Delavallade (2006) examined the impact of corruption on government spending structure based on individual sectors. The study tested the system of nine equations, where every equation represents certain sector of government spending as a part of total function of government spending considering the level of corruption and other controlled variables. While the dependent variables in the study are the individual sectors of government spending as a percent ratio on total government spending, the independent variables are corruption indicators of World Bank and other controlled variables (e.g. level of urbanization, GDP per person, population percentage between 0 to 14 years of age, etc.). By using three-phase method of least squares the author finds that within 64 countries in the years 1996 and 2001 the corruption deforms the government spending structure in a way that it limits the volume of government spending aimed at social area (Social protection, health, and education) and on the other hand it contributes to the growth of government spending volume allocated in the sector public services and order, fuel and energy, culture and defense. There are indications on the demand side of corruption, that government officials influence decisions within state budget in favor of government spending allocation to the areas where they expect to receive the highest bribery and where the decisions are taken in a

“secret” environment. At the supply side are the companies that can be invited to bribery of foreign officials in order to export weapons, army equipment, gas or fuel. Apart from this the author mentions that in sector such as e.g. defense, energy or public order, every project includes the need of higher volume of public investment. It is probable that these projects bring the producers higher rent. The study also found that expenditure on fuel and energy, culture and public services and order are more recurrent in nature and this gives more freedom of action, hence more opportunities for corruption, than social spending which involves more predetermined spending.

A study that examined the impact of existing corruption control measures in fighting corruption in Africa by Asongu (2013) found out that in countries with high levels of corruption control measures, greater economic prosperity leads to efforts in controlling corruption. The study adopted the quantile regression model to analyse panel data of 46 African countries obtained from the African Development Indicators (ADI) of the World Bank. The study further found that there are differences in approaches adopted by both the clean and dirty countries in their fight against corruption and this brings about different results for each category of countries. the study calls for institutional reforms among African nations and the need to intensify the fight against corruption in Africa.

An empirical analysis of countries at various stages of development (Ulman and Bujanca, 2014) examined the influence of corruption on the macroeconomic environment. The study which adopted the Spearman Rank Correlation and Regression Analysis, covered countries in Sub-Saharan Africa, the Americas, Europe and Asia. The study finds that there is a positive correlation between corruption perception and the level of development of the microeconomic environment. Summing up, it can be said that countries rated as highly developed on the macroeconomic environment aspect are also perceived as less likely to be corrupt or countries rated as having a low macroeconomic environment rate are perceived to be more corrupt than the countries with a more developed macroeconomic environment.

Lawal (2007) identifies corruption as a major impediment to development in African countries and concludes that if African countries will make any reasonable progress in development, then they have to take seriously, the reforms which most of them are embarking on to combat corruption. According to the paper, although there are several studies on the relationship between corruption and public sector expenditure in many areas, there is now a growing concern in studying the relationship between the duo in individual African countries and Sub-Sahara Africa as a region and the African continent as a whole because of global perception that Africa is the most corrupt region, and SSA, the most corrupt sub-region in the world.

Examining Nigeria and the burden of corruption was the aim of a study conducted by Adesina (2016) in which the use of the exploratory research design was adopted as was the case with Ogbeidi (2012). According to Adesina (2016), the magnitude of corruption in Nigeria is giving the country a negative image in the international community and Nigerians abroad are being molested because of the stigma of corruption in the country. The study commended the efforts of the president Buhari led administration at fighting corruption, but noted that factors such as transparency, accountability, a free press, independence of the anti-graft agencies, independent judiciary if allowed to exist, are capable of reducing the level of corruption in the country. The study concludes by suggesting that all hands must be on the deck in the war against corruption while it is imperative to entrench civic education in the country’s educational curricula.

Table 1:Corruption perception score and position of 10 sub-Sahara African countries

| S/NO | COUNTRY | 2009 SCORE | 2009 POSITION | 2018 SCORE | 2018 POSITION |
|-------|--------------|------------|---------------|------------|---------------|
| I. | BOTSWANA | 5.6 | 37 | 61 | 34 |
| II. | NAMIBIA | 4.5 | 56 | 53 | 41 |
| III. | RWANDA | 3.3 | 89 | 56 | 48 |
| IV. | SOUTH AFRICA | 4.7 | 55 | 43 | 73 |
| V. | GHANA | 3.9 | 69 | 41 | 78 |
| VI. | GABON | 2.9 | 106 | 31 | 124 |
| VII. | NIGERIA | 2.5 | 130 | 27 | 144 |
| VIII. | KENYA | 2.2 | 146 | 27 | 144 |
| IX. | UGANDA | 2.5 | 130 | 26 | 149 |
| X. | CAMEROUN | 2.2 | 146 | 25 | 152 |

Source: Transparency International (1995-2019). *Corruption perceptions index 2009 & 2018.*

The corruption perception as reported by Transparency International Corruption perception index, for the 10 Sub-Saharan African countries examined in this study between 2009 and 2018 is shown in table 2.1 above. The report shows that the countries scores are in the range of between 61 to 25 on a scale of 100 for the 2018 corruption perception index report with Botswana being the least corrupt and Kenya and Cameroon being the most corrupt; for the 2009 report, the ten countries had a score ranging from 5.6 to 2.2 on a scale of 10 with Cameroon being the most corrupt and Botswana being the least corrupt (Transparency International 1995-2019) as shown in the table above:

METHODOLOGY

Thus, a causal research design was employed. This study focuses on how corruption perception affects government expenditure in sub-Saharan Africa for which available records from World Bank database show that there are 48 sub-Saharan African countries. However, these 48 countries do not all have complete set of data that can be used in this study; therefore, this study has both a target population and an accessible or study population, both of which are finite. Only 38 of these 48 countries have a complete set of data that can be used for the period covered in this study; therefore, while our target population is the entire 48 countries in SSA, our accessible or study population comprise these 38 countries with a complete set of data (which does not include Angola, Eritrea, Malawi, Somalia, Tanzania, Zambia, Guinea-Bissau, Zambia, Sudan and South- Sudan which do not have complete set of data).

