CORRUPTION AND ITS IMPACT ON ENTREPRENEURSHIP IN NIGERIA

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ARTICLEDETAILS	ABSTRACT
	Purpose: Emerging empirical literatures on corruption advocates that its impact on overall national economic performance and micro-level firm performance is inconclusive. As such corruption is said to either 'grease' or 'sand' in the wheels of entrepreneurship, affecting firm performance (at the micro-level) and, ultimately, economic growth (at the macro-level). This study examines this issue using unique and exceptionally rich indexes of Corruption Perception Index (CPI) as a proxy for Corruption and Global Entrepreneurship Index (GEI) as a proxy for Entrepreneurship. **Design/Methodology/Approach:** Review of the relevant academic literature and regression analysis was employed. **Findings:** From the result of analysis, since GEI assigns the highest scores to countries most favorable to entrepreneurship while the CPI gives its highest scores to countries perceived to be the least corrupt. Thus, a negative correlation suggests that the most corrupt countries have the strongest entrepreneurial ecosystems. Thus, it reveals that there exists an inverse relationship between corruption and entrepreneurship in Nigeria during the quarterly period of the study. Thus, depicting that corruption "grease the wheels of entrepreneurship". **Implications/Originality/Value:** The contribution offers a comprehensive impact of the corruption on entrepreneurship development in Nigeria by employing a quarterly data for the period of 2012 to 2020 on entrepreneurship development in Nigeria and hints at promising areas of future research. **Research limitations:** The study employs only secondary data to access the impact of corruption on entrepreneurship in Nigeria for only the quarterly periods of 2012 to 2020 due to data availability.

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1. Introduction

Does corruption enhance or retard to entrepreneurship? At the starts the enquiry seems to be amusing and even surprisingly challenging. It is, however, still controversial among researchers which falls on the sides of Sanders and Greases of the wheel of entrepreneurship hypothesis. Emerging empirical literatures on corruption advocates that it not only affected the nationwide economic performance but also become the cause to affect firm at its micro-level performance.

The Sanders school of thought which was coined from the "Sand the Wheels of Entrepreneurship" hypothesis postulate that corruption does retard entrepreneurship, therefore corruption is perceived as an uncertainty associated with the business environment which create room for rent seeking activities such as kickbacks) underinvestment in human capital (Reinikka & Svensson, 2005),adverse effect on organizational growth (Aidt, 2009) as well as hurdle for organization to invest and grow (Meon and Sekkat, 2005; Fisman & Svensson, 2007).

However, in "greasers" school of thought asserts that deception and fraud enhance entrepreneurship. For instances, kickbacks to public office holders would help stimulate entrepreneurship especially where business environment is characterized with excessive bureaucracy that would somehow or another debilitate intensity (Bardhan, 1997).
Therefore, the crux of this study is to empirically analyzes whether corruption enhance or retard entrepreneurship in Nigeria using Corruption Perception Index as a proxy for corruption as well as Global Entrepreneurship Index as a proxy for entrepreneurship respectively.

The paper is arranged as follows, Section-1 of the paper provides a short review on appropriate literature, whereas section-2 shows the hypothetical framework of study. The Section-3 presents experimental literature on corruption as well as on entrepreneurship; while the Section-4 provides the explanation about data and data collection and research methodology adopted for the study; the section-5 talks about the exact outcomes of analysis, and Section- 6 closes with implication of findings and directions for prospective research in future

2.   Literature Review
2.1. Theoretical Literature
This section presents the theoretical framework on corruption and entrepreneurship for this study.
2.1.1. Greasers school of thoughts' hypothesis on corruption renowned as "grease the wheels"
The study conducted by the greases school of thoughts "grease the wheels" hypothesis of corruption opines that implant can act as trouble saving mechanism, thus rising in efficiency. Furthermore, the "greasers" school of thought of corruption posits that corruption may enhance growth, investment and development in the short run reliant on low-grade quality in governance and bureaucratic rules and regulations. They also argue that it could also motivate public officials in a situation where the wage is grossly insufficient (Leff, 1964, Leys, 1965, Aidt, 2003, Cuervo-Cazurra, 2006, Wang and You, 2012).

