Institutional Quality, Trade Protection Policy and Macroeconomic Performance in Nigeria

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Abstract

This study investigates the role of institutional quality on the causal nexus between trade protectionist policy and macroeconomic performance in Nigeria. Annual data on the exchange rate, corruption, unemployment, economic growth, trade protectionist policy, government capital expenditure, government expenditure on education, and government effectiveness covering the period from 1981 to 2019 were sourced from World Bank Development Indicators (WDI), Central Bank of Nigeria (CBN) Statistical Bulletin and International Country Risk Guide (ICRGs). Data collected were analyzed using the autoregressive distributed lag (ARDL) model and VAR Granger causality test. The results showed that due to the high level of corruption and low level of government effectiveness in the economy, institutional quality plays a negative role in the relationship between trade protectionist policy and macroeconomic performance in Nigeria. The study also found that trade protectionist policy causes and significantly explains changes in the exchange rate and economic growth in Nigeria while unemployment causes and explains changes in trade protectionist policy in Nigeria. This study concluded that the absence of institutional quality mitigates the effectiveness of trade protectionist policy on macroeconomic performance in Nigeria.

Keywords: Institutional Quality; Trade Protectionist Policy; Macroeconomic Performance; ARDL; VAR; Nigeria.

JEL Classification Codes: E02; F20; F13

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1. Introduction

The need for the promotion of industrial development, revenue generation and trade surplus led Nigeria in the early 60s to embark on economic strategies that reinforce the effect of trade on economic development in the early 1960s. These strategies spanned from the first, second, third, and fourth national development plans to the Structural Adjustment Programme (SAP), National Economic Empowerment Development Strategy (NEEDS), ECOWAS Common External Tariff (CET), Diversification Plan and the Economic Recovery and Growth Plan (ERGP). These policies aimed to address issues concerning the shrinking foreign exchange reserve and the weakening exchange rate (Madichie, Osagu & Eze, 2018). The ultimate objective of the adopted strategies was to boost export earnings and significantly raise the contribution of trade to economic development, thereby, mitigating import and oil dependence. However, these trade policies were said to be relatively tilted towards trade protectionist approaches since Nigeria actively protected indigenous industries and employed import bans and trade restrictions (see Ayanlade, 2020).

Nigeria recently signed and ratified the African Continental Free Trade Agreement (AfCFTA) with the sole aim of encouraging intra-African trade among member nations of Africa. However, Nigeria has the highest average tariff rate when compared to other main AfCFTA members (like Ghana and South Africa) (see Onuka & Oroboghae, 2020). Ayanlade (2020) argued that several active "trade policy incentives" in Nigeria were strengthened through investment inducements set towards rejuvenating the economy's productive capacity and guaranteeing domestic labour benefits from trade protection and fiscal inducements. In Figures, I, II and III show the pattern of trade protectionist policy, economic growth, exchange rate and unemployment in Nigeria. These Figures revealed and affirmed that Nigeria's economy relatively employs a high level of trade protectionism.

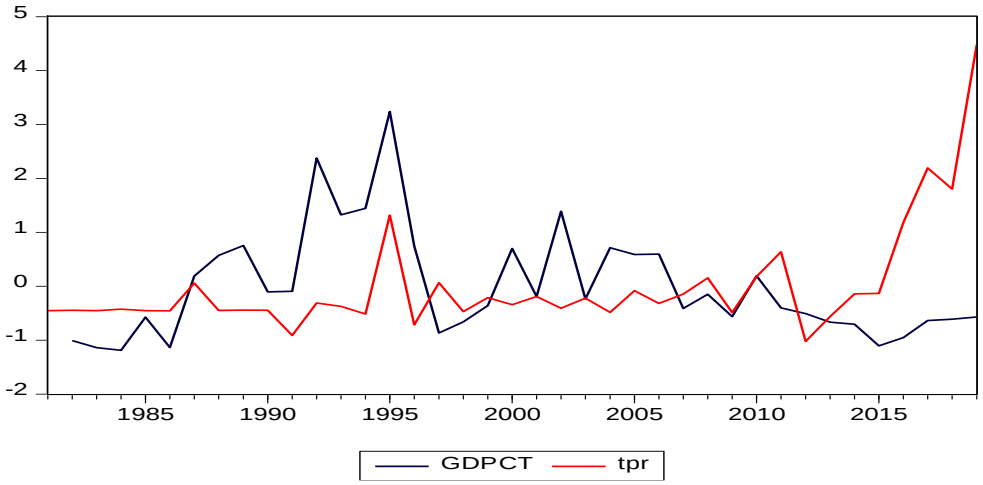

Figure I: Pattern of trade protectionist policy (*tpp*) and economic growth (*gdpct*) in Nigeria.
Source: Authors Computation.

