

ECONOMIC ANALYSIS OF FINANCIAL OPENNESS AND ECONOMIC DEVELOPMENT NEXUS: FURTHER EVIDENCE FROM NIGERIA

Onyinye O. Mgbemena¹ and Christopher U. Kalu²

¹Department of Economics, Michael Okpara University, Umudike Umuahia, Abia, Nigeria

²Department of Economics, Nnamdi Azikiwe University, Awka, Anambra, Nigeria

Email of corresponding Author: onyinye02@yahoo.co.uk

Abstract

Poverty, an economic development anathema is a major socioeconomic challenge of the Nigerian economy. Its occurrence has made the Nigerian economy to be described in the global economy as the poverty hub of the world. This paper examined empirically the web of linkage between financial openness and economic development paradigm, proxy by poverty from 1986 to 2020. The econometric approaches of co-integration and the Granger causality in line with the objectives of this paper were utilized. The endogenous and covariate variables of this paper are poverty headcount and interest rate control, unemployment, real gross domestic product, overseas development assistance, foreign direct investment, Gini coefficient, rule of law and inflation rate. The Central Bank of Nigeria (CBN) Statistical Bulletin and National Bureau of Statistics (NBS, 2020) as official sources of data in Nigeria were used. The findings show that financial openness was negatively and insignificantly related to poverty headcount. Moreover, the parameter coefficients of the included variables were negatively linked to poverty headcount while the lags of the covariates were positively linked to poverty headcount. The policy implications of these results were considered and hence, the paper recommended among others, the need for policymakers to improve and promote the financing of the real sector activities especially small scale enterprises so as to reduce economic development challenges especially poverty.

Keywords: *Co-integration, financial openness, Granger causality, poverty, Nigeria*

JEL Codes: F33, I32, C32, Q43

Introduction

The concept of financial openness and financial development seems alike as there is a causality between both openness and development of the financial system especially as the financial system develops and becomes more sophisticated. However, financial openness can have significant effects on financial development both positively and negatively. In a broad sense, financial openness refers to the openness of the financial market of a country to other countries. It allows people to trade and carry out various financial transactions in its domestic market. Financial openness matters: It is often associated with higher rates of economic growth and thereby poverty reduction. It has a very positive impact on total factor productivity growth. Again, in the long-run, financial openness whether trade openness can potentially enhances economic growth by providing access to goods and services and financial inflows thereby achieving efficiency in the allocation of resources and improving technology diffusion and knowledge dissemination (Barro & Sala-i-Martin, 1997). It also reduces poverty and inequality. The concern is on the former and not the latter.

Various indicators have been developed to measure financial openness and integration. These measures are classified in the literature as de jure, de facto and hybrid measures. The main source for most de jure indicators is the Annual Report on Exchange Rate Arrangements and Exchange Restrictions, published by the International Monetary Fund (IMF), which provides information on the extent and nature of rules and regulations governing

external account transactions for a wide array of countries. These data have been widely used as the basis for binary measures of capital controls and financial openness (Edison, *et al.*, 2004)

For the de jure measures, the KAOPEN index by Chinn and Ito (2008) and the financial openness index (FOI) by Johnston and Tamirisa (1998) and Brune and Guisinger (2006) cover the broadest range of countries and time periods. An alternative way to measure financial integration is to use de facto indicators. Quantity-based measures that rely on actual flows best capture de facto integration for emerging markets and low income countries. Gross flows (the sum of total inflows and total outflows) are preferred over net flows, because they provide a less volatile and more accurate picture of integration. Because gross flows tend to be volatile and prone to measurement error, however, the sum of gross stocks of foreign assets and liabilities should be expressed as a share of GDP (Kose *et al.*, 2009). A widely used de facto indicator is Lane and Milesi-Ferretti's (2007) index, which is calculated as a country's aggregate assets plus liabilities relative to GDP. These measures include portfolio, equity, foreign direct investment (FDI), debt and financial derivatives. Meanwhile, the findings of Kose *et al.* (2009) reflect the fact that the information in the two types of integration (De facto and de jure) can differ and therefore, it is important to take these differences into account. These differences were taken into consideration by this paper and relied on Abiad, Detragiachi and Tresselt (2008) that posited that financial openness measures are: credit controls; interest rate controls; state ownership in the banking sector; capital account restrictions; prudential regulations and supervision of the banking sector and sector market reforms. This paper utilized interest rate control proxy by deposit rate ceiling.

