

The Impact of Corruption on the Health Sector of the Nigerian Economic Growth

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Abstract

The health sector is a prerequisite for human capital development and a live-wire to the growth of the Nigerian economy. The deplorable condition of the health sector in the country, despite government spending raises serious concerns, These concerns include poor accessibility of health care(public hospitals), poor health quality, mismanagement, embezzlement, It is in view of this that this paper examined the economic impact of corruption on the health sector of the Nigerian economic growth. The major objective is to examine the impact of corruption on the health sector of the Nigerian economy. Data used for this study was sourced from Central Bank of Nigeria (CBN) statistical bulletin and bureau of statistics from 1991 to 2017. The ordinary least square (OLS) technique was employed. However, the variables were subjected to the unit root test, co-integration test, to test for the stationarity and the long run relationship among the variables before the application of the OLS. The variables were not stationary at level but became stationary at first difference. The R^2 shows a good fit with a value of about 74%, the overall F-statistic value is 30.83244 which is the test of appropriateness of the model and the 'P' value of 0.00007. This leads to the rejection of the H_0 and acceptance of the H_1 that, there is a significant relationship between corruption and the Health Sector on the Nigerian economic growth. The Error Correction Model (ECM) showed that the disequilibrium in the economy can be adjusted back to equilibrium at a speed of 27.22%. In essence the ECM result shows that economic growth responds to a deviation from the long run equilibrium. Therefore, the recommendation is made thus; Governments need to publish detailed health budgets and financial information that's easy to understand. Then the funds can be tracked and prevented from being stolen. Health workers need adequate pay and guarantees that salaries will reach them. This makes them less vulnerable to bribes or likely to demand them.

Keywords: *Real gross domestic product, Nigeria, Corruption (CPI), Total health sector expenditure*

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Background to the Study

Health is one of the most vital conditions of life. Keleher and MacDougall (2017) opined that, feeling healthy is core to our everyday lives and is reflected in the common greeting, 'How are you?' Rarely does a day go by when we don't consider our own health and inquire about the health of others. Prior to the second world war, Shut (2005), a well-known public health professional, expressed the view that 'health therefore does not simply mean the absence of disease; it is something positive, a joyful attitude to life, and a cheerful acceptance of the responsibilities that life puts upon the individual, no health system ever develops in vacuum. Hence, history of nutrition and health as it is taught in many institutions is tied to the culture of the people: tradition, ancient and medieval.

In Nigeria, historical perspective of nutrition and healthcare development started midway through the centuries in a similar pattern. It could be traced through the colonial period, an era of traditional medicine in its full course. Nutrition and Health care were basically provided by the traditional bonesetter, traditional surgeons, traditional birth attendants, diviners and koranic healers. During the colonial period, the colonial authorities provided basic nutrition and health care services to colonial administrators and their families only. A vast majority had no access to orthodox health care. They depended largely on traditional medicine. But the post- colonial period witnessed an era of independence and strategic development plans that culminated in the provision of basic health facilities and services, especially in urban centres. This was the major landmark in the history of health care development in Nigeria.

World Bank (2000) and Transparency International (2006) opined that in the last 10 years, efforts to combat corruption have gained the attention of national governments, development partners and civil society organizations, in the same vein Transparency International view corruption in the health sector to mean the difference between life and death. Poor people are worst affected. Medical staff can charge unofficial fees to attend to patients. They may demand bribes for medication which should be free. Or they may let patients who bribe them queue-jump. Corruption also costs lives when fake or adulterated medications are sold to health services. Without proper checks from regulators, public health funds can easily disappear. World Bank surveys show that in some countries, up to 80 per cent of non-salary health funds never reach local facilities. Ministers and hospital administrators can siphon millions of dollars from health budgets. Or they can accept bribes. This distorts policy and denies people hospitals, medicines and qualified staff. Stolen funds also hamper efforts to beat major health challenges, such as malaria and HIV/AIDS. It's not only developing countries which suffer. Wealthy countries lose millions of dollars each year to insurance fraud and corruption (Transparency International, 2017).