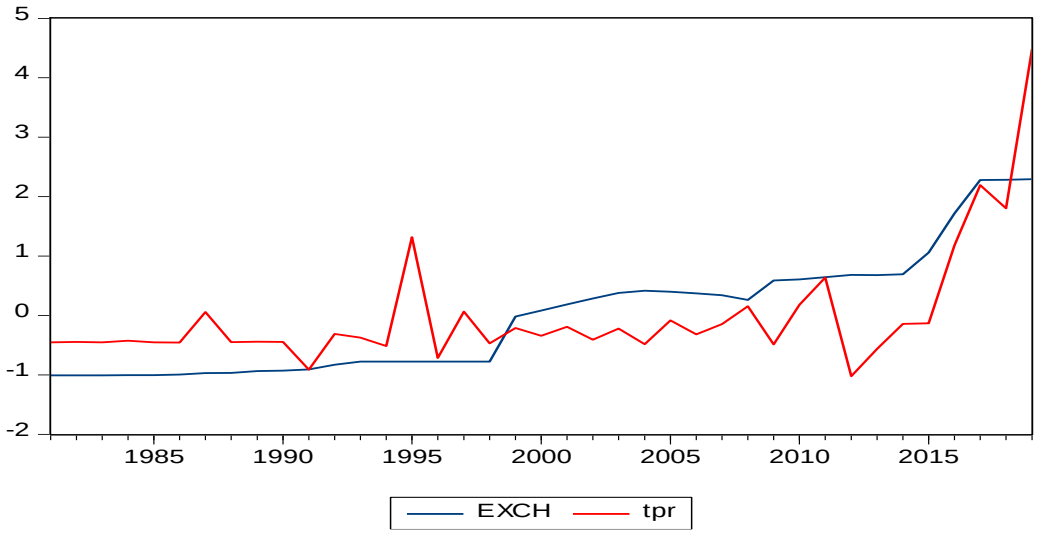

Figure II: Pattern of trade protectionist policy (*tpr*) and exchange rate (*exch*) in Nigeria
Source: Authors Computation**.**

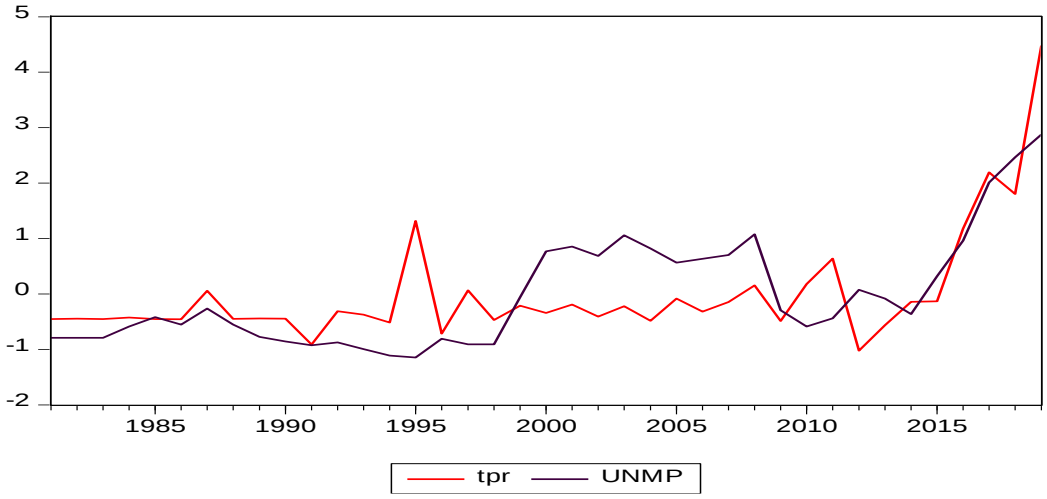

Figure III: Pattern of trade protectionist policy (tpr) and unemployment (unmp) in Nigeria
Source: Authors Computation.

Despite the seemingly high rate of trade protectionist policy in Nigeria, unemployment has also been on the increase while economic growth was relatively low. Studies such as Vagianou (2016) and, Madichie *et al.* (2018) argued that the effectiveness of a trade policy is dependent on the strength of institutional factors in the economy. Also, Madichie *et al.* (2018) and Onuka and Oroboghae (2020) posit that for an economy to benefit from trade protectionism, strong institutional quality setups (such as strong infrastructure, high government stability and low level of corruption) are necessary fundamentals that must be in place. But, the study by Onuka and Oroboghae (2020) and Ayanlade (2020) noted that the state of institutional factors in Nigeria is quite peculiar in that, terrorism, corruption, low government effectiveness and low government stability exist in the economy and as such, there is the likelihood that institutional quality inhibits the effect of trade protectionist policy on macroeconomic performance in Nigeria.

Similarly, there has been a continuous empirical discussion on the extent and direction of causation between trade protectionist policy and economic growth. Studies such as Zestos and Tao (2002), Rodriguez and Rodrik (2000), and, Potrafke *et al.* (2020) suggested the existence of different directions of causation amid trade protectionist policy and economic growth in different economies. While the study by Zestos and Tao (2002) noted that only a unidirectional causal relationship exists between trade protectionist policy and standard of living, however, Rodriguez and Rodrik (2000) and Potrafke *et al.* (2020) found that no causal relationship exists. Available studies in Nigeria such as Okere and Iheanacho (2016) noted that a unidirectional flow of causation exists between trade protectionist policy and standard of living. This is because the direction of causation only flows from trade protectionist policy to standard of living implying that trade protectionist policy significantly explains and causes changes in the standard of living in Nigeria. While Ude and Agodi (2015) also found a significantly positive direction of causation between trade protectionist policy and GDP growth. These studies failed to recognize the important role of institutional quality on the effectiveness of the nexus between trade protectionist policy which has the capacity to spur a robust macroeconomic performance in the country. Hence, this study intends to provide more insight into the role of institutional quality in the nexus between trade protectionist policy and macroeconomics and investigates the causal relationship between trade protectionist policy, institutional quality, and macroeconomic performance in Nigeria.

Subsequent sections of this study include: the literature review, methodology, analysis and interpretation of results, and conclusion and policy recommendation.