Poverty is mainly viewed as an indicator of lack of access to resources and income opportunities, but it has other aspects of social positioning such as geographical location, age, gender, class, ethnicity, community structure, community decision making process and political issues that determine poor people's vulnerability (Yodmani, 2001; Damas & Rayhan, 2004). Poor households often identify vulnerability as a condition that takes into account both exposures to serious risks and defenselessness against deprivation. Data from the World Bank Poverty and Shared Prosperity report shows that Nigeria's poverty level has further increased in the wake of COVID-19 pandemic. More specifically, 79 million Nigerians live in extreme poverty, accounting for 20 percent of the people living in poverty in Sub-Saharan Africa. Data from COVID-19 phone survey showed that 85 percent of households experienced higher food consumption as a coping strategy (World Bank, 2021). The upward trend in poverty is expected to continue owing to the difficulty in generating adequate broad-based economic growth, inability to create jobs and high population growth rate.

In terms of empirical evidence with recommendations on relationship between financial openness and poverty, not much evidence has been recorded. The few studies on Nigerian case are: Okore and Onoh (2013); Amaefule *et al.* (2019); Uma and Obidike (2013); Amamchukwu and Igbojika (2019) and Muhammad & Akhmad, (2021). All of these Nigerian based papers focused on capital account liberalization, as a measure of financial openness. Furthermore, the relationship between openness and poverty has not been given adequate research attention in Nigeria, except Cobham (2001) that examined historical capital account liberalization and poverty nexus in the literature. The relationship between gini coefficient and poverty has been examined in the literature. Ewubare and Okpani (2018) concluded on the positive but insignificant relationship between national poverty index and income inequality. Again, on average, income growth has been the major driving force behind both the declines and increases in poverty (Fosu, 2010). On the relationship between the rule of law and poverty, Mbaku (2014:532) submitted that "unless the African countries provide themselves with institutional arrangements that guarantee the rule of law, poverty will remain pervasive". The proxy variable for economic development in this paper is poverty. It was preferred among others because of its multifaceted and multidimensional challenges on livelihoods.

The objectives of this paper are outlined as follows:

- To investigate the impact of financial openness on poverty in Nigeria.
- To estimate the causality between financial openness and poverty in Nigeria.

The remaining sections of this paper are structured as follow: Section 2 presents the methodology since the empirical literature has been considered at the background of this paper. Section 3 highlights the empirical results. Section 4 presents the conclusion and policy recommendations of this paper while section 5 presents the contributions of this paper to the existing body of knowledge.

Methodology

Theoretical Framework

Financial liberalization theory provides conflicting predictions concerning the relationship between financial openness and poverty reduction. On the one hand, by ameliorating information and transaction costs and therefore allowing more entrepreneurs to obtain external finance, financial openness improves the allocation of capital, thereby exerting a particular large impact on the poor. To the extent that financial system functions optimally following capital financial openness, financial services become available to a larger percentage of the population and to the poor. On the other perspective, financial openness and improvements in the financial system primarily benefit the rich and those who are politically connected. Especially at the early stages of financial openness, financial services, and credit are limited to the wealthy and connected. A higher degree of financial openness, then, may only succeed in channeling more capital to the few, but certainly not the poor. A third theoretical perspective views the non-linear relationship between financial openness and income distribution, and more specifically of an inverted U-shaped curve: at the early stages of financial openness only a few relatively wealthy individuals have access to financial markets. Thus, while the distributional effects of financial openness are adverse at the early stages, they certainly become positive after a timing point. Liberalization of the financial system is thought to have positive effects on economic growth and thereby on poverty through the growth channel (Sami & RuiXin, 2016).

Empirical Model Specification and Data

The baseline structure of the regression equation following Estrada *et al.*,(2008) and Abiad, Detragiach and Tressel(2008) was specified thus:

$$POVR = f(INTC; UNEM, INFL, RGDP, ODA, FDI, GINI, RUL) \quad (2.1)$$

The expression of equation (2.1) can further be expressed in a statistical and econometric form as:

$$Poverty = \lambda_0 + \lambda_1 INTRC + \lambda_2 UNE + \lambda_3 INFL + \lambda_4 RGDP + \lambda_5 ODA + \lambda_6 FDI + \lambda_7 GINI + \lambda_8 RUL + U_i \quad (2.2)$$

Where poverty is measured by poverty headcount ratio (POVR); INTC = interest rate control, the proxy for financial openness; UNE = unemployment rate, INFL = inflation rate; RGDP = real gross domestic product; ODA = Overseas development assistant; FDI= Foreign direct investment, GINI = Gini coefficient a proxy for inequality and RL = Rule of law, proxy for institutional framework.