Hadi (2016) opined that the trouble with Nigeria is simply and squarely a failure of leadership. There is nothing basically wrong with the Nigerian character. There is nothing wrong with the Nigerian Land or climate or water or air or anything else. The Nigerian problem is the unwillingness or inability of its leaders to rise to the responsibility, the challenge of personal example which is the hallmarks of true leadership. I am saying that Nigeria can change today if she discovers true leaders who have the will, the ability and the vision". Nigeria, once

heralded as the beacon of Africa, has since fallen short of this potential. Years of kleptocratic, repressive dictators coupled with widespread corruption, have resulted in large-scale neglect and deterioration of public services. Nowhere is this more apparent than within the health sector! A renowned political analyst once said “there are 3 vital areas a responsible government must never allow the private sector to dominate – Health, Education and Security”.

Hadi (2016) also said that, Nigeria bears witness to some of the worst health-care statistics in the world and comes close to the bottom of virtually every development index. Most of other countries that are ranked higher than Nigeria have suffered significant internal conflict and have considerably lower per capita gross domestic products. In 2000, the World Health Organization ranked the Nigerian health system in 187th place out of 191 countries evaluated. According to Hadi, United Nations Development Program (UNDP) said that, life expectancy in Nigeria has declined to 43 years (2006) from 47 in (1990). In contrast, life expectancy in Malaysia, which attained nationhood at the same time as Nigeria, has now reached 70 years. Over 50,000 Nigerian women die from child birth every year (equivalent to a plane carrying 140 people crashing every single day). Nigeria accounts for 10% of the world's maternal deaths in child birth whereas the country represents 2% of the world's population. One in five Nigerian children dies before his/her 5th birthday. About a million Nigerian children die of preventable causes every year. Only 18% of Nigerian children are fully immunized by their first birthday. Malaria kills more Nigerians than any other disease, and yet less than 5% of its population have access to insecticide treated nets proven to be effective in preventing malaria. The Nigerian Government at all levels spends less than 5% of public expenditure on health, despite being signatory to the 2000 Abuja Declaration to increase this to 15%, over 75% of the Millennium Development Goals are also health related.

A poorly structured health service that relies on vertical programs for HIV, TB and Malaria means that coordination is chaotic, and already scanty resources fail to reach the lower levels in which they are needed most. Each component of the three-tier governance structure – Federal, State and Local government is involved in the provision of health care, which results in chaotic coordination and communication, poor accountability, and considerable disparities throughout the country. Now back to basics, the Nigerian Primary Health Care system is in a state of total collapse. Primary Health Care centres are dilapidated structures decorated with expired drugs and cob webs and have become in many places inhabitants for domestic animals. In many tertiary and secondary health centres, ordinary water supply is not available, not to talk of availability of power supply and essential drugs.

Corruption is a pervasive problem affecting the Nigerian health sector. At the level of individuals and households, there is mounting evidence of the negative effects of corruption on health and welfare of citizens. There is increasing interest among Nigerians and international donors on how corruption affects health care access and outcomes, and what could be done to combat corruption in the health sector?, Hence the need for this study. The main objective of this study therefore, is to examine the economic impact of corruption on the health sector in Nigeria from 1991 to 2017. The specific objective is to determine the

relationship between corruption and the health sector of the Nigeria economy. In order to achieve this objective the paper has been structured into five sections with the introduction as section one where the background, problem statement, questions and objectives are covered. Section two present the literature review which contains conceptual and theoretical frameworks as well empirical evidences. Section three forms the methodology of the paper. Section four deals with the analysis of the empirical result and discussion of findings. Section five provides the conclusion and policy recommendations.

Literature Review

Conceptual Framework

The Concept of Health

Health is seen as an important form of human capital, as postulated by David, Bloom and Canning (2000). It can enhance workers' productivity by increasing their physical capacities, such as strength and endurance, as well as their mental capacities, such as cognitive functioning and reasoning ability. We expect to see a positive relationship between health and productivity of both skilled and unskilled workers; evidence of this link is increasing at the microeconomic level. Health and economic prosperity go hand in hand. In micro and macro data, there is abundant evidence that a wide array of health indicators is positively associated with many different dimensions of economic prosperity. Explanations for this association have been much debated. Isolating the causal pathways linking health and economic outcomes has been a central issue. It is likely that causality runs in both directions. First, higher income individuals invest more in human capital, including health: as their income grows, they invest in better diets, improved sanitation and better healthcare. Second, if a worker is healthier, less susceptible to disease, and more alert and more energetic, then he or she will probably be more productive and command higher earnings.

