



Assessment of Democracy as an Influencing Tool for the Level of Corruption in Sub Saharan Africa

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Abstract

This study ascertain the influence of democracy period on corruption covering 1995 to 2016 with the use of panel data. The dynamic two-step system GMM was used and findings indicated that duration (period) of democratic regime and transparency were significant, it means higher level of democratization in Sub Saharan-African countries influences lower levels of corruption, the period of steady/uninterrupted democratic regime has higher level of corruption than other non- democratic regimes or truncated democratic period, transparency in government policies and programmes influences a reduction on corruption in the region. The study also discovered that nations that produces oil has lower corruption level than nations without oil. Also, unemployment rate negatively affect the level of corruption in Sub Sahara Africa. The study therefore recommends that: governments of the concern countries should encourage the public to fully participate in the democratic process so as to reduce to a greater extent the level of information asymmetry which could increase the tendency of corrupt practices. Sensitization and orientation programs should be organised to educate the populace about the danger of involving in corruption as this will go a long way in inculcating discipline among the populace.

Keywords: Assessment, corruption, democracy, influencing, level

1. Introduction

There is no doubt that corruption has eaten deep the resources and prosperity of many societies and several individuals in such societies are waiting and struggling to have access to public office through democratic process to also embezzle and syphon public wealth through the influence of the office they occupied. Corruption is considered as an impediment to the growth and development of several societies across the globe. It has crippled several social and economic prosperities and indeed, the manifestations and growth potentials of several nations, particularly in the developing societies which largely could be found in the Sub Sahara African Region. Corruption is global in nature, but differs in magnitude, complications and nature from one country to another. The deduction from empirical studies, public submissions, media analysis (both print and broadcast) and social networks acknowledged that the largest act with many practitioners across the globe is corruption (Ibietan, 2013). Corruption is regarded as the most significant detrimental factor that leads to the decline and collapse of economic, social and moral structures and the basic principles and institutions that form and support democracies. Khan (2006) opines that the



most dangerous form of corruption in most third-world countries is predatory corruption where public office holders utilize their political or military influence to syphon public funds and other resources.

Sub-Sahara Africa was occupied by unhealthy administrations ranging from autocratic, , dictatorships, authoritarianisms, personal dynasties, militarisms and monarchy systems which occupied the political economy for several years since independence of the countries (Mafukata, 2015). These long durations of undesirable administrations have exposed the region to all sort of corrupt practices, particularly those associated with public offices. This situation is thus detrimental to the socio- economic performance of the region as, though difficult to quantify, corruption has caused the region an absolute set back in virtually all aspects of human endeavor. According to Haydaroglu, (2016) general economic activities in Sub-Sahara Africa for several decades were not appealing when compared to robust economic activities and performance of other similar developing countries in other continents. The unappealing performance has been attributed to two factors, exogenous and endogenous factors. The exogenous factors includes unfavorable terms of trade, global financial crisis, among others, while the endogenous factors includes corruption, protracted civil wars, inappropriate and inconsistent policy regimes, ethnic conflicts and adverse security conditions, economic freedom, complex administrative and institutional frameworks and ineffective institutions.

Going by the report of International's Corruption Perception Index for the year (2017), which states that, amongst the twenty highly corrupt countries across the globe, ten are from Sub- Saharan Africa. Worst still, according to ICPI (2016) Somalia, South Sudan, Lesotho, Sudan and Guinea Bissau were amongst the highly corrupt ten countries across the globe. Similarly, amongst the ten highly corrupt countries across the globe, six are domicile in Sub Sahara Africa (Mafukata, 2015). This situation is disheartening as is capable of retarding the growth of the region in virtually all spheres of human endeavor. Due to the hazardous and miserable consequences of corruption, several governments across the globe have adopted similar or rather the same policy instruments and approaches geared towards curbing corruption at different levels of governance but have failed due to one reason or the other that is peculiar to the individual region or state. Considering the magnitude of the problem however, does not determine a solution because of the diversity of circumstances that produces corruption and poor governance, which make it difficult to propose global approaches for curtailing corruption (Rose-Ackerman, 2004). Arising from the above therefore, what comes to one's mind at this juncture is that, why is corruption higher and pervasive in the region.