2. Empirical Review

Siddiqui and Ahmed (2009) noted in a study on 141 nations that there is a solid causal relationship between institutional quality and macroeconomic performance. Using the generalized method of moment estimation, it was argued that strong institutional quality is a possible pre-condition for an economy to attain convergence. While Chuku (2014) in a study on 43 African economies from 1996 to 2012 revealed that only the rule of law, regulatory quality, and control of corruption affect macroeconomic performance in Africa though there was evidence of heterogeneity amongst the selected geographic regions, Habtamu (2008), in studying the importance of institutional quality in elucidating the evidence of weak economic performance in 35 Sub-Saharan African (SSA) economies (1996 to 2005), discovered that government effectiveness, political instability, rule of law, regulatory quality, voice, and accountability significantly and positively affect economic performance in SSA economies. In addition to this, Habtamu (2008) opined that weak economic growth was inherent in the 35 SSA economies due to poor governance and generally weak institutional qualities which were meant to foster economic performance. Though most studies in economic research validate the importance of institutional quality in an economy, few existing empirical studies support the vital role of institutional quality and the need for its inclusion in studies on the trade protectionism-macroeconomic performance nexus.

Studies such as Abboushi (2010); Walter (2016); Kumari and Bharti (2017) and Braml and Felbermayr (2018) have documented evidence of the suggestive role of institutional quality in the effect of trade protectionist policy on macroeconomic performance in both developed and developing economies. In addition, it was argued that differences in the macroeconomic performance outcomes could be the resultant effects of institutional factors in various economies. For instance, Abboushi (2010) in the study on the reasons and outcomes of protectionism found

out that, with the rapid growth of international trade, economies with free trade policies benefit more than those with trade-restricted policies. And that protectionism is only a response to pressure from specific industries and political constituencies which have harmful effects on the economies of its trading partners. In reiteration, Walter (2016) in the study of trade barriers revealed that a country's competitiveness determines its degree of isolation from the global trading market. This study also discovered that the state of an economy is likely to affect its foreign trading activities thereby implying that, a less competitive economy will induce protectionist trade measures in times of economic downturn.

According to Braml and Felbermayr (2018) in a case study in Europe; understanding free trade attitudes, found that the recent trade world is characterized by different preferences that do not follow standard economic theory. This study however noted that these preferences are affected by self-interests especially trade politics (indicating the role of institutional quality) and that the preference for protectionism is a phenomenon more popular in richer regions than the poorer regions, thereby countering the argument by Walter (2016). This study further noted that macroeconomic behaviors vary between countries which in turn determines the various trade policy attitudes or strategies. This finding further counters the argument of Walter (2016) and reveals that economies with different attitudes to trade policies will achieve divergent sets of economic performance. For instance, Kumari and Bharti (2017) in their study on the small economy but big lessons from India, Hungary, and Singapore revealed that even though economies adopt similar trade protectionist strategies, the inbuilt macroeconomic structure of the economy determines the success of the trade policy employed. This study found that India, Singapore, and Hungary adopted similar export promotion strategies, and Singapore became more advanced and globally recognized than Hungary and India.

In addition, Vagianou (2016) discovered in a study from 1990 to 2002 on Malawi that, trade openness plunges an economy into a state of greater social and economic deprivation. This finding showed that the agricultural sector remained stagnant despite the implementation of the Structural Adjustment Policy (SAP) in Malawi. This could be due to the inherent nature of institutional quality in the economy. Also, in a study on 30 Sub-Saharan African countries from 1985 to 2012, Oluwatoyin and Folasade (2014) examined the influence of trade openness and institutional quality (ethnic tension as a proxy for cultural institutions, political rights as a proxy for political institutions, and repudiation risk as a proxy for contracting institutions) on economic growth and discovered that while institutional quality has a significant and positive influence on economic growth, trade openness has a weak significance on economic growth.

Furthermore, Pita (2017) reiterated the findings by Vagianou (2016) in a case study on Argentina that the structure of an economy determines its choice of trade policy. This study also showed that throughout the history of Argentina, the country has always been a closed economy but with consistent protectionist policies. This implies that the consistency of trade and economic policies, in general, reflects the strength of the institutional quality setup in an economy. In addition, Leyaro (2014) while investigating the relationship between institutional quality through the use of governance indices, trade, and economic growth in 46 economies in SSA within the time frame from 1996 to 2012, argued that for economic performance to remain evident in an economy, institutional quality has a paramount role to play. These findings, therefore, show that there is a need to ascertain the role of institutional quality in the relationship between trade protectionist policy and macroeconomic performance in Nigeria. In addition, because of the need for the

formulation and implementation of consistent trade protectionist policies, it is imperative to investigate the causal relationship between trade protectionist policy, institutional quality, and macroeconomic performance in Nigeria.

3. Methodology

3.1. Sources of Data

Annual data on the exchange rate, corruption, unemployment, economic growth, trade protectionist policy, government capital expenditure, government expenditure on education, and government effectiveness covering the period from 1981 to 2019 were sourced from World Bank Development Indicators (WDI), Central Bank of Nigeria (CBN) Statistical Bulletin and International Country Risk Guide (ICRGs).

3.2 Model Specification

The baseline model of this study is built on the Lucas endogenous economic growth model and adapted from Romer, 1989; Lucas, 1988; Rebelo, 1991; Aiyedogbon and Ohwofosa (2016). It is thus specified as:

$$y = f(l, k, tpp) \tag{1}$$

where: *y* represents macroeconomic performance (measured by unemployment, exchange rate, and economic growth) while *l, k,* and *tpp* symbolically represent labour (proxied by government expenditure in education), capital (proxied by government capital expenditure), and trade protectionist policy (tpp_t). Thus, equation (1) is further specified as:

$$y_t = f(gxe_t, gxk_t, tpp_t) \tag{2}$$

where:

y_t is the vector of macroeconomic variables in the study (economic growth (proxied by GDP per capita) $gdpc_t$, exchange rate ($exch_t$), and unemployment ($lunmp_t$).
cc_t = Corruption
bq_t = government effectiveness (proxied by bureaucracy quality).
gxe_t = Government expenditure in education
gxk_t = Government capital expenditure
tpp_t = Trade protectionist policy