The Concept of Corruption

Corruption is a potent cancer that has mercilessly eaten Nigeria to a state of stupor says politics and government (2015). Corruption is the given of a bribe to an official so that the truth will not be told. It involves embezzlement of public fund for personal use and any act which is considered to be criminal act according to the law of particular society. Marris (1991, also cited in politics and government 2015), opined that “corruption is a dishonest or fraudulent conduct by those in power, typically involving bribery: it is the illegitimate use of power to benefit a private interest.” Donwa, Mgbame, and Ogbeide (2015), also defined corruption to include bribery, fraud and dishonesty, which is capable of destroying or perverting the purity of societal well-being. Corruption is defined as any act of dishonesty in the words of Ogboru (2014), perceives corruption as the circumvention of laws and rules (codified or conventional) for the purpose of obtaining some advantage, privilege or gain to oneself or another person, and to the detriment and/or disadvantage of either the state or other individuals or both.

According to Mike (2017), he sees corruption as the dishonest or fraudulent conduct by those in power typically involving in bribery. Theories abound for the different possible causes of the flagrant graft that exists in Nigeria. Some blame greed and ostentatious lifestyles as a potential root cause of corruption. To some, societies in love with ostentatious lifestyle may delve into

corrupt practices to feed the lifestyle and also embrace a style of public sleaze and lack of decorum. The customs and attitudes of the society may also be a contributing factor. Gift giving as expressions of loyalty or tributes to traditional rulers may be fabrics of the society. Also, a political environment that excludes favors towards elites or wealthy citizens may also be influenced by corruption. Wealthy elites may resort to sleaze in order to gain power and protect their interest. However, the bottom line surmised from the views of most Nigerians is that corruption is a problem that has to be rooted out. In Nigeria, another major cause of corruption is ethnicity called tribalism in Nigeria. Friends and kinsmen seeking favor from officials may impose difficult strains on the ethical disposition of the official. Many kinsmen may see a government official as holding necessary avenues for their personal survival or gain. Corruption is defined by Transparency International as 'misuse of entrusted power for private gain'. Corruption occurs when public officials who have been given the authority to carry out goals which further the public good, instead use their position and power to benefit themselves and those close to them.

Theoretical Underpinning

The Rational Choice Theory of Corruption

The theory was provided by Zwalde (2016). According to her, the causal chain is that of an individual making a (bounded), rational decision that leads to predetermined outcome. The theory states that, public officials are corrupt for a simple reason that the potential benefits of corruption exceed the potential costs, if the benefits minus the probability of being caught, times its penalties are greater than the benefit of not being caught, then, an individual will rationally choose to be corrupt. Order wise he will not.

The Theory of Healthcare Supply

The theory examines the divergence in the organization of healthcare supply from that of the normal theory of supply (Newhouse 1974). The consumer's lack of knowledge in the healthcare market gives the producer of healthcare monopoly power in the health market. Newhouse (1974) looked into the theory of non-profit making hospital behavior. He suggested that non-profit making hospital maximize quality and quantity in the light of a zero profit. According to New House, the production is either for pure profit or pure patient welfare motivation. The decision makers of the hospitals are assumed to have two (2) major objectives which they aim to maximize. These two objectives are the quality and the quantity of care delivered. He further stated that the demand for care shifts upward as the quality rises because quality care will serve as a greater significance to the consumer.

Empirical Review

The study of economic impact of corruption on the health sector in Nigeria is rather a new phenomenon in economic literature and it has received a lot of attention in recent times. A study on corruption in the health sector and implication for service delivery in Oyo state public Hospitals by Akokuwebe and Adekanbi (2017) examines how corruption has impeded the service delivery in relation to diversion of drugs and how it has affected the increase of mortality (12.7 deaths/ 1000 population) in Nigeria in 2016. The study adopted a qualitative design and samples were drawn through systematic sampling technique. Data collected were

in-depth interview with pharmacists, health practitioners and health management officials. A pre-tested interview guide was used as instrument of data collection and data were content analyzed. It was found that corruption in the health sector especially in the public hospitals has negative implications for service health delivery in Oyo state, Nigeria, the research however recommend that stringent measures should be taken to deal with corrupt health workers who are caught in one corrupt act or the other so that they can serve as deterrence to other potential perpetrators in the health sector.

