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THE ASYMMETRIC GAUGE OF GOVERNANCE AND ECONOMIC INSTABILITY IN NIGERIA: AN INVESTIGATION USING A NON-LINEAR AUTOREGRESSIVE DISTRIBUTED LAG (NARDL) MODEL

[1] Felix Aberu, [2] Oluwaseyi A. Adelowokan & [3] Tajudeen I. Wahab
[1 & 3] Department of Economics, College of Social and Management Sciences, Tai Solarin University of Education, Ijagun, Ijebu Ode, Nigeria
[2] Department of Economics, Faculty of Social Sciences, Olabisi Onabanjo University, Ago-Iwoye, Nigeria
***Corresponding authors' email**: felixaberu@gmail.com

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ABSTRACT

The complex relationship between governance and economic performance has long been a focal point of policy analysis and economic research. Understanding this relationship is crucial in the context of Nigeria, a nation characterized by its rich natural resources yet plagued with economic instability. Hence, the study explored the asymmetric effects of governance on economic instability in Nigeria. The study employs a Non-linear Autoregressive Distributed Lag (NARDL) model to uncover evidence of these dynamics. The data spanned for 24 years (1999 to 2023). Our findings show that corruption is positive and significant, indicating that previous corruption levels significantly increase economic instability in the long run. Furthermore, Negative governance is positive and significant, suggesting a potential short-run increase in economic instability in Nigeria. However, this result further shows that previous negative governance increases fueled current economic instability in the short run with a crowd-out effect. This outcome emphasizes the complexity of economic instability, potentially requiring further investigation into additional variables. There has been a conceptual misconception in the literature on the concept of governance as a major determinant of most performance of macroeconomic variables in Nigeria without its decompositions. Hence, this study attempted to establish this relationship, by using political instability, corruption, and rule of law as proxies for governance, and found that negative governance impacts economic instability in Nigeria.

1.0 Introduction

The natural condition in which the economy's potential is maximized, price system conflicts are at their lowest, and economic growth is tangential can be described as stability within an economic system. Therefore, we can characterize instability as an unnatural state of the economic system that reduces the capacity for expansion and creates tensions in the pricing system; it gives the economy a cyclical character and increases the likelihood of a depression if the instability continues to grow. Furthermore, when an economy sees considerable changes and uncertainty in important economic indicators like inflation, unemployment, interest rates, exchange rates, and total economic growth, it is said to be in an unstable economic state. It is defined by an absence of predictability and

unpredictability in the way the economy operates, making it challenging for organizations, people, and policymakers to make wise financial decisions. (See Epaphra, et al., 2013).

Economic instability can have far-reaching effects. It can slow economic expansion, undermine consumer and company confidence, raise the unemployment rate, promote income inequality, and disturb financial markets. Consistently, Governments and central banks frequently put into place measures to lessen economic instability in Nigeria, such as fiscal and monetary policies, regulatory reforms, and international cooperation to foster stability and long-term economic growth, but unfortunately, all of these defile implementation purpose as exchange rate, inflation, unemployment, and gross domestic product of the country remains a priory unclear. For example, Nigeria's economy has fluctuated significantly during the past two years. The Naira's value to the US dollar dropped from roughly 380 NGN in 2021 to roughly 460 NGN in 2023. Living expenses increased when inflation shot up from 16.47% in 2021 to 22.79% in 2023. With unemployment rates hovering above 33% in 2021 and showing little signs of abatement, the situation remains dire. Amidst persistent economic difficulties, the Gross Domestic Product (GDP) expanded at a moderate pace of 3.6% in 2021 before slowing to roughly 2.8% in 2023. (Central Bank of Nigeria, 2023; National Bureau of Statistics, 2023).

The general public in Nigeria nowadays places a high value on currency rates and their constant movements since, in one way or another, these factors affect the economy's ability to reach its maximum productive capacity. This is concerning given its macroeconomic significance, particularly in a nation like Nigeria which is heavily dependent on imports (Olisadebe, 1991).

The exchange rate, or ratio of currency prices, represents the ratio at which one currency can be exchanged for another. It is the worth of a foreign currency in terms of the currency of the home country. It also states the value of one currency to another. While regular fluctuations or an inappropriate exchange rate have been a major hindrance to the economic growth of many African countries, including Nigeria, Trade Imbalances, Financial Market Volatility, Inflationary Pressures, Debt Burden, and loss of foreign investors' Confidence plaguing Nigeria are not unconnected to the undetermined exchange rate pressure. However, a correct or appropriate exchange rate has been one of the most critical factors for economic growth in the economies of most developed countries. (Olisadebe, 1991).