Some of the common consensus among prominent scholars of the "grease the wheels" study of hypothesis of corruption is that exploitation may enhance economic development by a lot of channels especially when bureaucracy is ill-functioning.
One channel in ill-functioning of bureaucracy is slowness. Lui (1985), Aidt (2003), Cuervo-Cazurra (2006) applying a formal economic model to calculate the effect of venality on material maximization that venality would proficiently reduce the time consumed on files but speed up in transaction process. The rationale behind this is that bribes could serve as a motivation to bureaucrats to fast track the process in a sluggish administration. Also, Huntington (1968) affirms that corruption would lessen the dreary bureaucratic rules and enhance in growing. The author further cited the United States of America railroad utility and Industrial Corporation in the 1870s and 1880s where the high-level prevalence of corruption also witnessed rapid growth during the same period.
Secondly, (Hewitt and Van Rijckeghem (1995) and Méon and Weill (2010) argue that another channel through which corruption can drive growth in the presence of ill-functioning bureaucracy is focus on the quality of civil/public servant. Also, Leys, (1965), Bayley (1966), Van Rijckeghem and Weder (2001) and Muttreja et al. (2012) posit that if wages in government institutions are low or insufficient, corruption (bribes) could serve as perks/motivation to civil servants. As a result, this attracts highly skilled manpower from poorly remunerated private organizations to government owned corporations.

Thirdly, corruption could serve as a means of decision rule by public officials (Beck and Maher, 1986, Lien, 1986). For instance, in competition auction or bidding for government contracts or projects, the authors assert that only firms that pay the highest amount of bribes in such bidding process will win such contracts. Therefore, corruption can be said to be a benchmark for granting government procurement contracts.
Also, Leff, (1964) and Bayley (1966) asserted that corruption might serve as edge against unfavorable government policies especially if organizations are biased with entrepreneurship owed, for instance, to a conceptual bias.

Furthermore, Leff (1964) asserts that corruption could enhance the quality of investment provided if it is in form of tax avoidance and such investment is channeled in high yielding project with Return on Investment (ROI).

Akai et al. (2005) argue that, in short run malpractice may neutralize government failure and support in economic development and exogenously determine suboptimal bureaucratic management system. Recently, Wang and You (2012) confirmed that malpractices/corruption may support the best effectual way to bypass most rigid and strict rules of laws in China. Also, Dreher and Gassebner (2013), endorsed the same results from the study conducted on 43 countries from 2003 to 2005 by using extreme bounds analysis. The result indicates that when the Government rules of laws are in its extreme level, corruption might be beneficial.

In summary, the aforementioned propositions confirm that corruption may positively drive inclusive growth because it greases the adverse defective bureaucracy and bad policies.

2.2.2. The Sander school of thoughts' hypothesis of corruption renowned as "sand the wheels"

The "Sanders" school of thought of corruption affirms that corruption is inimical to entrepreneurship, (Mauro, 1995, Tanzi, 1998, Al-Sadig, 2009, Méon and Weill, 2010,

Ibrahim et al., 2015).   Argue in "sand the wheels" hypothesis of corruption, the corruption is a harmful to economic development through several distorting channels. Kurer (1993) opined that deceitful officials have an edge to generate other misrepresentations in the economy to cover up their ill-gotten wealth. Also, that a "civil servant can limit new or other civil servants access to key or "juicy" positions to preserve the rent from corruption.

Rose-Ackerman (1997) counter the assumption that graft can promote the choice of the right decision as subjective. The authors argue that a firm willing to pay the highest bribe tends to compromise in the quality of goods and services to be produced or to be rendered.

 In conclusion, the aforementioned argument affirms that corruption may negatively retard inclusive growth because of the "sand effect "on investment and good policies.