Bedir (2016) investigated the relationship between health expenditure and economic growth in developing countries. Using panel data for 16 countries, found out that there is a rising health expenditure per capita in all countries in the panel. Moreover, the result revealed that health expenditure per capita grows rapidly than the capital income growth rate for the countries. The causality test showed that in Europe, Middle East and Russia, one-way causality exists from HEXP to INC and is found in Hungary and South Africa. A one-way causality exists from INC to HEXP for Greece, Poland, UAE and Indonesia. Empirically, the result has indicated that income to a greater extent explained the variation of health expenditure in the countries under study. It is evident therefore that the role played by this health expenditure in Nigeria was not given attention.

Lustig (2006) in the study on the direct relationship between health and growth in Mexico uses 1970-1995 data and uses life expectancy and mortality rates for different age groups as health indicators. He observed that health is responsible for approximately one-third of long-term economic growth. He considered health to be an asset with an intrinsic value as well as instrumental value. Good health according to him is a source of wellbeing and highly valued throughout the world. In the same vein Aguayo-Rico and Iris (2010) examined the impact of health on economic growth for 13 European countries, 12 African countries, 16 American countries, and 11 Asian countries over the period 1970-80 and 1980-90 using ordinary least square (OLS), the authors found that health capital has a significant effect on economic growth, especially with a variable that captures all the determinants of health. Some other studies on health and economic growth conducted earlier found a positive relationship between the two.

Methodology

The study employs annual time series data spanning the period 1991 to 2017. To analyze the economic impact of corruption on the health sector of the Nigerian economic growth. The choice of data from 1991 is based on a research carried out by the Transparency international on corruption perception index (CPI), and 2017 is based on the available data. The data were obtained from several issues of Central Bank of Nigeria (CBN), World Bank report on Nigeria and National Bureau of Statistics (NBS).

Model Specification

In an attempt to determine the economic impact of corruption on the Nigeria health sector, a model was developed to justify the relationship that exists among the variables. In this regard, a multiple regression model was developed to determine the economic impact of corruption

on the health sector in Nigerian. The following model was specified in order to determine the impact of the independent variables on the health sector of the economy. A multiple regression model was used to ascertain the relationship between the dependent variable which is real gross domestic product (RGDP) as a proxy for economic growth, and the independent variables which are; THSE as a proxy for health sector and corruption perception index (CPI) as a proxy for corruption.

The model formulated for this paper work in its functional form can be expressed in mathematical terms as follows;

$$RGDP=f (THSE, CPI) \text{-----}(1)$$

Where;

- RGDP=Real Gross Domestic Product
- THSE = Total Health Sector Expenditure
- CPI = Corruption Perception Index

The variables adopted are selected based on conventional knowledge about them. Real Gross Domestic Product is the measure of economic growth. While Corruption Perception Index (CPI) and Total Health Sector Expenditure (THSE) as proxies for corruption and health sector respectively.

The linear form or econometric of the model can be expressed as;

$$RGDP =\alpha_0+\beta_1THSE +\beta_2CPI +\mu \text{-----}(2)$$

Where;

- α_0 = intercept of the model
- β_1 and β_2 = Regression Parameters.
- μ = Error Term

A Priori Expectation

The a priori expectation is a theoretical statement set by economic theory. For this paper, total health sector expenditure (THSE) is expected to have a positive sign while the level of corruption proxied by corruption perception index (CPI) should be negatively related to real gross domestic product (RGDP) respectively.

$$\alpha_0 \geq 0, \beta_1 \geq 0, \beta_2 \leq 0$$

Hypotheses

This paper aimed primarily at determining the economic impact of corruption on the health sector of the Nigerian economy. Thus, in order to achieve the objectives of the study, the null and alternate hypotheses are formulated as follows;

- H₀:** There is no significant relationship between corruption and the health sector of the Nigerian economic growth.
- H₁:** There is a significant relationship between corruption and the health sector of the Nigerian economic growth.