The high level of corruption in the region and the attitude of the current and intending political office holders are menace and indeed a great threat to the growth and development of Sub Sahara Africa that requires immediate attention. The reports of ICPI (2016 and 2017) also Mafukata (2015) and Khan (2006) were evidences of these assertions which constitutes the reasons that prompted this study. The pervasive nature of the level of corruption in the region as contained in the reports of ICPI cited above could be linked to



factors such as: poverty, GDP per capita, adult literacy rate, inappropriate and inconsistent policy regimes, and absence of transparency in government policies, protracted civil wars, ethnic conflicts and weak institutional framework, among others. Thus, being a reason that has prompted several theoretical and empirical studies aimed at finding out the causes of corruption. Some of such studies, Bratton, 2004, Linberg 2006 and also Attahiru, Mohammed, Sa'adu, Oluwole and Chikezie (2022) have focused on the impact of democratic factors as causes of corruption but there are still some gaps existing in such studies including the influence of duration of democracy on corruption. Based on above facts, the below question arises: does the duration of democracy have any influence on the level of corruption. Therefore, the need to fill such gap has prompted this study which will shed light on a number of related issues. The broad objective is to assess democracy as an influencing tool on level of corruption in the region with the view to specifically determine the influence of democratic durations on corruption level. Findings of this study complement other related studies by providing information with regards to duration of democracy and how it influences the level of corruption in Sub Saharan Africa.

2. Literature Review

Theoretical Framework

Corruption emanate from decisions and actions of individuals. Principal-agent model believes that the interests of principal and agent are different, the model believes that there is informational asymmetry to the satisfaction and favor of the agent. However, in this theory, the principal can dictate the pay-off rules in their engagement. Similarly, an important feature of the agency theory is that decisions are assumed to be trade-offs between different kinds of costs (monitoring costs, bonding costs and residual loss). This theory was adopted for this study based on the fact that it considered the engagement between established electoral rules and corrupt attitude among political officials and other public officials (Persson, Tabellini & Trebbi, 2003): Political office holders are the agent and voters (electorates) are the principal. As a result of the asymmetry of information in the principal agent engagement, political office holders (politicians) have the chance to extort rents, either for their personal purpose of accumulating wealth or to pay for exorbitant, expensive and costly political campaigns. Surely, the chance to be re-elected by a corrupt political office holder is less than that of a reasonable, honest and sincere politician. However, political office holders (politicians) face a challenge of trade-off between rent seeking and demonstrating an incorrupt act and honesty to their voters (electorates) to be considered for re-elected.

Empirical Review

Duration of democracy is considered as the years or period of uninterrupted democratic administrations where by a country is steadily democratic, such uninterrupted period reduces corruption (Triesman, 2000). Sung (2004) as cited in Pellegata (2009) opine that infant and still premature democratic countries exhibits higher rate of political corruption as against some electoral autocracies (maturing democracies) and subsequently to absolute consolidated democratic counties. Pellegata (2009) finds that the durational difference in



democratic system is basically the major important element in curbing the extent of political corruption of a country. Aside the real level of democracy in a political regime, the length of exposure to democratic system is a basic factor in constraining the extent of political corruption. The extent a political administration experienced political pluralism and electoral competitions, the higher it will be able to grant citizens and opposition parties the opportunity to monitor and sanction public office holder. Saha and Campbell (2007) researched on the effect of democratic system on corruption and their study reported that a mature democratic system can constrain corruption, where the tendency and possibility of being caught acting in a corrupt manner is high. A consolidated democratic system is more than a mere democratically elected administration. It requires fully functional institutions like judiciary system, policing system and press services. More so, democratic system have to be in practice for a relatively longer period of about 20 years before the perception of corruption will begin to come down. This attitudinal transformation takes place due to corruption's negative effect on growth damages and legitimacy in a democratic system (Blake and Martin, 2006). Montinola and Jackman (2002) reported that political corruption is absolutely lesser in dictatorships regimes when compared with partial democratic countries. However, once past a threshold, democratization institutions support corruption. Salawu and Hassan (2011) and Babangida (2002) opines that there is a negative ethnic influence on corruption.