Specifying equation (2) in a linear form:

$$y_t = \alpha_0 + \beta_1 gxe_t + \beta_2 gxk_t + \beta_3 tpp_t + \beta_4 cc_t + \beta_5 bq_t \tag{3}$$

Incorporating the error term (ε_t), equation *(3)* is specified as:

$$y_t = \alpha_0 + \beta_1 gxe_t + \beta_2 gxk_t + \beta_3 tpp_t + \beta_4 cc_t + \beta_5 bq_t + \varepsilon_t \tag{4}$$

4. Result and Interpretation

Before the analysis and interpretation of results, preliminary tests such as the tests for stationarity, lag length selection criteria, and cointegration was carried out on the variables to ensure a non-spurious analysis. In testing for the presence of stationarity, both the Augmented Dickey-Fuller (ADF) (Dickey & Fuller, 1981) and Phillips Perron (PP) stationarity test (Phillips & Perron, 1988) were utilized. From the PP stationarity result, all variables were stationary at the difference of one except government expenditure on education (*gxet*), government capital expenditure (*gxkt*) while government expenditure on education (*gxet*), unemployment (*lunmp*), and government capital expenditure (*gxkt*) were the only variables stationary at levels when the ADF test was employed.

Table 1: Stationarity Result

Variables	**ADF Test**			**PP Test**		
	Level	1st difference	Remarks	Level	1st difference	Remarks
$lunmp_t$	0.0030***	0.0012***	I(0)	0.6044	0.0013***	I(1)
$gdpc_t$	0.0611*	0.0000***	I(1)	0.0729*	0.0000***	I(1)
$exch_t$	0.5399	0.0049***	I(1)	0.8081	0.0094***	I(1)
gxe_t	0.0000***	0.0000***	I(0)	0.0000***	0.0000***	I(0)
gxk_t	0.0001***	0.0000***	I(0)	0.0001***	0.0000***	I(0)
tpp_t	0.9994	0.0000***	I(1)	0.4892	0.0000***	I(1)
bq_t	0.3050	0.0014***	I(1)	0.3678	0.0001***	I(1)
cc_t	0.5285	0.0087***	I(1)	0.6951	0.0091***	I(1)

Note: ***, ** and * denote significance at 1%, 5% and 10% respectively.

Source: Authors computation.

The standard VAR tool was used to determine the optimal lag length of the models for efficient data analysis in the ARDL framework (Karlsson *et al.*, 2019; Badshah & Bulut, 2020). Table 2 below shows that the appropriate lag length for *exch*, *lunmp*, and *gdpct* models which were given as one, one, and three respectively.

Table 2: Lag length selection criteria Result

Model	Lag	LogL	LR	FPE	AIC	SC	HQ
lunmp	0	-688.7207	NA	1.44E+08	38.65115	38.95906	38.75862
	1	-543.6662	225.6404*	731192.2	33.31479	35.77804*	34.17453*
	2	-487.1318	65.95679	665875.8*	32.89621*	37.51481	34.50822
gdpct	0	-447.3072	NA	443.8030	25.96041	26.27148	26.06779
	1	-342.1233	162.2837	18.95954	22.74990	25.23846*	23.60895
	2	-277.0612	74.35673*	10.81531	21.83207	26.49811	23.44279
	3	-190.1782	64.54165	3.853182*	19.66733*	26.51086	22.02971*
exch	0	-511.9150	NA	7813.206	28.82861	29.13652	28.93608
	1	-393.6462	183.9736*	175.5618	24.98035	27.44360*	25.84009*
	2	-337.8630	65.08044	166.6923*	24.60350*	29.22210	26.21551

* indicates lag order selected by the criterion
LR: sequential modified LR test statistic (each test at 5% level)
FPE: Final prediction error
AIC: Akaike information criterion
SC: Schwarz information criterion
HQ: Hannan-Quinn information criterion

Source: Authors Computation.

The ARDL Bounds testing cointegration technique was used to test for the existence of a long-run relationship between the variables in the models. Table 3 shows that the computed F-statistics is greater than the upper bound *I(1)* at 1% and 5% level of significance, which implies that a long-run relationship exists between the variables in the models (exchange rate, unemployment, and economic growth).

Table 3: Cointegration Result

Bounds test result		
Model	F-statistic	No. of Regressors (K)
gdpct	7.3680***	6
exch	5.1492***	6
lunmp	4.6108**	6
Pesaran *et al.*, 2001 Critical values		
Significance	I(0)	I(1)
10%	2.53	3.59
5%	2.87	4
1%	3.6	4.9

Note: ***, ** and * represent 10%, 5% and 1% levels of significance respectively.
Source: Authors Computation.

The long-run estimates of the exchange rate model show that the trade protectionist rate has a direct and significant impact ($t = 3.54$, $p < 0.05$) on the exchange rate. This implies that a unit increase in trade protectionist rate leads to about 0.14 percent appreciation in the exchange rate of Nigeria. Similarly, government effectiveness (bureaucracy quality) is seen to have a direct and somewhat significant impact ($t = 1.96$; $p < 0.10$) on the exchange rate. This shows that a unit increase in government effectiveness leads to an appreciation in the domestic exchange rate by about 13 percent. Expectedly, the outcome of the study revealed that corruption has an inverse and significant impact (-4.18; $p < 0.05$) on the exchange rate in Nigeria. That is, due to the high negative role of corruption, the domestic exchange rate will depreciate by about 44 percent in relation to the major international currencies of the world. This finding partly corroborates the views of Abboushi (2010), Obi and Abina (2018), and, Ruiz-Estrada and Park (2019) state that trade protectionist policy will only be an effective tool to strengthen the exchange rate and spur a positive trade balance if strong institutional quality exists in an economy. This therefore partly affirms the findings of Stephen and Obah (2017), and, Adamu (2018) and posits that the effectiveness of trade protectionist policy is dependent on the quality of institutions in the economy. However, other explanatory variables, that is, government expenditure on education and government capital expenditure had insignificant effects on the exchange rate.