Data Analysis and Discussion of Finding

The economic impact of corruption on the health sector in Nigerian is the main focus of this paper. In this section, the paper presents and interprets the regression results obtained from the estimation process. The results and interpretations are presented as follows

Unit Roots Test

The Unit root tests are test for stationarity in a time series. A time series is stationary if a shift in time doesn't cause a change in the shape of the distribution; unit roots are one cause for non-stationary. It is recommended that the unit root test is conducted to validate the data for analysis; research has shown that using such non-stationary series would lead to spurious and misleading results, hence the need to difference. To investigate the presence of random walk in the time series data, a unit root test is carried out Gujarati (2013). The unit root was tested using Augmented dickey fuller (ADF) at 5% level of significance. This is to ascertain the stationary nature of the data to avoid a spurious regression model. The ADF result is presented thus;

Table 1: Augmented Dickey Fuller unit root test result

Variables	ADF Statistic	5%Critical value	Order of Integration	Remark
CPI	-3.780304	-2.986225	1(1)	Stationary
THSE	-5.153591	-2.986225	1(1)	Stationary
RGDP	-3.383124	-2.986225	1(1)	Stationary

Critical value at 0.05%. Source: Authors' computation using e-views

Co- Intergration Test Results

Having ascertain the unit roots properties of the series and given that the variables were not stationary at levels, but at first difference. It is therefore appropriate to use co-integration analysis to estimate the relationships between the variables, provided that the method chosen allows for the possible joint endogeneity of all the variables as suggested by Guest and Swift (as cited in Osemwengie and Isuwa 2016). The existence of co-integration implies that the cointegration time series variables must be drifting together at roughly the same rate. According to Johannes (1991), cointegration can be used to ascertain whether there exists a linear long term economic relationship among the variables. Hence, the cointegration results of both Trace and Maximum-Eigen test results are presented in the tables below as follows;

Table 2: Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.993837	74.62537	29.79707	0.0000
At most 1	0.546938	13.55474	15.49471	0.0960
At most 2 *	0.286687	4.054018	3.841466	0.0441

Trace test indicates 1 cointegrating equation(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Table 3: Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.993837	61.07063	21.13162	0.0000
At most 1	0.546938	9.500720	14.26460	0.2468
At most 2 *	0.286687	4.054018	3.841466	0.0441

Max-eigenvalue test indicates 1 cointegrating equation(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

The maximum Eigenvalue co-integration test results shows that the null hypothesis of no co-integrating relationship among the variables in the result is rejected at 5% level of significance. This is because the test indicates one co-integrating equation among the variables of the model. The two tests confirm the presence of a co-integrating equation. Hence, it means that there exists a long run relationship between the economic impacts of corruption on the health sector of the Nigerian economy. Therefore, the multiple regression analysis is presented below to reconcile the short and the long-run behavior of the economic variables (Gukat 2015).

Table 4: Result of the estimated model

Dependent Variable: D(RGDP)

Method: Least Squares

Sample (adjusted): 1992 2017

Included observations: 26 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(CPI)	71547.40	45463.59	1.573730	0.1298
D(THSE)	99828.07	24077.93	4.146041	0.0004
ECM(-1)	-0.272236	0.136242	-1.998188	0.0528
C	2454.916	16794.27	-0.146176	0.8851
R-squared	0.745963	Mean dependent var	-1273.467	
Adjusted R-squared	0.701786	S.D. dependent var	115495.5	
S.E. of regression	84445.14	Akaike info criterion	25.66623	
Sum squared resid	1.57E+11	Schwarz criterion	25.85978	
Log likelihood	-329.6610	Hannan-Quinn criter.	25.72197	
F-statistic	30.83244	Durbin-Watson stat	1.943051	
Prob(F-statistic)	0.000007			

Source: Authors Computation

The result of the Error Correction Model (ECM) of economic impact of corruption on the health sector in Nigeria economic growth has been summarized in table 4. The result revealed that the intercept is 2454.91, the value of R^2 reveals that 74% variation in the RGDP was explained by changes in THSE and CPI during the period 1991-2017, while 26% unexplained variation in the RGDP can be attributed to other factors that exert effect on the real gross domestic product but were not included in the model which the error term 'u' depicted. Thus, the model exhibits a high explanatory power, and hence is considered a good fit. The constant coefficient shows a positive relationship which confirmed with the a priori expectation and suggest that RGDP would be at positive level for zero value of THSE and CPI. This means an autonomous component that does not depend on the level of THSE and CPI.