Theoretical and empirical evidence have shown that there exists a negative relationship between interest rate control and poverty (Naceur & Zhang, 2016). It is expected that inflation would impact positively on poverty depending on the level of inflationary rate. Although in the case of low income countries like Nigeria, the relationship between inflation and poverty is negative and statistically insignificant under certain specification (Talukdar, 2012). The relationship between real GDP and poverty is such that the initial levels of economic development and income inequality can have significant impacts on poverty reduction. However, the growth- poverty nexus is not as simple as assumed, as shown by cross-country regression. This may be explained by the fact that different countries have different initial conditions. The countries vary with respect to their initial levels of economic development and income inequality. As submitted by Bouguignon (2002) there is a growth elasticity of poverty with the initial level of economic development and income inequality (Son & Kakwani, 2004). The relationship between overseas development assistance and poverty, showed that foreign aid has a positive impact on poverty, as reported by the

majority of the studies in both the non-monetary and monetary measures of poverty groups. This means that in general, foreign aid reduces poverty, irrespective of the type of poverty measures used (Mhambe&Odhiambo, 2019). The literature supports the positive effects of foreign direct investment on poverty reduction (Hung, 1999; Jalilian& Weiss, 2002; Calvo&Hernandez, 2006; Reiter &Steensma, 2010; Fowowe&Shuaibu, 2014; Uttama, 2015). The few studies that found a negative impact of FDI on poverty reduction include Huang *et al.*, (2010) and Ali and Nishat (2010). There are also some studies that have found FDI to have an insignificant impact on poverty reduction (Tsai & Huang, 2007; Akinmulegan, 2012; Gohou and Soumare (2012) and Ogunbiyi and Igberi (2014).

Table 1: Data set on the Model Variable

Variables	Definitions	Sources
POVR	Poverty, measured by headcount ratio	World Bank Indicator(2021)
INTC	Interest rate control	Central Bank of Nigeria(CBN)
UNEM	Unemployment	CBN(2021)
INFL	Inflation rate	CBN(2021)
RGDP	Real gross domestic product	National Bureau of Statistics(NBS)(2021)
ODA	Oversee development assistance	IMF(2021)
FDI	Foreign direct investment	CBN
GINI	Inequality	NBS
RUL	Rule of law, proxy for governance	WGI

Source: Researchers' Compilation (2022)

Estimation Techniques and Procedures

The estimation techniques of this paper are the Johansen co-integration and Granger causality approaches. It can be understood that cointegration indicates the presence of causality among two time series but it does not detect the direction of the causal relationship. According to Engle and Granger (1987), the presence of co-integration among the variables shows unidirectional or bi-directional causality among other variables. The co-integration test established whether a long-run equilibrium relationship exists among the variables. It is generally accepted that to establish a co-integration, the likelihood ratio must be greater than the McKinnon critical values. The model can be stated as: $\Delta X_t = \mu + \Psi_1 \Delta X_{t-1} + \Psi_2 \Delta X_{t-2} + \dots + \Psi_{p-1} \Delta X_{t-p+1} + \epsilon_t$ (2.3)

Where μ is a constant term ΔX_t represents the first co-integrating differences. A simple form of Granger causality modeling, which involves two co-integrated and stationary time series $\{X, Y\}$, can be causally linked by specifying the following bivariate vector autoregression (VAR) model

$$X_t = \alpha_1 + \sum \beta_i \Delta INT C_t - i + \sum \lambda_i \Delta X_{t-1} + e_t \quad (2.4a)$$

$$\Delta POVR_t = \alpha_2 + \sum d_i \Delta X_{t-1} + \sum e_i \Delta POVR_{t-1} + e_t \quad (2.4b)$$

Where X is the intermediate target variables $\{INTC, UNEM, INFL, RGDP, ODA, FDI, GINI, RUL\}$. Given equations (2.4a) and (2.4b), the causality test, i.e. X does not Granger-cause $POVR$ conducted by testing the null $e_i = 0$, for all i . Similarly, the feedback test, i.e. $POVR$ does not Granger-cause X , is to test the null $\beta_i = 0$, for all i ; then, for each test (exogeneity and feedback) the F -statistics is computed using the residual sum of squares from the constrained and unconstrained regression.

Result presentation, analysis and discussion of findings

Summary of descriptive statistics

The first point of empirical and policy analysis is to examine the statistical properties of the variables as it relates to the measures of central tendency and dispersion. Table 3.1 presents the descriptive statistics.