3. Methodology

Analyses were done with the aid of Inferential and descriptive analysis mainly to actualize the objectives. The inferential analysis entails adopting regression model in determining the effect of the explanatory variables on the dependent variable. On the other hand, descriptive statistical analysis entails presenting tables to show some summaries and pattern of the data sourced. This was actualized through the adoption of summary statistics. Generalized Method of Moment (GMM) was used to the dynamic panel model indicated in table 3 below. The use of this technique was as a result of the countries to pooled together in this sample probably possessed some individual differences, which makes the countries to be heterogeneous that could violate the assumption in which the pooled ordinary least squares regression is built. More so, indicating a dynamic association will introduce endogeneity problem in the model used that the fixed and random effects models will not be able to address. This problem can be addressed properly in the system GMM framework. Adopting Generalized Method of Moments (GMM) system to analyze the regression equation was in recognition of the fact that it also put into cognizance the constraints of serially correlated variable, missing variables and endogeneity factors. (Flannery and Hankins, 2013). In yet similar development, Arellano and Bover (1995), Blundell, and Bond (1998) reported, the first differencing system of Arellano and Bond (1991) do not provide adequate information about the first differenced variable, specifically if they are serially correlated. Additionally, first differencing of the repressors, lagged first differences should also be used as instruments in a levels equation. The model of Saha (2008) was adopted.

$$CPI_{i,t} = \beta_0 + \beta_1 PR_{i,t} + \beta_2 \log(RGDP)_{i,t} + \beta_3 GINI_{i,t} + \beta_4 UNEM_{i,t} + \beta_5 ALR_{i,t} + \beta_6 EF_{i,t} + \varepsilon_{i,t}, .1$$



Modification have been done to the model indicated above through re-defining Political Right (PR) to mean Democracy Dummy (D Dummy) and by adding CPTit, TRS, PVT and ETI to serve as control variable. Therefore, to estimate impact of the duration of democracy on corruption level, the basic regression statistics is indicated below:

$$CPI_{it} = \beta_0 + \beta_1 CPI_{it-1} + \beta_2 DDummy_{it} + \beta_3 TRS_{it} + \beta_4 PVT_{it} + \beta_5 ETF_{it} + \beta_6 OILDUM_{it} + \beta_7 \log GDP_{it} + \beta_8 GINI_{it} + \beta_9 UNEM_{it} + \beta_{10} ALR_{it} + \beta_{11} EF_{it} + \mu_{it} \dots\dots 2$$

$$\text{And } U_{it} = C_i + V_{it} \dots\dots\dots 3$$

Where C_i = Implies individual country effect, V_{it} = Normal Gauss-Markov error term, CPI (-1) Equal to Corruption Perception Index, TRS Implies Transparency in terms of government policies and programmes, PVT = Poverty level (i.e the proportion of the population living below \$1.9 per day), OILDUM = Dummy variable which have the value of 1 for oil countries while 0 for non- oil countries, ETF = Ethnic Fractionalization, DDUM = Dummy variables, 1 implied during democratic rule and 0 otherwise, EFI = Economic Freedom Index, β_0 is implies the constant parameter or intercept, $\beta_1 - \beta_{11}$ are the slope parameters for the corresponding variables. Note: Corruption Perception Index has been transformed to its inverse to show higher value for higher corruption and vice versa.