In the same vein, the long-run estimates of the economic growth model reveals that previous years' government expenditure on education ($t = 3.16$, $p < 0.01$; $t = 3.76$, $p < 0.01$) as well as previous years of government effectiveness ($t = 2.05$; $p < 0.10$) has a positive and significant effect on economic growth in Nigeria. Differently, Table 4 also shows that previous years' corruption negatively and significantly affects economic growth in Nigeria. The finding shows that the negative role of corruption ($t = -2.37$; $p < 0.05$) leads to a decline in economic growth by about 0.38 percent. Hence, poor institutional factors result in an ineffective trade protectionist policy on economic growth in Nigeria. Moreover, other explanatory variables, that is, government expenditure on education and government capital expenditure had insignificant effects on the explained variable.

Furthermore, results from the long-run estimates of the unemployment model show that the past year's value of the trade protectionist rate has a positive and significant impact ($t = 2.29$; $p < 0.05$) on the unemployment rate in Nigeria. That is, a unit increase in the trade protectionist rate will marginally reduce the level of unemployment in Nigeria. However, while the past year value of government effectiveness has a negative and somewhat significant impact ($t = -1.77$; $p < 0.10$), corruption also has a negative and significant impact ($t = -2.39$; $p < 0.05$) on unemployment rate in Nigeria. This implies that both past values of government effectiveness and corruption aggravate the problem of unemployment in Nigeria by about 0.26 and 0.58 percent respectively. This finding therefore partly affirms the views of Stephen and Obah (2017), Bassey and Ekpenyong (2017), Adamu (2018), and, Furceri *et al.* (2019) who states that an increase in trade restrictions leads to high unemployment with weak institutional factors in an economy. This study also partly agrees with the assertions by Okere and Iheancho (2016), Phuong (2017), Obi and Abina (2018), and, Ebenyi *et al.* (2017) that trade protectionist policy will yield a decrease in unemployment if an economy has a strong institutional quality setup. However, other explanatory variables, such as government expenditure on education and government capital expenditure had insignificant effects on the explained variable.

This study reiterates the views of Ajide (2017) and Omoke *et al.* (2021) that, the institutional quality setup in Nigeria is described by distinctive features of the high level of corruption, low government effectiveness, terrorism, political instability, absence of law and order, poor service delivery, and high public bureaucracy. Thus, this study affirms the views of Braml and Felbermayr (2018) and Omoke *et al.* (2021) that the evidence of poor institutional quality plays a dampening role in the nexus between trade protectionist policy and macroeconomic performance in Nigeria. That is, the relationship between trade protectionist policy and macroeconomic performance is dependent on the stance of institutional factors in an economy.

Table 4: Longrun Estimates Results

Variables	Coefficients	Standard error	t-statistics	p-value
Dependent variable: Exchange rate (*exch*)				
gxet	-0.231129	0.470518	-0.491223	0.6272
gxet(-1)	-0.815116	0.500381	-1.628991	0.1149
gxkt	9.200576	6.686567	1.375979	0.1801
tpr	0.14213***	0.040155	3.539517	0.0015
bq	13.33544*	6.803972	1.959949	0.0604
cc	-44.23776***	10.59276	-4.176224	0.0003
Dependent variable: economic growth (*gdpct*)				
gxkt	-0.033361	0.048860	-0.682788	0.5077
gxet	-0.002862	0.003715	-0.770294	0.4560
gxet(-1)	0.011021***	0.003491	3.157193	0.0083
gxet(-2)	0.018846***	0.005007	3.764115	0.0027
tpr	0.000388	0.000290	1.339141	0.2053
bq	0.013776	0.104161	0.132259	0.8970
bq(-3)	0.109768*	0.053173	2.064359	0.0613
cc	0.102940	0.154498	0.666284	0.5178
cc(-3)	-0.383397**	0.161469	-2.374428	0.0351
Dependent variable: Unemployment (*lunmp*)				
gxkt	0.010689	0.132746	0.080524	0.9365
gxet	-0.009802	0.009145	-1.071850	0.2940
gxet(-1)	-0.016032	0.010053	-1.594697	0.1233
tpr	0.000437	0.000637	0.686811	0.4985
tpr(-1)	0.002049**	0.000893	2.293223	0.0305
tro	-0.004179	0.005679	-0.735959	0.4686
by	0.170887	0.139760	1.222717	0.2328
bq(-1)	-0.261566*	0.148130	-1.765786	0.0896
cc	-0.583976**	0.244898	-2.384568	0.0250

Note: ***, **, * denote 1%, 5% and 10% levels of significance respectively
Source: Authors Computation**.**

The short-run estimates which verified the presence of a long-run relationship between the variables in the three models were also presented in Table 5a, Table 5b, and Table 5c. That is, the *ECT* coefficient: -0.55 (t = -6.64, p < 0.01); -2.63 (t = -8.80; p < 0.01) and -0.48 (t = -6.33; p < 0.01) of the models (exchange rate, economic growth and unemployment) were negative and statistically significant at 1% level of significance. The values of the *ECT* showed that while the speed of adjustment in which the economic growth model corrects for short-run disequilibrium is highest at approximately 62%, the exchange rate and unemployment models after a short-run shock adjust back to long-run equilibrium by 55% and 48% respectively. In addition, the tests for the significance of the models such as the R-squared, F-statistics, and Durbin-Waston for the *exch, gdpct,* and *lunmp* models were of the right degree. The R-squared values of the exogenous variables in both exchange rate, economic growth, and unemployment models were 62%, 92%, and 58% of the variations jointly explained by government expenditure on education, government capital expenditure, trade protectionist policy, corruption, and bureaucracy quality in Nigeria. This further connoted that 48%, 8%, and 42% of variations in the exchange rate, economic growth, and unemployment models were explained by the variables not captured in the models. Also, the Durbin-Watson Statistic values of 1.68 for *exch,* 2.28 for *gdpct,* and 1.93 for *lunmp* models depict the absence of serial correlation in the residuals of the estimated models. This further verified the standard error and statistical inference estimates of the equation coefficients. Finally, the F-statistics which describe the overall significance of the model suggested that the estimated regression equations (*exch, lunmp,* and *gdpct*) were statistically significant with F-statistic (P-value) values of 17.58 (0.00), 13.22 (0.00), and 8.70 (0.00) respectively.

