
THE IMPACT OF CORRUPTION ON ECONOMIC GROWTH IN GHANA

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Abstract

This paper aims to find out how corruption affects economic growth statistically in Ghana. The research used secondary time series data from 1998 to 2020 for a total of twenty-two years. The study used gross domestic product (GDP) per capita as a measure of economic growth. The Corruption index and total government expenditure were used as explanatory variables in the analysis. The data was checked for stationarity using the unit root test and the Augmented Dickey-Fuller (ADF) test was applied. To assess the effect of corruption on economic growth, multiple regression analysis was used. The study revealed that corruption has an insignificant negative impact on economic growth in Ghana. This finding implies that the economy would be unable to grow rapidly if corruption is not curtailed in Ghana. The research suggests that policies that promote sustainable development should be facilitated to improve the level of economic growth by reducing corruption and poverty. Lastly, the study further suggests that political will is needed to root out corrupt government appointees.

Keywords: Corruption, economic growth, GDP, statistical,

1. Introduction

Corruption is a symptom and product of structural weakness, and it can damage a country's economic results. However, in recent times, research into the causes and effects of corruption has increased dramatically. On the one hand, corruption has surfaced in several countries that have already begun a series of liberalizing reforms in the hopes of achieving rapid globalization. Descriptive evidence, however, indicates a negative relationship between a country's perceived level of corruption and its ability to thrive from globalization and liberalization reforms (Adela et al. 2014).

Corruption is when people in positions of authority, such as managers or government officials, act dishonestly. Giving or receiving bribes or inappropriate gifts, double-dealing, under-the-table deals, election rigging, diverting funds, laundering money, and defrauding investors are all examples of corruption. To quote Mr. John Agyekum Kufuor, former President of the Republic of Ghana, "corruption is as old as Adam and Eve." Corruption erodes confidence, weakens democracy, and stymies economic development in the sense that funds that should be used to improve citizens' lives by providing good roads, education, electricity, clean water, and other social services are instead taken by a single individual or a small group of people. Transparency International (TI) defined corruption as the abuse of entrusted power for private gain. It went on

to say that corruption erodes confidence, weakens democracy, stifles economic growth, and exacerbates inequality, poverty, social discord, and the environmental crisis. Corruption, according to the International Monetary Fund (IMF), has existed for a long time and will continue to exist in the future unless governments can find successful ways to fight it. According to Ugur and Dasgupta (2011), corruption is both a symptom and an outcome of institutional weakness, with potentially negative consequences for a country's economic performance. According to Odi (2014), corruption is an ancient practice that can be traced back to pre-biblical times and has manifested itself in the ancient civilizations of both developed and developing countries. Adegoke (2017), indicates that corruption has become a fast way of life and it has eroded the country's integrity. Adela et al., (2014), defined it as the abuse of public duty for private gain by a public official or different entity. According to Kasimu & Kolawole (2015), corruption entails the use of bribes to persuade someone to do something that is against the law. Ngutsav (2018) describes corruption as clogging the wheels of economic development. He goes on to say that corruption is recognized as a bad thing even by those who practice and perpetuate it. He also indicates that corruption is not only found in democratic and dictatorial politics but also feudal, capitalist, and socialist economies.

1.1 Problem Statement

There has been a slew of research on the subject conducted around the world, including (Woo and Heo 2009; Spyridon et al., 2013; Hashen, 2014; Odi 2014; Adeagbo, 2015; Kasimu & Kolawole 2015; Hossain, 2016; Basem, 2016; Adegoke & 2017), yielding tremendous and result-driven recommendations. Theories have been proposed (agency theory, utilitarianism theory, and so on) that serve as eye-openers on the causes, consequences, and how to combat cancer known as corruption. After it transitioned to multi-party democracy in 1992, Ghana has been regarded as one of the more stable countries in West Africa. However, it is perceived that corruption occurs in all sectors of the Ghanaian economy and transparency is often lacking. The perpetrators are frequently unpunished. The courts and the police are considered to be the most tainted with corruption (Kaunain Rahman, 2018). However, there is an increasing impression that government-related corruption is on the rise, a problem that has plagued all successive governments. In line with this, the new President of the Republic of Ghana made a campaign pledge during the 2016 election that once he took office, he would eliminate corruption from the system, which he attempted doing in 2018 by establishing a special prosecutor's office to deal with corrupt government officials. Despite the president's commendable effort, corruption continues to plague the country's government officials. This has had an impact on all aspects of economic growth, both in the public and private sectors. Ghana is currently ranked 75th in the world and 10th in West Africa, among the most corrupt countries but there is no extensive statistical research on its impact, necessitating the publication of this paper. This paper aims to look into the effect of corruption on Ghana's economic development.