2.2. Empirical Literature
This section presents the empirical literatures on corruption-entrepreneurship nexus. The impact of corruption on entrepreneurship has generated mixed consensus on whether corruption does stimulate or negate entrepreneurship. This has led to two distinct schools of thought known as The "Sanders" school of thought of corruption and the "greasers" school of thought.

The "Sanders" school of thought of corruption postulate that corruption retards entrepreneurship some of the major contributors to this school of thought include Ugur and Dasgupta (2011), Aidt et al. (2008), Meon and Sekkat (2005), Mendez and Sepulveda (2005) and Gyimah-Brempong (2002) who opined that corruption retards entrepreneurship through following channels such as reduction on marginal return on investment (ROI) as well as a "Sand in wheel" of growth in smaller institutions that's also creates handedness in the growth process of developing countries which mostly have small and medium scale enterprises (SMEs) as the pillar for their economies (Fisman andSvensson, 2007; Mauro, 1995; Shleifer and Vishny, 1993 and Klitgaard, 1991).

However, the "greasers" school of thought assert that corruption enhance entrepreneurship especially in environment where exist high level of bureaucracy coupled with weak institution. Some of the contributors of this school of thought included Mironov,2005; Dreher and Gassebner ,2011; O'Toole and Tarp 2014). (Mironov 2005) investigate the corruption –entrepreneurship nexus in 141 countries for the period of 1996 to 2004. The result revealed that corruption does enhance entrepreneurship especially in countries with weaker institutions. He further, assert that during the process entrepreneurs might evade or pay less taxes and therefore releases more monies for entrepreneurs to expand their business, therefore make them more productive/ profits. Besides, Dreher and Gassebner (2011) examined the impact of corruption over the sample size of 43 countries data on entrepreneurship covering the period of 2003 to 2005. Their result show that corruption does have a moderated effect on entrepreneurship that is,a rise in corruption index by one point decreases the growth in entrepreneurship by 0.31% points. Henceforth, the over all, as per the 'grease the wheels' hypothesis, some corruption may help facilitate commerce in an otherwise business-unfriendly environment.

3. Methodology
This section demonstrates the data employed for the study as well as its source, and

methodology applied for estimation. It also explains the econometric model analyzed with estimation technique.

3.1.   Description of the Data Set

This study is conducted in Nigerian context, for the quarterly periods of 2012 Q1 to 2020 Q4. Data sources are from the Corruption Perception Index (CPI) and Global Entrepreneurship Index (GEI) in quarterly basis. In this study, Global Entrepreneurship Index is the dependent variable denoted by GEI while Corruption Perception Index denoted by (CPI). EVIEWS 9.0 is the software package used for calculation of our results.

3.2. Model Specification

The model adopted for this study similar to that used by Dumitrescu, M.S., et al (2020), which show an impact of corruption on entrepreneurship. The model which include Corruption variable to ascertain its impact on Entrepreneurship (GEI) as was done by Dumitrescu, M.S., et al (2020), consistent with neoclassical growth theory.

$$3. \quad GEI = CPI + \varepsilon_t \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (1)$$

Where
GEI - Global Entrepreneurship Index
 CPI -Corruption Perception Index
 The expected apriori sign of corruption on entrepreneurship could be positive or negative has stated by grease and sand hypothesis of corruption.

4. Results & Discussions

This section presents the result of impact of corruption on entrepreneurship in Nigeria.

4.1.   Descriptive Statistics

Table 1 below represents the summary statistics of variables used in the study. Mean distribution of all variables was presented in second row of this table. The mean value is unarguably one vital tool in determining the central tendencies of the data set. Third row of this table reflects the maximum, whereas; fourth row of the table represents the minimum value in the data set of all variables. The fifth row in this table shows the standard deviation value within result. The GEI that is taken as dependent variable for the study purposes has a maximum value i.e. 22.70000, while the minimum value in the data set is 0.000000 having its mean value 8.279412 that is moderately closer to maximum value   as compared to minimum value. However, the entrepreneurship (GEI) level in Nigerian context is relatively high. On the basis of our review we are confident that entrepreneurship in Nigerian context remains relatively high.