Economic instability and Governance are closely related. An institution is the laws, customs, and groups that control and influence social and economic behavior in a nation. Transparency, accountability, the rule of law, the protection of property rights, and Governance are characteristics of high-quality institutions. Economic instability can result from weak or badly performing institutions in several different ways such as policy instability, corruption, and weak rule of law (Kilishi, *et al*. 2013).

Technology change, labor, and capital are the three main economic drivers, according to the Solow-Swan neoclassical growth model (Solow, 1956; Swan, 1956). However, there are differences in country-specific stable growth due to different effective frameworks, such as institutions that direct the implementation of policies and programs. This growth theory has undergone numerous variations, including the addition of human capital (Mankiw, Romer, & Weil, 1992, among others). Significantly, these scholars have failed to highlight other elements that stimulate economic instability. Since North (1990) first mentioned institutions as one of the factors influencing economic growth, a large body of literature has been produced to support their usefulness. According to Kormendi & Meguira (1985) and Tullock (1987), countries

with "strong institutions" and high levels of civil rights perform economically. According to the Organization for Economic Cooperation and Development (2001), the effectiveness of a nation's institutions affects its economic performance. This is based on the idea that a high-quality institution is necessary to give Nigeria's poorer population a favorable environment for economic instability. Strong Governance is required to ensure sustainable growth and development, according to studies like those by Thorbecke (2013) and Iheonu et al., (2017).

Furthermore, corruption, bribery, tax evasion, inflation, interminable exchange rate pressure, and the existence of ineffective institutions are the main barriers to economic progress in Africa and Latin America as ill-conceived arrangements make those nations risky and unattractive (Luiz, 2009; Fosu, Bates & Hoeffler, 2006; Baliamoune, 2005; Birdsall, 2007; Charnock, 2009).

Asian economies, for example, have seen significant development as a result of strong institutions, but African economies, particularly Nigeria, have experienced high levels of economic instability over time. In response, governments and multilateral agencies changed their focus to replicating developed-country institutions in poor nations (Rodrik, 2008). Despite worldwide Governance alignment, there is limited agreement on the efficacy of these reforms (Andrews, 2013).

Institutions in developing countries are primarily concerned with redistribution rather than production, with monopolies rather than competitive conditions, and with restricting rather than developing opportunities. These institutions rarely result in investments that increase productivity (Yildirim & Gokalp, 2016). Furthermore, capital formation and economic instability in Africa are likely to be influenced by governance factors like as the distribution of political and civil rights, the quality of the legal system, and the efficacy of the government (Epaphra & Kombe, 2018). According to Owasanoye (2019), African countries lose $90 billion annually due to illicit financial flows overseas, the majority of which come from Nigeria, and the key causes of this setback are not unconnected to Governance weakness in Nigeria.

Based on the results of previous studies, the study "The Asymmetric Gauge of Governance and Economic Instability in Nigeria: An Investigation Using a Non-linear Autoregressive Distributed Lag (NARDL) Model" is justified. Research has demonstrated that oil prices have uneven effects on Nigerian sectoral output, highlighting the necessity of economic diversification.

Ogunjimi, J. (2020) Furthermore, investigated the asymmetric impacts of income disparities and oil prices on gasoline consumption in Nigeria's transportation sector to underscore the significance of structural policies for oil price management (Olanrewaju, A. M., & Temitope, D. J. (2018) Additionally, investigated the monetary policy shocks in Nigeria showing the asymmetric effects on output and price levels, highlighting the need for a balanced monetary policy mix for stability and economic growth.

These findings, however, collectively support the relevance and significance of exploring asymmetric governance indicators in understanding economic instability in Nigeria.

Therefore, this study allows for a clearer differentiation between shocks, contributing more profound intuitions into the dynamic and non-linear relations that policymakers widely overlook considering the unpredictable dynamics in governance and economics in general in Nigeria.

2.0 Literature Review

Theoretically, governance is seen as an approach to lessen the uncertainty involved

in interpersonal communication and offer society a stable foundation for interaction. These principles are upheld by the institution's founding law, which frequently accords with international best practices. However, this study underpinned the Keynesian theoretical framework developed by John Maynard Keynes, it posited that variations in aggregate demand play an important role in economic instability. According to Keynes, changes in investment and consumption spending are the primary causes of business cycles. He argued for vigorous government intervention through fiscal and monetary policies such as exchange rate, inflation, government expenditure, and taxes to stabilize the economy and encourage full employment during downturns.