2. Literature Review

2.1 Introduction

In recent years, scholars, economists, bankers, policymakers, researchers, and the general public have debated the topic of increasing corruption and its effect on economic growth. Both

theoretically and empirically, the impacts of corruption on economic development are still unresolved. This is because there are many different theoretical perspectives on corruption, and traditional theory holds that a high level of corruption in a country is a source of economic instability or stagnation, inappropriate use of political control, and nepotism. Several empirical studies contradicted traditional wisdom. A few studies have found a positive and significant link between corruption and economic growth, while others, such as Rotini et al., (2013), found no link between an increase in corruption and real production growth.

2.2 Theoretical Framework

Theoretically, the Policy-Oriented Theory of Corruption was introduced by Teveik, Albert, and Charles in 1986 to clarify the role of the government in fighting corruption. They argue that considering the prevalence of corruption, government corruption has been surprisingly harmful to economic development, necessitating a thorough investigation. According to the theory, a high level of corruption in any country, whether developed or developing, will prevent the economy from growing, and that if the area of administrative corruption is to become more theoretical and less descriptive, it must establish a structure and methodology that will enable it to be measured. In addition, Arrow (1962), Lucas (1988), and Romer (1988) proposed Economic Growth Theory in response to flaws in the Solow Swan growth theory or model (1990). As suggested, this theory emphasized an economy's long-run growth rate and was based on endogenous factors rather than the exogenous factors of neoclassical growth theory. According to the Solow-Swan model, the long-run growth rate of production is determined by two exogenous variables: the rate of population growth and the level of corruption in the region. The growth theory emphasizes technological progress as a result of capital stock growth, human capital development, corruption reduction, and the rate of investment.

2.3 Empirical Review

A few scholars have looked into the role of corruption in both developed and developing countries' economic development. Abiodun, Elijah, and Obayelu (2007), for example, use descriptive surveys and content analysis to examine the impact of corruption and economic reforms on Nigerian economic growth and development. They claimed that the implementation of an anti-corruption team or instruments had resulted in substantial reductions in the level of corruption in Nigeria. However, the study discovered a negative correlation between corruption levels and economic development, making it difficult for Nigeria to develop quickly. This means that, despite the country's vast resources, corruption in Nigeria hinders economic growth, performance, and progress. This is also because corruption damages or destroys a country's reputation and results in the loss of much-needed revenue.

Morris & Klesner (2010), explore the relationship linking corruption and trust in Mexico based on data from the 2004 Americas Barometer survey. The study discovers a powerful mutual causality between perceptions of corruption and trust in political institutions that further suggests that rooting out perceptions of corruption or shoring up trust in public institutions will be an extremely difficult project for anyone who takes on the task. Aidt (2011) studies the relationship between corruption and sustainable development using a sample of 110 countries between 1996 and 2007. Sustainability is measured by growth in genuine wealth per capita. The study suggests

that cross-national measures of perceived and experienced corruption reduce growth in genuine wealth per capita. The finding was in contrast to the evidence on the relationship between corruption and growth in GDP per capita. The negative correlation between a wide range of different corruption indices and growth in genuine wealth per capita is very robust and is of economic as well as statistical significance. Adewale (2011) used a parsimonious error correction mechanism and an experimental test design methodology for data analysis to investigate the crowding-out effects of corruption in Nigeria, and found that there is a negative relationship between corruption and production growth in Nigeria. The implication of this is that Nigeria's government should implement a national re-orientation program to educate citizens about the critical importance of eliminating corruption in all facets of the Nigerian economy and socio-political structure.

Rotimi et al., (2013) studied corruption and Nigerian economic growth. This study explores the ordinary least squares (OLS) to determine the relationship between corruption and economic growth. In the study, the granger causality method was also used to assess the causal relationship that exists between corruption and GDP. The finding revealed that corruption impairs and impacts economic growth. Odi (2014) investigates the impact of corruption on Nigerian economic growth using granger causality and regression techniques. He used GDP as a proxy for economic growth and the corruption index as a proxy for corruption in the study. The finding indicates that the level of corruption in Nigeria over the years has had a significant negative impact on economic growth in Nigeria. The study further suggested that the economy cannot grow fast without zero tolerance of corruption in the country. Ben et al., (2018) examined the effect of corruption on economic sustainability and growth in Nigeria. The study adopts the Classical Linear Regression Model (CLRM) using secondary data from 1999-2016 with an array of other universal/customary and analytical tests. They indicated that corruption and exchange established positive and significant affiliations, while unemployment and inflation rate have negative and non-significant affiliations. Enofe & Odibo (2019) investigate the impact of corruption on the economic development of Nigeria using the three-stage least square method (3SLS) and time series secondary data covering 1986 to 2018. The study revealed that corruption significantly influences the economic development of Nigeria.

Hoinaru et al., (2020), investigated the impact of corruption and shadow economy on economic and sustainable development using a large cross-country database of 185 countries for the 2005–2015 time period. They find that corruption and shadow economy are poverty-driven diseases and they highly characterize low-income countries. They also find some evidence that corruption can also be seen as a way to circumvent the law to achieve higher economic benefits and thereby to increase economic development. The study, however, finds out that economic and sustainable development in high-income countries is more strongly and negatively affected by the phenomena of corruption and shadow economy than in the case of low-income countries.