Moreover, the results for all the independent variable, namely, CPI follow same pattern of maximum and minimum trends by entrepreneurship (GEI). As an illustration, the CPI demonstrates maximum value i.e. 28.00000, while the minimum value is 25.00000 having mean value of 26.44118 that is very near to the minimum value as compared to its maximum value. Hence, on the basis of these results we can infer that CPI is very unpredictable as well as incomparable, observing the gap among minimum and the maximum value.

Table 1: Descriptive statistics Nigeria

	GEI	CPI
Mean	8.2794	26.441
Median	0.0000	26.500
Maximum	22.700	28.000
Minimum	0.0000	25.0000
Std. Dev.	10.029	0.7527
Observations	17	17

Source: Author's own elaboration

4.2. Covariance matrix for corruption and its impact on entrepreneurship in Nigeria

Table-2 reflects covariance structure of the variables selected for study. Study variables demonstrate the divergent relationship with each other. Conversely, we draw especial interest on the relationship among our dependent variable i.e. GEI with another independent variables as shown in the given table, as this is our key concern in this part of the study. The GEI slightly as well as adversely correlates with CPI with value of 0.539923. Study coefficients are statistically significant at 5% significance level. These results demonstrate a weak correlation among endogenous and exogenous variables. On the basis of our analysis and results we are confident to say no multicollinearity exist within the model.

Table.2: Correlation Analysis

	GEI	CPI
GEI	1.000000	
CPI	-0.539923	1.000000

Source: Author's own elaboration

4.3.1. Regression Results

In order to highlighting the dependence among our endogenous variable i.e. Global *Entrepreneurship Index (GEI)* with exogenous variable i.e., Corruption *Perceptions Index (CPI)* we developed a regression model based on the following linear equation.

$$GEI = \beta_0 + \beta_1\, CPI + \varepsilon_t \quad ………………………….. (2)$$

Econometric model is being estimated on the basis of values within two variables i.e.:

$$\text{Forecast GEI}= \quad GEI = 8.493 - 7.194\, CPI + \varepsilon_t \quad ……………………….. (3)$$

On the basis of our estimation it can be concluded that our study model is valid at significance level of 5%, (see *significance F-value = 0.0000*), variation in our dependent variable i.e. CPI explaining 94.4% from the variation of GEI. However, coefficient of variable CPI is statistically significant at significance level of 5%, (see *p-value=0.0000*) it clearly reflects that an increase in CPI with one unit will lead to cause in growth of GEI

with value of 0.95%.

Table.3: Regression Analysis

Dependent Variable: GEI

Method: Least Squares

Included observations: 17 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
CPI	-7.194	2.895664	-2.484348	0.0253
C	8.493	76.59395	2.591496	0.0204
R-squared	0.915	Mean dependent var		8.279412
Adjusted R-squared	0.944284	S.D. dependent var		10.02954
S.E. of regression	8.718870	Akaike info criterion		7.278987
Sum squared resid	1140.280	Schwarz criterion		7.377012
Log likelihood	-59.87139	Hannan-Quinn criter.		7.288731
F-statistic	0.0000	Durbin-Watson stat		0.123060
Prob(F-statistic)	0.025274			

Source: Author's own elaboration

From the result of analysis above, since GEI assigns the highest score to countries most favorable to entrepreneurship, while the CPI gives its highest score to countries perceived to be the least corrupt. Thus, a negative correlation suggests that the most corrupt countries have the strongest entrepreneurial ecosystems. Thus, it reveals that there exists an inverse relationship between corruption and entrepreneurship in Nigeria during the quarterly period of the study. Thus, depicting that corruption "greases the wheels of entrepreneurship".

5. Conclusion

In conclusion, this article thus validates that corruption enhance entrepreneurship in Nigeria due to excess bureaucracy witness in Nigeria during the period under study. Future research on this area might be the exploration of factors that contributed on the growth of these two in indexes and how they might be extended to the other countries like African and Asian.

Acknowledgment

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