Radzeviča & Bulderberga (2018) examined the significance of Governance in economic growth: implications for the Baltic States were investigated. The Generalized Method of Moments was used on a panel of 113 nations from 2006 to 2016. They found that Government effectiveness, regulatory quality, tax burden, monetary freedom, financial freedom, trade freedom, and the strength of auditing and reporting standards, corporate board efficacy, and investor protection all have a beneficial impact on economic growth.

The study by Nguyen et al., (2018) examines Governance and economic growth in emerging economies. The study used the System Generalized Method of Moments (SGMM) from 2002 to 2015. Their findings suggest that Governance has a strong positive impact on economic growth. Foreign direct investments (FDIs) and trade openness both have a detrimental impact on economic growth. Carraro & Karfakis (2018) examined institutions, economic freedom, and structural transformation in 11 sub-Saharan African countries. The study used the Panel Tool. Their result reveals a positive and statistically significant effect of the quality of institutions and economic freedom measures on structural transformation between sectors. The study by Iheonu et al., (2017) investigated the impact of Governance on economic performance in West Africa. The study makes use of Panel data from 1996 to 2015. According to the findings, corruption control, government efficacy, regulatory quality, and the rule of law, all have a positive and significant impact on economic performance in West Africa.

Yildirim & Gokalp (2016) examined Turkey's economic performance and analyzed its institutions. In the study, panel data analysis from 2000 to 2011 was used. Their results show that Governance factors including the credibility of the legal system, restrictions on foreign investment, trade barrier rules, and the proportion of the private sector in the banking system all have a favorable impact on macroeconomic performance. The macroeconomic performances are negatively impacted by judicial independence, government spending, transfers, subsidies, civil liberties, and the rate of the black-market exchange, collective bargaining, and political stability.

Kilishi et al., (2013) studied institutions and economic performance in Sub-Saharan Africa: A Dynamic Panel Data Analysis. The Blundell Bond System Generalized Method of Moment (GMM) estimators were used in the investigation. The findings suggest that institutions in Sub-Saharan Africa have a considerable impact on economic performance, notably the regulatory framework and the efficacy of government.

Dandume, (2013) examined the performance of Nigerian institutions and economic growth. The ARDL approach to cointegration and causality was used in this work. Findings show that corruption has a positive effect on economic growth while Accountable executive, Rule of law, and competitive politics are not significant to the economy. In addition, findings from the Granger Causality test reveal that there is a bilateral relationship between the institutions and economic growth in Nigeria.

Furthermore, studies have provided a deteriorating effect of governance on the economic stability in Nigeria using the NARDL model to capture asymmetries relationships. (See Okon, U., & Udoh, A. 2020; Eze & Ike, 2021).

There is a large body of research on cross-country studies on the impact of governance or institutions on investment or economic growth, but studies on the impact of governance on economic instability are being understudied considering the peculiarity of Nigeria being an import-dependent country. As a result, there is a need for a similar study in Nigeria, with the inclusion of variables such as economic instability, which is a proxy for the exchange rate. Hence, based on the aforementioned, the following research hypothesis is considered for this study;

$H_0$1: Positive Governance does not have a significant effect on economic instability in Nigeria.

$H_0$2: Negative Governance does not have a significant effect on economic instability in Nigeria.

3.0 Methodology

This study aims to investigate the existence of an asymmetric impact of the Governance index (INSTU) on economic instability (EISTA) in Nigeria using time series annual data. Hence, the Governance index and exchange rate data set used in the empirical analysis covers the period from 1999 to 2023. Governance is decomposed positive and negative shocks, control for corruption, and political instability data and were compiled from the Worldwide Governance Indicators (WGI) The following are some instances where Governance and economic instability are linked: Governments with stable political environments are more likely to carry out fiscal responsibilities such as responsible budgetary measures, which include managing the national debt and mitigating inflation and exchange rates, these measures support the preservation of price stability and the development of a positive macroeconomic climate. Moreover, political stability also helps to foster a less corrupt environment, where less corruption enhances resource allocation efficiency, which informs economic instability (Smith, 2020). Therefore, the exchange rate is a proxy for economic instability being the dependent variable and was sourced from the Central Bank of Nigeria Statistical Bulletin and considered amongst others a sensitive and all-involving indicator of economic instability.