Table 1. Variables, measurements and sources

Variables	Measurement	Source
Corruption Perception Index	Corruption Perception Index	Transparency International (2017)
Democratic Dummy	Dichotomous (equals 1 if democratic regime and zero if otherwise)	Wikipedia (2017)
Transparency	Transparency Index	Variety of Democracy Database (2017)
Poverty	Proportion of people living below \$1.9 daily	World Development Indicators (2017)
Ethnic Fractionalization	Ethnicity Fractionalization Index	Alesina, Devleeschauwer, Easterly, Kurlat, and Wacziarg, (2003)
Oil dummy	Dichotomous (equals 1 if oil-producing nation and zero if otherwise)	Wikipedia
RGDP per capita	GDP per capita at constant prices	World Development Indicators (2017)
Inequality	Gini Coefficient	World Development Indicators (2017)
Unemployment	Unemployment rate	World Development Indicators (2017)
Adult Literacy	Adult literacy rate	World Development Indicators (2017)
Economic Freedom	Economic freedom index	Heritage Economic Freedom Index (2017)

Note: Above table contains the variables, measurements and sources of data



4. Results

Table 2: Summary Statistics of Variables

Variables	Sample	Mean coefficients	Standard Deviation coefficients.	Minimum	Maximum
Corruption Index	Overall	-0.5	0.21	-1	-0.12
	Between				
	n		0.07	-0.6	-0.29
Transparency	Within		0.2	-0.8	-0.04
	Overall	0.7	1.11	-2	3.21
	Between				
Poverty	n		1.08	-1.8	2.44
	Within		0.39	-1.1	2.55
	Overall	42.8	21.6	0.37	94.1
Ethnic fract.	Between				
	n		21.7	0.47	83.4
	Within		5.22	27.1	65.3
GDP per cap(2010 base year)	Overall	0.67	0.22	0	0.93
	Between				
	n		0.24	0	0.93
Gini	Within		0	0.67	0.67
	Overall	2256	3210	194	20334
	Between				
Unemployment	n		3385	230	16792
	Within		576	2507	5798
	Overall	45.2	8.04	29.8	65.8
Adult literacy	Between				
	n		7.55	31.6	62.7
	Within		2.07	35.5	62.3
Economic Freedom	Overall	9.93	7.81	0.74	37.6
	Between				
	n		7.83	1.01	29.7
Corruption Index	Within		1.55	2.64	23.2
	Overall	64.7	19.6	15.5	95.3
	Between				
Transparency	n		20.4	20.8	94
	Within		3.74	53.1	76.8
	Overall	54.53	8.13	21.4	77
Poverty	Between				
	n		7.27	36.0	70.8
	Within		3.05	39.3	67.2

Source: Author's Computation

The table above presents the descriptive analysis for panel data as summary statistics and correlation analysis with the view to firstly, describe the data with respect to their average values and standard deviation, minimum and maximum values for overall, between and within, and secondly, to detect if adopting the variables used would not result to the problem of multicollinearity in the models. Moreover, the summary statistics of the following variables, corruption perception index, ethnic fractionalization, poverty, transparency, log of RGDP per capita and Gini coefficient (adopted in order to proxy inequality), adult literacy rate unemployment rate, and lastly, economic freedom were



indicated in the table above. Mean values represents the average behaviour of each variable over the countries and time periods. Also, the overall, between and within in standard deviation depicts the rate of spread in each of the variable from its respective overall mean coefficients, which implies (overall), from its mean among cross-section, which denotes (between), and from its mean within cross-section, which represents (within). Minimum and maximum were also contained three values which denotes the lowest and highest values of each variables for overall, over the selected countries and within each cross-sections respectively.

Table 3: System GMM Estimators – Effect of Democratic Duration on Corruption

Variables	Coefficient	p-value
CPI(-1)	0.747*** (0.038)	0.000
DDummy	0.272*** (0.084)	0.001
TRS	-0.062* (0.034)	0.067
PVT	0.002 (0.003)	0.500
ETI	-0.244 (0.312)	0.435
OILDUM	-0.048 (0.143)	0.740
Log of GDP per capita	0.143 (0.101)	0.156
GINI	0.003 (0.006)	0.576
UNEM	-0.006 (0.004)	0.173
ALR	0.004 (0.002)	0.111
EF	3.13e-05 (0.000)	0.860
Constant	-1.546** (0.741)	0.037
Number of country	40	
Wald Chi-squared	1183.27***	0.000