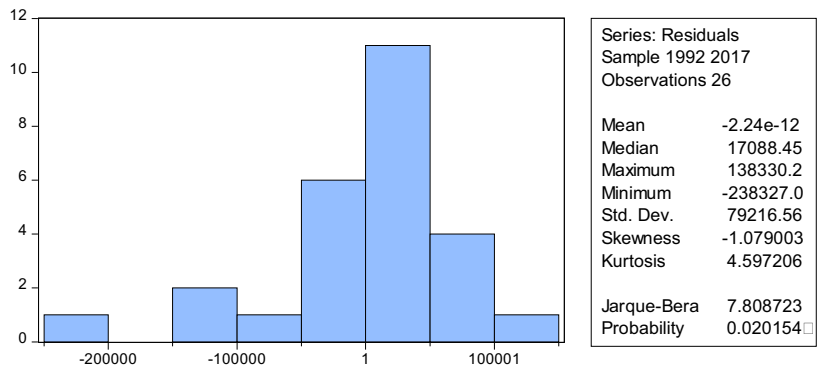
The coefficient of the total health sector expenditure (THSE), $\beta_1=99828.07$ and a P-value of 0.0004 was significant at 5% level of significance which also confirmed to the economic a priori expectation indicates the possibility of the THSE to contribute positively to the RGDP. This means that a unit change in the THSE, cause an increase of about 99828.07 in the RGDP. The regression value of CPI shows that the coefficient is 71547.40 which does not confirm with the economic a priori expectation because of its positive value, and P-value 0.1298 was statistically insignificant at 5% level of significance this could be attributed to other forms of corruption in other sectors other than the health sector which the study did not capture.

Based on “rule of Thumb”, we conclude that the value of Durbin Watson DW= 1.943051 indicate a positive autocorrelation. However, this is not so because of the application of

“Heteroscedasticity and Autocorrelation Consistent” (HAC) standard error procedure. The F-statistic value is 30.83244 which is the test of appropriateness of the model and the 'P' value of 0.00007. This leads to the rejection of the H_0 and accepting of the H_1 that there is a significant relationship between corruption and the Health Sector on the Nigerian economic growth.

The Error Correction Model parameter (ECM) is negative and significant at 5% level as expected. The ECM is an error correction term in the model to restore back equilibrium and validates that there exists a long-run equilibrium relationship between the variables. The value of the ECM is 27.22%, in essence, 27% of disequilibrium in period t-1 is corrected or adjusted annually by changes in RGDP. The value of ECM represents the speed with which the variables return to equilibrium after a deviation.

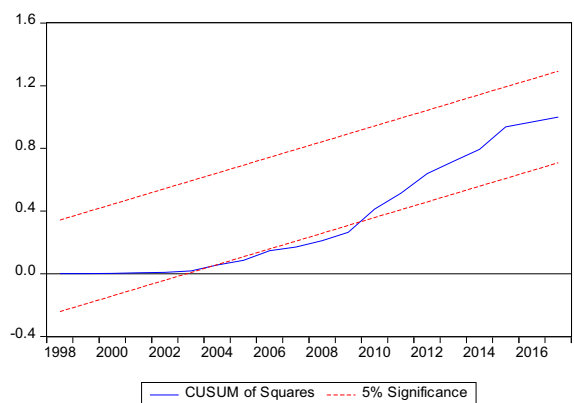
Normality Test: The result of the normality test is presented in figure 1



From the Normality test in figure 1, testing at 5 percent level of significance, the Jarque Bera of 7.808723 is greater than 0.020154. This implies that the residuals are normally distributed which is a desirable result.