$$\mathrm{EISTA}_t = \beta_0 + \beta_1(\mathrm{GOV}_t) + \beta_2(\mathrm{COR}_t) + U_t \quad (1)$$

Equation (1) is the econometric ModelEISTA_t represents the economic instability, while GOV_t implies a vector of governance variables as stated in equation (2)

$$\mathrm{EISTA}_t = \beta_0 + \beta_1(\mathrm{POIST}_t) + \beta_2(\mathrm{COR}_t) + U_t \quad (2)$$

Equation (2), EISTA_trepresents the economic instabilityPOIST_trepresents political instability, COR_t implies corruption, and with their respective time domain *t,*

This study increases the literature frontier by deviating from the previous studies where the effects of Governance on economic growth and other macroeconomic variables were analyzed under a linear background. However, the present study conducted its analysis in a nonlinear framework which helps foresee whether the time series components (both positive and negative of the governance vector) are cointegrated or not. This research's primary objective is to examine the asymmetric impact of Governance on Economic instability. The nonlinear model is specified in the following form;

$$\text{EISTA}_t = f(\text{GOV}t^+, \text{GOV}t^-) \quad (3)$$

Where $\text{GOV}t^+$ and $\text{GOV}t^-$indicate the positive Governance and negative Governance indices. Shin *et al*. (2014) proposed an estimation technique named nonlinear ARDL, which used partial sums of positive and negative changes to define the short and long-term asymmetric effect. The NARDL procedure has various benefits over other conventional models of cointegration: (i) even in small samples, the NARDL model operates appropriately, (ii) NARDL does not oblige for a stationary test, (iii) NARDL can be applicable whether the included variables were stable at the level I(0) or first difference I(1) or integrated fractionally (Ibrahim, 2015; Lee *et al*., 1997). However, this method does not work well when any I (2) variable is involved. After examining the empirical efforts (Dhaoui & Bacha, 2017; Katrakilidis & Trachanas, 2012; Koutroulis*et al*., 2016; Meo*et al*., 2018; Raza*et al*., 2016), we specified the following model

$$\text{EISTA}_t = \varphi_0 + \varphi_1(\text{GOV}_t{}^+) + \varphi_2(\text{GOV}_t{}^-) + U_t \quad (4)$$

Where φ_0 denotes long-run intercepts $\text{GOV}_t{}^+$ and $\text{GOV}_t{}^-$, indicate positive and negative asymmetric effects and partial sums change in Governance. Equation (1) offers only a long-run impact on the model. However, we have to redefine Eq. (1) under the error correction model (ECM) because it provides the basis for assessing the constant speed of adjustment rate and the dependent variable's short-run performance in the stochastic Equation. The ECM arrangement in a multivariate perspective is given below:

$$\Delta lnEISTA_t = \alpha_1 + \sum_{t=i}^{\delta 1} \vartheta 1i\, \Delta lnEISTA_{t=I} + \sum_{t=0}^{\delta 2} \vartheta 2i\, \Delta lnGOV\_POS_{t=I} + \sum_{t=0}^{\delta 3} \vartheta 3i\, \Delta lnCOR_{t=I} + \pi_1 lnEISTA_{t=I} + \pi_2 lnGOV\_NEG_{t=I} + \pi_3 lnCOR_{t=I} + U_t \quad 5$$

Where, $\pi_1 - \pi_3$ and Δ represent long-run coefficients and short-run differenced variables, respectively, $\delta_1 - \delta_3$ signifies optimum lag length. Equation (5) implies that the predicted variables have a symmetrical connection; however, the present research seeks to explore the asymmetric effect of governance on the economic instability of Nigeria. Therefore, the desired variables were decomposed into negative and positive segments to see the asymmetric impact by considering the following nonlinear Equation. This decomposition regression.

$$\rho_t = \omega^+ Z_t^+ + \omega^- Z_t^- + U_t \quad (6)$$

Where ω^+ and $\omega^-$are associated with the coefficient of the long run and M_t is a decomposed parameter of explanatory variables as;

$$w_t = Z_0 + Z_t + Z_t^- \quad (7)$$

Where the regressors were denoted with Z^+ and Z^- that is partially decomposed into positive and negative-sum variations. Subsequently, however, equations (6) and (7) represent the partial sums of positive and negative adjustments in governance.