*Note: Robust standard errors in parentheses; *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$; CPI is corruption index; DDummy implies democratization dummy; TRS implies transparency in government policies; PVT denote poverty; ETI refers to ethnicity fractionalization; OILDUM is oil dummy; UNEM is unemployment; ALR is adult literacy; and EF refers to economic freedom.. Source: Author's Computation*

The regression model above expresses the effect of duration of democratic variables (D dummy) on corruption, controlling for government transparency, level of poverty, ethnic



influence, oil production, log of RGDP per capita, level of inequality, level of unemployment, adult literacy rate and economic freedom. This model includes a dummy variable to capture the uninterrupted democratic period. The results presented in the Table 3 reveals that democracy dummy and transparency are statistically significant in affecting the level of corruption in Sub-Sahara Africa. This is evident in their p-values being less than the conventional significant levels of 1 percent and 10 percent respectively. The first period lag of corruption index is also statistically significant at 1 percent level of significance. Poverty, ethnic, oil dummy, log of RGDP per capita, inequality, unemployment rate and adult literacy are not statistically significant in affecting the level of corruption even at the 10 percent level of significance. This is shown by their p-values being greater than 0.1. This simply implies that period of democracy and transparency were statistically significant on corruption level in the region while poverty level, ethnicity fractionalization, oil production, log of RGDP per capita, level of inequality, level of unemployment and the level of adult literacy are not relevant in explaining corruption in Sub-Sahara Africa. Their irrelevancy could be as a result of the components used as proxies for the variables.

Moreover, coefficients of corruption lag, democracy dummy are positive while transparency is negative. This implies that the former variables influence the level of corruption positively, hence, increase in them will lead to increase in corruption while later variable influence the level of corruption negatively, hence, an increase in it will lead to a decline in corruption. In the same vein, significant positive coefficient of lag of corruption indicates that a point increase in corruption in one period will result to a rise in on corruption level in the following period by about 0.74 points and vice versa. The significant negative coefficient of transparency implies that a point increase in transparency in government policy will result to a decline in the level of corruption by about 0.06 points and vice versa. Since the measure of democracy in this model is a dummy of uninterrupted democratic period, its significant positive coefficient indicates that democratic periods significantly have higher level of corruption than other periods. Higher corruption level in democratic period could be as a result of the immunity most political office holders enjoyed while in office and after in the region as well as weak institutional framework and performance in curbing corruption at various levels of governance. Salawu and Hassan (2011) and Babangida (2002) findings confirmed that there is a negative ethnic influence on corruption. Such finding was contrary and not supported by the findings of this study. This study revealed that ethnic fractionalization do not determine corruption in Sub-Sahara Africa. This study further revealed that oil producing nations have lower level of corruption than non-oil producing nations. This finding is in sharp contrast to the findings of Sala-i-Martin and Subramanian (2003). Similarly, it was equally in contrast to the finding of Leite and Weidmann (1999) Ades and Di Tella, (1999) who argued that natural resources endowment, particularly oil, gas and so on have negative influence on the level of corruption etc.



5. Conclusion and Recommendations

It could be concluded from the above study that duration of democracy (uninterrupted democracy) do not significantly affect corruption in Sub-Sahara Africa. Furthermore, results for regression analysis indicated that democratization period possessed more corruption compared to non-democratization periods. This tally with the finding of Montinola and Jackman (2002) who reported that political corruption is absolutely lesser in dictatorships regimes when compared with partial democratic countries. However, once past a threshold, democratization institutions support corruption.

Institutions should be strengthened as a focal point for fighting corruption. People should be encourage to fully participate in democratic process and ensures that only credible and corrupt free leaders were elected. Sensitization and orientation programs should be conducted with a view to educate the populace about the danger of involving in corruption particularly when entrusted with public responsibility through election as this will go a long way to inculcate discipline among the populace within Sub Saharan region.