Table 5a: Short-run Estimates of EXCH Model

Dependent variable: Exchange rate (ex*ch)*				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	72.92297	11.99856	6.077646	0.0000
@TREND	3.731906	0.516246	7.228922	0.0000
D(gxet)	-0.23113	0.274798	-0.84109	0.4077
CointEq(-1)*	-0.55309***	0.08333	-6.63732	0.0000
R-squared	0.615174	Mean dependent var		8.276959
AdjustedR-squared	0.58019	S.D. dependent var		17.88151
S.E. of regression	11.58593	Akaike info criterion		7.839265
Sum squared resid	4429.712	Schwarz criterion		8.013419
Log-likelihood	-141.026	Hannan-Quinn criteria.		7.900662
F-statistic	17.58434	Durbin-Watson stat		1.676543
Prob(F-statistic)	0.000001			

Note: ***, **, * denote 1%, 5% and 10% levels of significance respectively

Source: Authors computation.

Table 5b: Short-run Estimates of GDPCT Model

	Dependent variable: Gross domestic product per capita (*gdpct)*			
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	0.551385	0.066079	8.344374	0.0000
@TREND	-0.013854	0.001812	-7.647703	0.0000
D(gdpct(-1))	1.420957	0.261219	5.439716	0.0002
D(gxkt(-2))	-0.089886	0.028422	-3.162613	-3.162613
D(gxet)	-0.002862	0.002099	-1.363659	-1.363659
D(tro)	0.001762	0.001966	0.896145	0.896145
D(bq)	0.013776	0.048781	0.282410	0.282410
D(bq(-1))	-0.164760	0.044695	-3.686285	-3.686285
D(bq(-2))	-0.109768	0.036467	-3.010045	-3.010045
D(cc)	0.102940	0.087804	1.172378	1.172378
D(cc(-1))	0.161122	0.114067	1.412523	1.412523
D(cc(-2))	0.383397	0.123552	3.103126	3.103126
CointEq(-1)*	-2.629915	0.299001	-8.795677	-8.795677

R-squared	0.921592	Mean dependent var	0.002320
Adjusted R-squared	0.851896	S.D. dependent var	0.130232
S.E. of regression	0.050119	Akaike info criterion	-2.842388
Sum squared resid	0.045214	Schwarz criterion	-2.086933
Log-likelihood	66.74178	Hannan-Quinn criteria.	-2.581605
F-statistic	13.22304	Durbin-Watson stat	2.282248
Prob(F-statistic)	0.000001		

Note: ***, **, * denote 1%, 5% and 10% levels of significance respectively
Source: Authors computation.

Table 5c: Short-run Estimates of the LUNMP Model

Dependent variable: Unemployment (*lunmp*)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.003646	0.331502	6.044143	0.0000
@TREND	0.003482	0.003541	0.983345	0.3349
D(gxet)	-0.009802	0.005464	-1.793807	0.0849
D(tpr)	0.000437	0.000549	0.797173	0.4329
D(bq)	0.170887	0.101680	1.680643	0.1053
CointEq(-1)*	-0.478354	0.075614	-6.326293	0.0000

R-squared	0.583926	Mean dependent var	0.050770
Adjusted R-squared	0.516817	S.D. dependent var	0.319742
S.E. of regression	0.222257	Akaike info criterion	-0.022571
Sum squared resid	1.531344	Schwarz criterion	0.238659
Log-likelihood	6.417563	Hannan-Quinn criteria.	0.069525
F-statistic	8.701195	Durbin-Watson stat	1.927168
Prob(F-statistic)	0.000031		

Note: ***, **, * denote 1%, 5% and 10% levels of significance respectively
Source: Authors computation**.**

This study also checked for the robustness of the models (*exch*, *gdpct*, and *lunmp*) using diagnostic tests such as the serial correlation, heteroscedasticity, and stability tests. As presented in Table 6, the Breusch-Godfrey LM test showed that there was no evidence of serial correlation since the LM test F-statistics for the models were greater than the 5% level of significance. Similarly, when testing for the presence of heteroskedasticity, Table 6 reveals that the problem of heteroskedasticity is non-existent in the three models of the study.

Table 6: Diagnostics Result

Test	**F-statistic**	**Prob.value**	**Remarks**
Exchange rate (*exch*)			
Serial correlation Test	0.5954	0.4473	No serial correlation
Heteroskedasticity Test	3.6729	0.0637	No Heteroskedasticity
Gross domestic product per capita (*gdpct*)			
Serial correlation Test	1.0069	0.3996	No serial correlation
Heteroskedasticity Test	0.9933	0.5252	No Heteroskedasticity
Unemployment (*lunmp*)			
Serial correlation Test	0.0247	0.8763	No serial correlation
Heteroskedasticity Test	0.5418	0.8558	No Heteroskedasticity

Source: Authors Computation**.**

Additionally, to guarantee the unbiasedness of the estimated regression coefficients, the stability of the models across the timeframe of the study was evaluated using the cumulative sum (CUSUM) test to check for structural stability (Ntembe *et al.*, 2018; Mohanty, 2018). The output as shown in Figures 6a, 6b, 6c revealed that the estimated parameters of the regression equations were stable since the graph lay within the critical bounds at a 5% level of significance.