$$\text{GOV}^+ = \sum_{i=1}^{n} \Delta\text{GOV}^+ = \sum_{i=1}^{n} Max\ (\Delta\text{GOV}_{i,0}) \quad (8)$$

$$\text{GOV}^- = \sum_{i=1}^{n} \Delta\text{GOV}_i^- = \sum_{i=1}^{n} Min\ (\Delta\text{GOV}_{i,0}) \quad (9)$$

To make model (5) asymmetric ARDL, we integrated a decomposed positive and negative series of governance in (equations 6 and 7).

$$\Delta lnEISTA_t = \alpha_1 + \sum_{t=i}^{\delta 1} \vartheta 1i\, \Delta lnEISTA_{t=I} + \sum_{t=0}^{\delta 2} \vartheta 2i\, \Delta ln\mathrm{GOV}^{+}{}_{t-I} + \sum_{t=0}^{\delta 3} \vartheta 3i\, \Delta ln\mathrm{GOV}^{-}{}_{t-I} + \sum_{t=0}^{\delta 4} \vartheta 4i\, \Delta lnCOR_{t-I} + \pi_1 lnEISTA_{t=I} + \pi_2 ln\mathrm{GOV}^{+}{}_{t=I} + \pi_3 ln\mathrm{GOV}^{-}{}_{t=I} + \pi_4 lnCOR_{t=I} + U_t \quad (10)$$

The bond statistics technique developed by Pesaran *et al*. (2001) was used to estimate the long-term cointegration among variables.

This section presents the results of the empirical analysis of data, the formulated models are analyzed and the results are discussed accordingly

4.0 Empirical Analysis

Table 1: Correlation Matrix of Pearson's Correlation Coefficient Method

VARIABLES	EISTA	GOV_POS	GOV_NEG	CORR
EISTA	1			
GOV_POS	-0.490387	1		
GOV_NEG	0.316972	-0.222631	1	
CORR	0.483696	-0.571001	0.888076	1

Source: Authors Compilation, (2024)

Table 1: indicates that there are negative correlation coefficients among the variables. Hence, no correlations exist in the explanatory variables, since there are no explanatory variables in these models with 0.95 or even with greater correlation coefficients, which implies that, there is no tendency of multicollinearity (Wooldridge, 2009; Baltagi, 2005).

Likewise, studies have claimed that testing the correlation among variables of estimates would make the researchers identify whether the variables have high multicollinearity among themselves. Hence, the parameter estimates may contradict what the theory says due to the unexpected effect of multicollinearity among the independent variables (Agung, 2009; Hamsal, 1982). However, Iyoha (2004) argued that multicollinearity among variables occurs when the result of the correlation coefficient is above 0.95.

It is essential to ascertain the properties of time series data used in Eq. (5) by limiting the concerns of spurious regression; therefore, assessing the data series to check the unit root could be appropriate. However, asymmetric ARDL cannot be used if any I(2) variable is involved. Thus, to ensure the integration level of variables and that of I(2) variables were contained in the estimation process, this study employed ADF (Gujarati, 2009; Maddala and Wu, 1999). The reason to avoid any second difference variable is that the value of cointegration F-statistics turns out to be invalid (Meo et al., 2018; Ilyas et al., 2010).

Table: 2: ADF Unit root test.

Variables	Level T-Stat	5% Critical Value	First Diff T-Stat	5% Critical Value	Order of Integrations
EISTA	-3.86132	-2.98622	-6.438739	-6.345323	I (1)
GOV_POS	-1.16132	-2.98103	-4,472106	-1.243196	I (0)
GOV_NEG	-1.26132	-2.98622	-5.266407	-3.749513	I (1)
CORR	-4.46132	-2.98108	-5.721452	-1.243196	I (0)

Source: Authors Compilation, (2024)

Note: The results of the unit root test are incorporated into the analysis based on the order of integration. Thus, Probability is computed assuming asymptotic normality.

Table 2: shows the summary results of the ADF unit root test for the entire variables used in this study for Nigeria. This study used ADF - Fisher Chi-square to test for the presence of unit roots in the data. Hence, the results in Table 2 show that Economic instability (EISTA) was stationary at level I (1) at a 5% significant level while positive Government stability, negative Government instability, and control of corruption, are all stationary at the first difference I (0), I (1) and (0) at 5% significance level respectively.