The sample for this study is 10 Sub-Saharan African countries selected from the accessible population of 38 countries; namely, Nigeria, Botswana, Ghana, Gabon, Namibia, Rwanda, South Africa, Uganda, Kenya and Cameroun. These countries are selected based on data availability; hence, purposive sampling technique is used. However, the study covers a period of 12 years from 2009 to 2020. Our data are secondary and time series in nature and were collected as published data from the official website of the relevant institutions.

As earlier stated, our study is a causal research based on panel data, and according to Granger (1969) and Sims (1972), causal relationships involving time series or panel data can be investigated using dynamic models.

Functional Models Specifications

Functionally, we specify the relationships between corruption and government expenditure as follows:

$$GGFCE = f(CPI)$$

Where;

GGFCE = General Government Final Consumption Expenditure

CPI = Corruption Perception Index

Econometric Dynamic Panel Specifications

A simple dynamic panel specification of the above relationships is given by:

$$GGFCE_{it} = \beta_0 + \beta_1 TGE_{it-1} + \beta_2 CPI_{it} + e_{it}$$

Where e_{it} and ϵ_{it} are the regression residuals; β_0 and ϕ_0 are the regression intercepts; β_i 's and ϕ_i 's are the slope coefficients that capture the various relationships of interest. For model , β_1 is the autoregressive coefficient that captures own effect on total government expenditure. Further, β_2 captures the direct effect of corruption on total government expenditure.

RESULTS AND DISCUSSIONS

Descriptive Statistics of Government Final Consumption Expenditure

Table above displays the distributional characteristics of general government final consumption expenditure over the period 2009-2020. The graphical construction indicating the size of the deviation and the extent by which the fitted regression line represents a near perfect replication of the actual is reserved in appendix two.

Moreover, the source of the raw estimated data is found in appendix one which is the data presentation. However, we have taken natural logarithm of all the datasets in order to bring them to common numeric unit of analysis.

Table 2: Distributional Properties of General Government Final Consumption Expenditures

| | Mean | Standard Dev. | Skewness | Kurtosis | JB(P-value) |
|--------------|----------|---------------|-----------|----------|-------------|
| Gabon | 21.5145 | 0.114368 | -0.601361 | 2.262842 | 0.608058 |
| Ghana | 21.77781 | 0.339578 | -0.303722 | 1.784156 | 0.630138 |
| Namibia | 21.98299 | 0.140570 | -0.194973 | 1.719307 | 0.638868 |
| Kenya | 24.03104 | 0.178371 | -0.851370 | 2.826371 | 0.480770 |
| Nigeria | 22.01122 | 0.156968 | 0.089631 | 2.593749 | 0.951901 |
| Cameroun | 20.83230 | 0.253675 | -0.108459 | 1.686521 | 0.642062 |
| Rwanda | 21.62178 | 0.228401 | -0.038692 | 2.077304 | 0.807075 |
| Uganda | 25.13323 | 0.060557 | -0.370382 | 2.091975 | 0.709418 |
| South Africa | 21.95370 | 0.208183 | -0.536660 | 1.736555 | 0.503044 |
| Botswana | 22.85264 | 0.291166 | -0.064535 | 1.786310 | 0.689061 |

Source: Author

From Table 2 above the means of the general government final consumption expenditure across the sampled countries beginning from central African states of Gabon, Cameroun are 21.5145 and 20.83230. In the southern African states of Namibia, South Africa and Botswana the means of general government final consumption expenditure in those countries are 21.98299, 21.95370 and 22.85264 respectively. In the west, we observe that Nigeria has a mean of 22.01122; Ghana is 21.77781, however, east African countries of Kenya and Uganda record a mean of 24.03104 and 25.13323 respectively.

General Government Final Consumption Expenditure Model Hypotheses Test:

Hypothesis: Corruption Perception Index and General Government Final Consumption Expenditure hypothesis.

The p -value of CPI is 78.69%, which is greater than 5% significance level. On the basis of decision criteria, the null is not rejected such that our inference is the absence of a significant relationship between corruption perception index and general government final consumption expenditure of Sub-Saharan African countries.

We have used empirical means to link corruption perception and government expenditure. Table 2 reports the descriptive statistics on the general government final consumption expenditures for the period 2009-2020. The result on the final consumption expenditure for each country shows minimum variance but the probability statistics show all the values are sampled from a normally distributed population.

CONCLUSION

The research on corruption perception and government expenditure is quite scarce. With the formulation of restricted models, random effect estimator is an appropriate estimator of the relationship involving general government final consumption expenditure; it is implied that GGFCE model satisfies random effect assumption. Fixed effect acceptance of the alternative hypothesis is a superior estimator when percentage of GDP enters the general government final consumption expenditure. This satisfies the fixed effect assumption.

It has been well known for decades now that the increasing state activity theory credited to Wagner drives expenditure, but corruption at state level imposes limits to which government can budget and spend money on current consumption. As already known corruption perception index has a statistically weak positive relationship with final consumption expenditure.

RECOMMENDATIONS

From the findings the following suggestions may be evaluated for relevance in policy formulation in the nearest future:

Since corruption perception index does not satisfactorily influence general government final consumption expenditure, using such index to explain changes in any of government final consumption expenditure will not be useful; what could theoretically influence government decision is rising state activities. We suggest increases in all government current consumptions.

To escape econometric problem of misspecification, future research should endeavor to accommodate first lag of general government final consumption expenditure to GDP in the model.

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