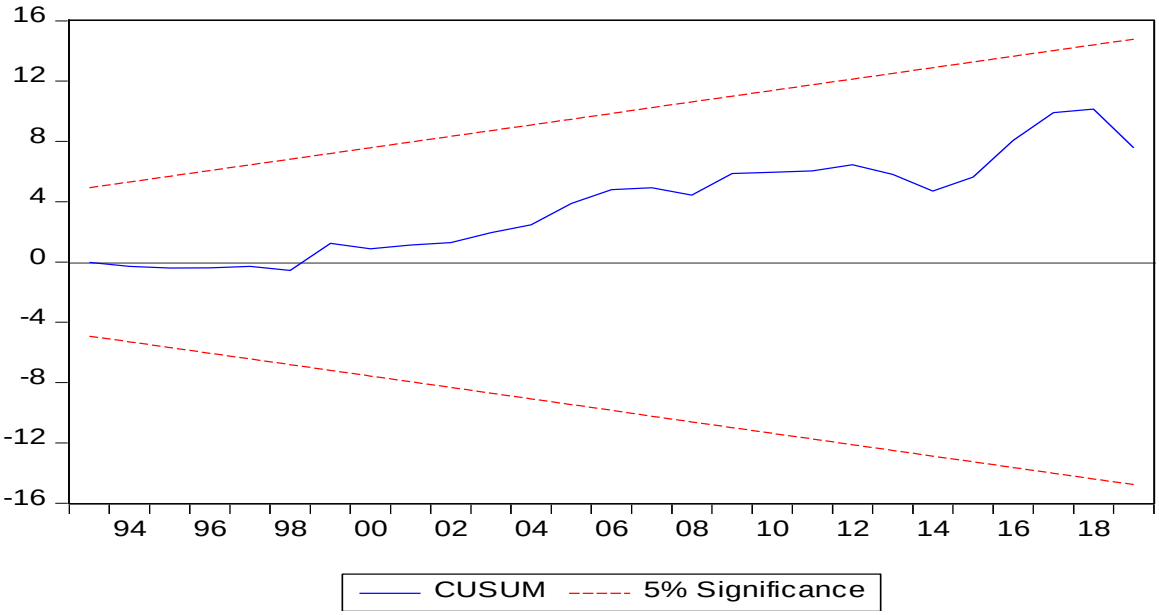

Figure 6a: CUSUM stability test of EXCH model

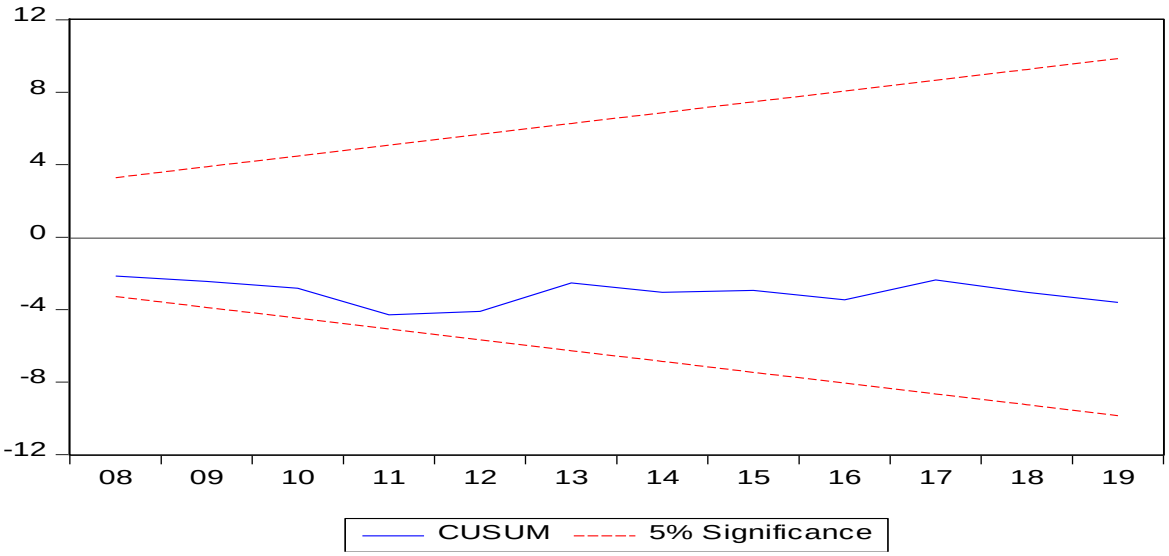

Figure 6b: CUSUM stability test of *GDPCT* model

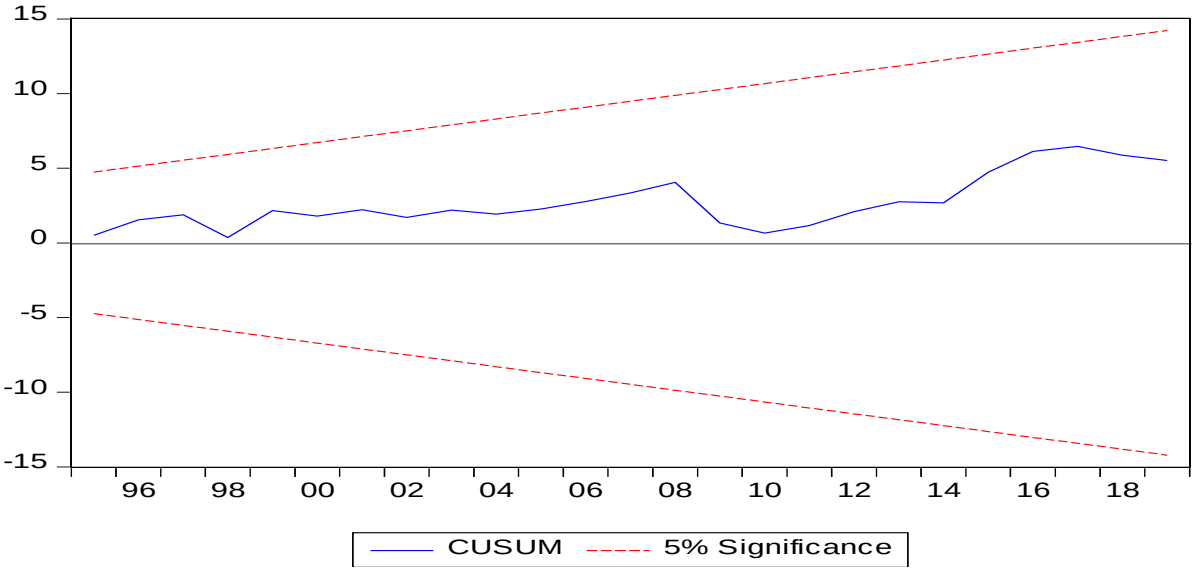

Figure 6c: CUSUM stability test for *LUNMP* model

Furthermore, to determine the direction of causation between trade protectionist policy, economic growth, exchange rate, unemployment, bureaucracy quality, and corruption, the VAR granger causality test was carried out. Specifically, if a variable is revealed as useful for the prediction of another variable or variables, such variable is thought to granger cause the other variable or variables (Granger, 1969; White & Pettenuzzo, 2010; Song and Taamouti, 2019). This implies that if a variable(s) is not useful for the prediction of another variable(s), such variable(s) is said to not granger cause the other variable(s). Results from Table 7 show that there is a unidirectional flow of causation from trade protectionist policy to the exchange rate in Nigeria at a 1% level of significance. This implies that trade protectionist policy granger causes and is a useful prediction of the exchange rate in Nigeria. However, the result also shows that there is no unidirectional flow of causation from exchange rate to trade protectionist policy and no causal relationship between exchange rate, government effectiveness, and corruption in Nigeria.

Also, Table 7 reveals that there is a unidirectional flow of causation from unemployment to trade protectionist policy, government effectiveness, and corruption. That is, at a 1% level of significance, unemployment granger causes and is a useful prediction of trade protectionist policy in Nigeria. In the same vein, at a 5% level of significance, unemployment granger causes and is a useful prediction of government effectiveness and corruption in Nigeria. However, no unidirectional flow of causation from unemployment to trade protectionist policy, government effectiveness, and corruption in Nigeria. Lastly, the result shows that there is a unidirectional flow of causation from trade protectionist policy to economic growth at a 5% level of significance and a unidirectional flow of causation from government effectiveness to economic growth at a 10% level of significance. This implies that trade protectionist policy and government effectiveness granger cause and are useful predictions of economic growth in Nigeria.