Table 3: NARDL Estimation Technique

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	83.04035	22.04798	3.766348	0.0017*
EISTA(-1)	0.808635	0.073019	11.07424	0.0000*
GOV_POS	-0.73321	2.509085	-0.292222	0.7739
GOV_NEG	3.642959	1.731537	2.103887	0.0516**
GOV_NEG(-1)	-0.303707	2.290941	-0.132569	0.8962
GOV_NEG(-2)	- 4.415912	1.651042	-2.674622	0.0166**
CORR	1.763434	0.691510	-2.550122	0.0214**
CORR(-1)	2.525526	0.798913	-3.161202	0.0061*
CORR(-2)	1.582054	0.709176	-2.230834	0.0404**
Adjusted R-squared	0.961327			
F-statistic	18,47592			0.0035

**P<0.01, and **P<0.05 respectively*
Source: Authors Compilation, (2024)

Table 3 shows that the coefficient for the lagged economic instability (EISTA (-1)) is 0.8086 and highly significant ($p < 0.0001$), indicating strong persistence in economic instability over time. However, the coefficient for positive governance shocks (GOV_POS): is -0.7332, but it is not statistically significant ($p = 0.7739$). This implies that positive changes in governance do not have a significant immediate effect on economic instability in Nigeria.

The immediate effect of negative governance shocks (GOV_NEG) is positive and marginally significant (coefficient = 3.6430, $p = 0.0516$), indicating that negative governance changes increase economic instability in Nigeria. The first lag of negative governance shocks (GOV_NEG (-1)) is not significant ($p = 0.8962$), indicating no significant impact. But the second lag of negative governance shocks (GOV_NEG (-2)) is significant and negative (coefficient = -4.4159, P = 0.0166), suggesting that the initial increase in economic instability due to negative governance shocks is followed by a delayed correction. The immediate effect of corruption is significantly negative (coefficient = -1.7634, $p = 0.0214$), indicating that higher corruption increases economic instability. The first lag of corruption is also significantly negative (coefficient = -2.5255, $p = 0.0061$). This implies that corruption in Nigeria has a crowd-out effect on the economy. This was also supported by the second lag of corruption since the second lag of corruption remains significantly negative (coefficient = -1.5821, $p = 0.0404$). The R-squared value is 0.9742, and the adjusted R-squared is 0.9613, indicating that the model explains a high proportion of the variance in economic instability.

The F-statistic is 75.5728 ($p < 0.0001$), indicating that the overall model is highly significant. The Durbin-Watson statistic is 2.1089, suggesting no significant autocorrelation in the residuals.

Table 4: **Short-run NARDL Results**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	12.14432	13.12723	2.24338*	0.0372
D(GOV_NEG)	3.642959	1.731537	2.103887	0.0516
D(GOV_NEG(-1))	4.415912	1.651042	2.674622	0.0166
D(CORR)	1.763434	0.691510	-2.550122	0.0214
D(CORR(-1))	1.582054	0.709176	2.230834	0.0404

* P-value incompatible with t-bounds distribution.
** Variable interpreted as Z = Z(-1) + D(Z).
Source: Authors Computations, (2024)

Table 5: **Long run NARDL Results**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	83.04035	22.04798	3.766348	0.0017
EISTA(-1)*	-0.191365	0.073019	-2.620739	0.0185
GOV_POS**	-0.733210	2.509085	-0.292222	0.7739
GOV_NEG(-1)	-1.076660	2.136551	-0.503925	0.6212
CORR(-1)	-5.871013	1.812199	-3.239718	0.0051

Source: Authors Computations, (2024)

In Table 5, the lagged value of economic instability (EISTA) has a negative coefficient (-0.191365) and is statistically significant (p = 0.0185), implying that past economic instability negatively affects current economic instability in the long run. The coefficient for positive governance (GOV_POS) is -0.733210 but not statistically significant (p = 0.7739), in the long run, suggesting it has no significant long-run effect on economic instability.

However, the lagged negative governance (GOV_NEG) has a negative coefficient (-1.076660) but is also not statistically significant (p = 0.6212), in the long run

The lagged of corruption (CORR) has a significantly positive coefficient (5.871013, p = 0.0051), indicating that higher past corruption levels significantly increase economic instability in the long run. Negative governance (D (GOV_NEG)) has a positive coefficient (3.642959) and is significant (p = 0.0516), suggesting a potential short-run increase in economic instability, due to negative governance in Nigeria. However, in Fig, 4, the lagged change in negative governance (D (GOV_NEG (-1)) is positively significant (4.415912, p = 0.0166), indicating that previous increases in negative governance fueled current economic instability in the short run. Corruption (D (CORR)) has a significantly positive effect (1.763434, p = 0.0214) on economic instability in the short run implying a crowd-out effect

Table: 6: Wald Equation NARDL Hypotheses Test

Test Statistic	Value	df	Probability
t-statistic	2.370724	16	0.0307
F-statistic	5.620334	(1, 16)	0.0307
Chi-square	5.620334	1	0.0178

Null Hypothesis: C(3)=C(4)+C(5)
Null Hypothesis Summary:

Normalized Restriction (= 0)	Value	Std. Err.
C(3) - C(4) - C(5)	8.362577	3.527436

Restrictions are linear in coefficients.