3. Methodology

Multiple model analysis was used to analyze the impact of corruption on economic growth. Gross domestic product (GDP) per capita was used as the dependent variable and corruption index, and expenditure was used as independent variables to demonstrate the application of the

ordinary least square method. The study used time-series data over a twenty-three-year period, from 1998 to 2020.

The model used is the one below.

$$GDPPC = \beta_0 + \beta_1COR + \beta_2EXP + \varepsilon_t$$

Where:

GDPPC = gross domestic product per capita

COR = corruption index

EXP = government expenditure per capita

β_0 = the vertical interception

β_1 and β_2 = are the regression coefficient of the explanatory variables

4. Presentation and Analysis of Results

4.1. Introduction

This section focuses on the empirical estimation, presentation, and economic interpretation of regression results using the methodology mentioned above.

Table 1 shows the results of the descriptive statistics for the dependent and independent variables. Economic growth is measured in terms of GDP per capita. COR and EXP are among the variables included in the descriptive statistics of the results, which are displayed in three columns.

GDPPC has a mean of 1529.13, with a maximum of 2378.00 and a minimum value of 595.00, as shown in Table 1 below. COR is 38.48 percent on average, with a maximum of 48 percent and a minimum of 30 percent. EXP obtained a mean value of 244.78, with a maximum of 516 and a minimum of 0.000.

Table 1. Descriptive Statistics.

	GDPPC	COR	EXP
Mean	1529.130	38.47826	244.7826
Median	1630.000	39.00000	251.0000
Maximum	2378.000	48.00000	516.0000
Minimum	595.0000	30.00000	0.000000
Skewness	- 0.202550	0.110202	0.120853
Kurtosis	1.601699	1.940699	1.722879
Observations	23	23	23

4.2 Correlation Matrix

The correlation analysis was used to determine the intensity and direction of the two variables' linear relationship. The correlation statistics in table 2 reveal a positive relationship between the dependent and independent variables.

Table 2. Correlation Matrix.

	GDPPC	COR	EXP
GDP	1.000000	0.720153	0.637900
COR	0.720153	1.000000	0.545962
EXP	0.637900	0.545962	1.000000

4.3 Stationarity Tests

The Augmented Dickey-Fuller Test was used to test the stationarity or unit root of the data was used in this analysis, and the results are shown below. The study compared test statistic value with that of test critical value at 5% significance and considering p-value and it has been indicated that all variables had unit-roots. This is because the ADF test statistics' absolute values for each of these variables were less than the absolute variables of the test essential values at 5%. Furthermore, the p-values for both of the ADF test statistics for these variables were both greater than 5% (0.82, 0.37, and 0.51, respectively). The null hypothesis of no unit roots in the data series could not be rejected in this situation, so it was accepted. The variables with a unit root, on the other hand, have been transformed into first differences to achieve stationarity in these data. Following that, the updated data was used in the study's regression model.

Table 3. Result of Augmented Dickey-Fuller (ADF)

	ADF Test Statistics	Test Critical Value at 5%	*P-Value
GDPPC	0.696579	3.004861	0.8278
COR	1.809623	3.004861	0.3662
EXP	1.493226	3.004861	0.5182

*MacKinnon (1996) one-sided p-value

4.3 Multiple Regression Analysis Result

Table 5: Result of the Impact of Corruption on Economic Growth (GDPPC)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(CORR)	-14.08957	9.961131	-1.414455	0.1734
D(EXP01)	0.734769	0.335509	2.190014	0.0412
C	67.37878	38.59818	1.745647	0.0970
R-squared	0.268960	Durbin-Watson stat		1.638791

The result of the multiple regression analysis is shown in table 5. In the table, corruption has an insignificant negative effect on GDP per capita with a coefficient value of (-14.089). This means that a percentage increase in corruption by one percent will lead to a decrease in GDP per capita by 14.09%, but the result does not produce a significant effect. This means that even though corruption has a negative impact on economic growth, it does not have much effect on the economy. With a coefficient value of 0.735, expenses have a significant positive effect on GDP per capita, causing a percentage increase in economic growth by 73.50%. The result suggests that the government's total expenditure on the economy of Ghana has accounted for 73.50%, which shows a good sign of economic development.

5. Conclusion and Recommendations

The main objective of this study is to investigate the effect of corruption on Ghana's economic growth. Descriptive statistics, correlation, and the multiple regression analysis through (LS) method were used in the investigation. The GDP per capita has been used as a proxy for economic growth, and corruption index and expenditure were used in the study. An empirical study shows that corruption has a negative impact on economic growth in Ghana. But the finding does not have a significant impact on economic development. This result implies that without appropriate punishment for corruption, the economy would not be able to expand quickly. Moreover, the report supports previous findings on the impact of corruption on economic growth in the literature. According to the research, policies that promote sustainable development should be facilitated to improve the level of economic growth by reducing corruption and poverty.

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