This finding, therefore, negates the view of Ude and Agodi (2015) and states that though a causal relationship exists between trade protectionist policy and economic growth, the direction of causation flows from trade protectionist policy to economic growth in Nigeria. However, this

finding validates the assertion by Okere and Iheanacho (2016) that a unidirectional causal relationship exists between trade protectionist policy and economic growth in Nigeria.

Table 7: VAR granger causality result

Excluded	Chi-square	Df	Prob. Value	Direction of causation
Dependent variable: TPP				
GDPCT	6.116864	2	0.0470**	Trade protectionist policy to Economic growth
EXCH	9.233539	2	0.0099***	Trade protectionist policy to Exchange rate
LUNMP	3.507758	2	0.1731	
Dependent variable: LUNMP				
TPR	12.91096	2	0.0016***	Unemployment to Trade protectionist policy
BQ	6.177141	2	0.0456	Unemployment to Government effectiveness
CC	7.910500	2	0.0192**	Unemployment to corruption
Dependent variable: BQ				
GDPCT	5.149857	2	0.0762*	Government effectiveness in Economic growth
EXCH	0.278781	2	0.8699	
LUNMP	1.712729	2	0.4247	
Dependent variable: CC				
EXCH	0.002915	2	0.9985	
TPR	0.002915	2	0.9985	
GDPCT	0.064341	2	0.9683	
LUNMP	1.119661	2	0.5713	
BQ	0.336989	2	0.8449	
Dependent variable: EXCH				
TPR	1.734659	2	0.4201	
BQ	1.734659	2	0.4201	
CC	1.735313	2	0.4199	
TPR	1.975633	2	0.3724	
	1.734659	2	0.4201	
Dependent variable: GDPCT				
TPR	2.473874	2	0.2903	
BQ	3.061439	2	0.2164	
CC	2.396281	2	0.3018	

Note: ***, **, * denote 1%, 5% and 10% levels of significance respectively.
Source: Authors' Computation.

5. Conclusion and Policy Recommendation

The study concludes that absence of sound institutional quality dampens the effect of trade protectionist policy on macroeconomic performance in Nigeria. This study also reveals that trade protectionist policy granger causes both exchange rate and economic growth in Nigeria while unidirectional causation flows from unemployment to trade protectionist policy in Nigeria. Furthermore, while the unemployment granger causes institutional quality in Nigeria, the government effectiveness granger causes economic growth in Nigeria. Therefore, this study recommends that policies that will serve as checks and balances on institutional factors be formulated and implemented for trade protectionist policy to be effective in promoting robust macroeconomic performance in Nigeria.

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