Table 6: validates the null hypotheses with the t-statistical probability value of 0.0307 and the F-statistic P-value of 0.0307. This implies that the null hypothesis 1 of Positive Governance does not have a significant effect on economic instability in Nigeria is accepted, while the null hypothesis 2 of, Negative Governance does not have a significant effect on economic instability in Nigeria is rejected.

Table: 7 Breusch-Godfrey Serial Correlation LM Test:

F-statistic	3.717278	Prob. F(2,14)	0.0507
Obs*R-squared	8.671226	Prob. Chi-Square(2)	0.0631

Source: Authors Compilation (2024)

Given the P-value of 0.0631 percent, we fail to reject the null hypothesis and conclude that the short-run model is free from serial correlation.

Table: 8 Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	3.189605	Prob. F(8,16)	0.0231
Obs*R-squared	15.36535	Prob. Chi-Square(8)	0.0524
Scaled explained SS	2.890529	Prob. Chi-Square(8)	0.9410

Source: Authors Compilation, (2024)

The Obs*R-squared probability shows that the null hypothesis cannot be rejected since its probability equal to 0.05. This result implies that the residuals have a constant variance across the different levels of the independent variables, which is desirable

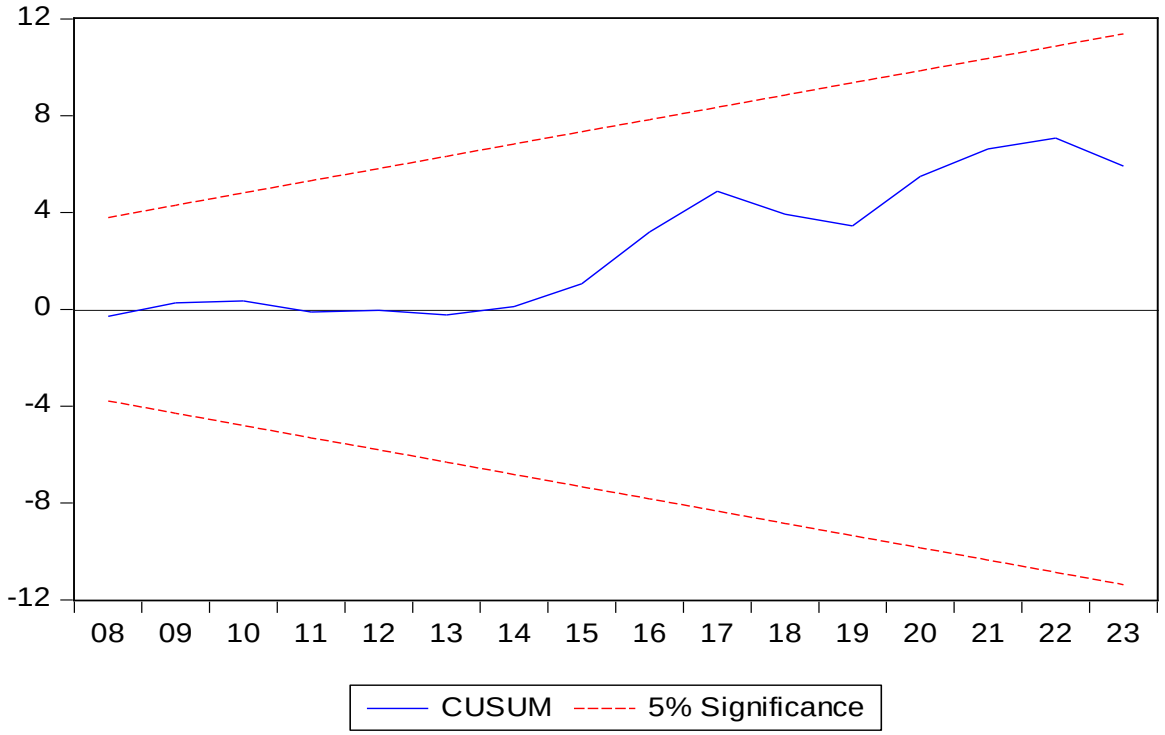

Figure 1: CUSUM Stability and Specification Test

Source: Authors Compilation, (2024)