Stability Test

The result of the stability test is presented in figure 2



Source: Author's Computation

For stability, it is important that the residuals and the cumulative sum of the squares stay within the 5 percent critical bound (represented by two straight parallel lines). The residual in the model stay within the two lines from 2004 to 2011. The parameters are adjudged to be stable within that year indicated by the graph

Test for Multicollinearity

Multicollinearity generally occurs when there are high correlations between two or more predictor variables or explanatory, independent variables. In other words, one predictor variable can be used to predict the other. This creates redundant information, skewing the results in a regression model. Its presence invalidates some of the basic assumptions underlying the mathematical estimation of the model. Variance Inflation factors (VIFs) greater than 10 are a sign of multicollinearity test is presented in table 5 below.

Table 5: Multicollinearity test result

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
D(CPI)	2.07E+09	1.027369	1.001158
D(THSE)	5.80E+08	1.002718	1.001806
C	2.82E+08	1.028363	NA

Source: Author's Computation

From the result obtained in tables 5, VIFs of the variables CPI is 1.001158 and THSE is 1.001806 respectively are both less than 10. This indicates the absence of multicollinearity between the variables in the model.

Conclusion and Recommendations

The paper explored empirically the relationship between corruption and the health sector on the Nigeria economic growth using ordinary least square technique. And concludes that, economic activities are carried out exclusively by human beings and as such, health sector expenditure towards improved human capital is crucial and as such, the health sector should be void of corrupt practices as it poise a threat to human life.

It is in view of the findings that the researcher came up with the following recommendations;

1. A high priority should be accorded to the health sector in the Nigerian budgetary allocation. The percentage allocated to health sector has been unimpressive; the 2018 budget is N340.456bn out of a total national budget of N9.612tn. Nigerian government should attempt to achieve the Mohammed and Rolle, (2015) benchmark of \$34 per capita health expenditure. In the face of the immediate and enormous need, improvements within the health-care sector are not yet encouraging enough. International support exists but, the benefits have not yet reached the local level, and there is pressing need for the government to move from rhetoric to solid commitment if these benefits are to be seen in the near future.

2. Governments need to publish detailed health budgets and financial information that's easy to understand, so that stolen fun can be tracked and prevented Health workers need adequate pay and guarantees that salaries will reach them. This makes them less susceptible to bribes or likely to demand them. Governments need to tackle counterfeit drugs at source. This means cooperation between countries, involving customs, suppliers, medical institutions and the police.
3. At the local level, communities must demand accountability from health professionals and administrators, and also scrutinise clinic or hospital budgets. Or make sure of official charges for services so we and others don't pay more. Members of the public must also demand public consultations over health services these allow us to participate actively in planning and implementation. Open tender systems and clear procurement processes are also needed. By monitoring these, we can help ensure that health facilities give us the best possible care.

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Appendix

Value of RGDP in Billions of Naira, Corruption perception index (CPI) and Total Health Sector Expenditure are in constant values

YEAR	RGDP	THSE	CPI
1991	279810.7	2.21	0
1992	281024.3	2.34	0
1993	286898.8	2.5	0
1994	289508.9	2.69	0
1995	288618.7	2.77	0
1996	303031.5	2.92	0
1997	311523.2	2.92	1
1998	319983.1	3.47	1.9
1999	321500.6	3.38	1.6
2000	338598.3	2.84	1.2
2001	353534.1	3.25	1
2002	366914.1	2.43	1.6
2003	404905	4.05	1.4
2004	541502.9	4.33	1.6
2005	560155.9	4.11	1.9
2006	606150.1	3.66	2.2
2007	647540.4	4.47	2.2
2008	688142.9	4	2.7
2009	735861.6	4.24	2.4
2010	793551.2	3.47	2.4
2011	793551.2	3.47	2.4
2012	856827.5	3.69	2.4
2013	879501.3	3.4	2.7
2014	902175.1	4.59	2.6
2015	924831.9	4.47	2.2
2016	404905	2.43	1.9
2017	69553.86	7.99	4

Source: Transparency international and World Bank report on Nigeria and CBN Statistical Bulletin various issues.