References

- Ades, A. & Tella, R. D. (1999). Rents, Competition, and Corruption: *The American Economic Review* 89(4): 982-993.
- Ades, A., & Rafael D. T. (1999). Rents, Competition and Corruption: *American Economic Review* 89(4): 982-993.
- Arellano M. & Bond S., (1991). The Review of Economic Studies, 58(2), 277-297
- Arellano & Bover (1995), Another look at the Instrumental Variable Estimation of Error Components Model. *Journal of Econometrics*. 68, 29 – 51
- Attahiru, M., Sa'adu, O. & Chikezie (2022). Impact of Quality of Election on Corruption in Sub Saharan Africa. *Akugba Journal of Research in Education*
- Babangida, (2002). Ethnic Nationalities and the Nigeria State. Excerpt from a Lecture Delivered at NIPSS, Karu, Plateau State, Nigeria.
- Blake, C. H. & Christopher, G. M. (2006). The Dynamics of Political Corruption: Re-examining the influence of democracy." *Democratization*: 1(13).
- Blundell, & Bond (1998), Initial conditions and moment restrictions in dynamic panel data models. *Journal of Econometrics* 87 (1998) 115—143.
- Flannery, M. J. & Hankins, K. W. (2013). Estimating dynamic panel models in corporate finance, *Journal of Corporate Finance*, 19(C), 1-19.
- Bratton, M. (2004). The Alternation Effect in Africa. *Journal of Democracy*, 15 (4)
- Haydaroglu, C. (2016). Corruption, Institutions and Economic Growth in Sub-Saharan Africa. *International Journal on Economic Research*, 1(7).
- Ibietan, J. (2013). Corruption and Public Accountability in the Nigerian Public Sector: Interrogating the Omission. *European Journal of Business and Management*: 15(5).
- Khan, M. H., (2006). Governance and Anti-Corruption Reforms in Developing Countries: Policies, Evidence and Ways Forward: *G-24 Discussion Paper Series, United Nations Conference on Trade and Development*.



- Leite, C. A. & Jens W. (1999). Does Mother Nature Corrupt? Natural Resources, Corruption, and Economic Growth: *IMF Working Paper No. 99/85*.
- Linberg, S. (2004). The Democratic Qualities of Competitive Elections: Participation, Competition and Legitimacy in Africa. *Commonwealth and Comparative Politics*
- Mafukata, M. A. (2015). Evolution of Corruption in Sub-Saharan Africa – from Nkruma to Mutharika The 2nd: Case Study of South Africa. *International Journal of Research in Business and Social Science*, 1(4).
- Montinola, G. R., & Jackman, R. W. (2002). Sources of Corruption: A Cross-Country Study. *British Journal of Political Science*, 32(1), 147-170.
- Pallegata A. (2009). The Effects of Democracy on the “Quality of Governance”. Evidence on the Capacity of Political Systems to Constrain Corruption. Paper presented at XXIII Convegno Annuale SISP, ROMA Facolta di Scienze Politiche, LUISS Guido Carli
- Persson T., Tabellini G. & Trebbi, F. (2003). “Electoral Rules and Corruption”. *Journal of the European Economic Association*, 1(4), 958- 989.
- Rose-Ackerman, S. (2004).The Challenge of Poor Governance and Corruption. *Copenhagen Consensus Challenge Paper*.
- Saha, S. & Campbell, N. (2007).Studies of the Effect of Democracy on Corruption. Prepared for the 36th Australian Conference of Economists, ‘Economics of Corruption Session’ Tasmania Australia.
- Saha, S. (2008). Democracy and Corruption: An Empirical Analysis in a Cross- Country Framework. *Association of Economists Annual Conference, Wallington, New Zealand*.
- Sala-i-Martin, Xavier, & Arvind S. (2003).Addressing the Natural Resource Curse: An Illustration from Nigeria. *NBER Working Paper 9804* (June).
- Salawu & Hassan (2011). Ethnic Politics and its Implications for the Survival of Democracy in Nigeria. *Journal of Public Administration and Policy Research*, 3(2), 28-33.
- Transparency International Corruption Perception Index (2015). [https://www.transparency.org/whatwedo/publication/corruption_perceptions_index 2016]
- Transparency International Corruption Perception Index (2017): Global Scores. [<https://www.files.transparency.org>]
- Treisman, D. (2000). The Causes of Corruption: A Cross-National Study. *Journal of Public Economics*, 76(3), 399-457.