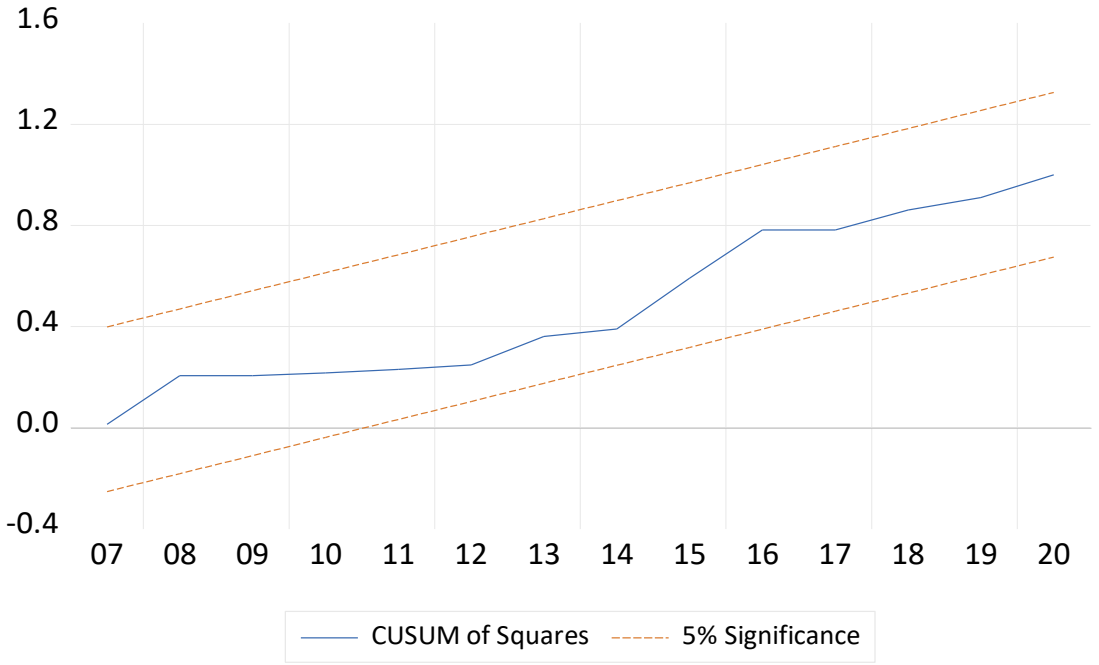

Figure 2: CUSUM of squares stability and specification Test

Source: Authors Compilation, (2024)

Fig 1 and 2 show the structural stability of the model because the CUSUM and CUSUM squares line appears within the critical bound of a 5 percent significant level

5.0 Conclusion and Recommendations

The paper examines the Asymmetric Gauge of Governance and Economic Instability in Nigeria using the time series data, the nonlinear autoregressive distributed lag (NARDL) approach was adopted in the evaluation of the broad objective and the hypotheses which also accounts for the short and long-run relationship that exists between economic instability and shocks in governance in Nigeria from 1999 to 2023. The empirical result reveals that Nigeria's economic instability is asymmetrically impacted by governance in the short. While negative governance shocks enhance instability and have a delayed corrective effect, positive governance improvements have no discernible impact on economic instability. Furthermore, short-run, economic instability is influenced by corruption; the model shows a substantial persistence in economic instability. Negative governance and corruption have a substantial impact on contemporary economic instability. Positive governance has no substantial long-run impact, whereas previous devastating governance and corruption have large short-run consequences. Therefore, the findings of this study are in tandem with the studies of (Luiz, 2009; Fosu, Bates & Hoeffler, 2006; Baliamoune, 2005; Birdsall, 2007; Charnock, 2009) that found institutions, exchange rates, and corruption as the causes of poor economic performance in Africa. Hence, it is recommended that short-run policies must be channeled to enhance the increase in the ability of institutions of governance, such as the judiciary, law enforcement, and anti-corruption agencies, to effectively enforce laws and regulations. Ensures that the government's revenue sources are steady and dependable. More significantly, less susceptibility to changes in the price of oil is ensured. Finally, decreased budget deficits and increased fiscal sustainability are paramount

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