Table 2: Summary of Descriptive Statistics Results

	POVR	INTC	UNEM	RGDP	ODA	FDI	GINI	RL	INFL
Mean	1.483	18.352	13.011	39416.1	1.56E+09	1.6198	44.13	0.611	119.36

Std.D	1.7509	4.264	4.94811	19940.30	2.23E+09	1.6198	2.708	0.494	174.60
Skewness	2.954	0.425	-0.0089	0.490437	2.7563	1.256378	1.3515	-0.4558	1.72
Kurtosis	13.04	3.5561	2.277	1.629666	12.114	1.656795	4.2553	1.207	4.66
Jarque-Bera	203.7	1.549	0.7834	4.25989	170.1870	5.730323	13.323	6.064	22.06
Prob.	0.00000	0.460	0.6758	0.1188	0.0000000	27.65182	0.00128	0.0482	0.000

Note: POVR =Headcount ratio; INTC = Interest rate control (financial openness); UNEM = Unemployment rate; RGDP = Real gross domestic product; ODA = Overseas development aid; FDI = Foreign direct investment; GINI = Gini coefficient; RL = Rule of Law; INFL = Inflation rate

Source: Authors' computation using EView 10

From Table 2 (summary of descriptive statistics) describes the characteristics of the variables in terms of the measures of central tendency and dispersion. From the presentation, majority of the variables are positively skewed to the right except unemployment and rule that were skewed to the left negatively. It also showed that interest rate control has the normal distribution at 3.55 while poverty rate and overseas development assistance rejected the hypothesis of normal distribution. Table 3.2 present the correlation matrix. The essence was to show how correlated these variables were to each other.

Table 3: Pair-wise Correlation Matrix

	POVR	INTC	UNEM	RGDP	ODA	FDI	GINI	RL	INFL
POVR	1.000000	-0.2284							
INTC	-0.228	1.000000							
UNEM	-0.6507	-0.177	1.000000						
RGDP	-0.576	-0.2168	0.929581	1.000000					
ODA	-0.3776	-0.1322	0.507103	0.51079	1.000000				
FDI	-0.0966	0.33037	-0.1451	-0.2686	-0.0319	1.00000			
GINI	0.477	0.0595	-0.5530	-0.332	-0.1762	-0.02158	1.00000		
RL	-0.660	-0.1364	0.7580	0.7496	0.4964	-0.10641	-0.3994	1.00000	
INFL	0.1578	0.3626	-0.3251	-0.3782	-0.1941	0.38511	-0.1107	0.5439	1.000000

Source: Authors' computation using EView 10

Table 3 presents the correlation matrix for multicollinearity. From the table, it was shown that INTC, UNEM, RGDP, ODA, FDI and RL correlated negatively with POVR although there was no multicollinearity between the variables. Table 3.3 presents the unit root test result using the standard Augmented Dickey Fuller(ADF) and Phillips-Perron (PP) tests. The stationarity tests and conditions of the variables are important to avoid the problem of spurious results due to explosive data.

Table 4: Unit Root Tests

Variables	ADF		Remarks	PP		
	Level	1 st Diff.		Level	1 st Diff.	Remark
PHC	-2.653	-3.62***	I(1)	-5.626767		I(1)
INTR	-8.378***	-	I(0)	-8.536462		I(1)
UNEM	-7.865860***	-	I(0)	-6.971907		I(1)
RGDP	-5.486276***	-	I(0)	-8.823345		I(1)
ODA	-2.246122	-3.6248	I(1)	-10.64731		I(1)
FDI	-2.055225	-3.648***	I(1)	-13.76724		I(1)
GINI	-9.188015***	-	I(0)	-2.847533		I(0)
DEMO	-5.744563***	-	I(0)	-5.744563		I(1)
INFL	-4.252981***	-	I(0)	-7.615379		I(1)

Note: *** implies significance at 1%

Source: Authors' computation using EView 10

Table 4 present the results of the stationarity tests. From the table, it was suggested that the variables are integrated at order zero (I(0)) and order I (1) using both the Augmented Dickey Fuller and Phillips-Perron approaches. The presence of stationarity promoted the test for co-integration (long-run relationship) among the variables using the Johansen approach. This is the major empirical focus of this paper. The result is presented in Table 5 and 6

Table 5: Johansen Cointegration Test (Unrestricted Cointegration Rank Test (Trace))

Hypothesized No of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob. **
None *	0.989232	513.2863	197.3709	0.0001
At most 1*	0.977087	359.2263	159.5297	0.0000
At most 2*	0.911835	230.8406	125.6154	0.0000
At most 3*	0.759070	148.2702	95.75366	0.0000
At most 4*	0.643272	99.87974	69.81889	0.0000
At most 5*	0.572886	64.83316	47.85613	0.0006
At most 6*	0.439082	35.90923	27.79707	0.0087
At most 7*	0.318536	16.25112	15.49471	0.0384
At most 8*	0.090138	3.211721	3.84166	0.0731

Note: Trace test indicates 8 co-integrating eqn(s) at the 0.05 level; * denotes rejection of the hypothesis at the 0.05 level and ** MacKinnon-Haug-Michelis (1999) P-values.

Table 6: Johansen Cointegration Test (Unrestricted Cointegration Rank Test (Maximum Eigenvalue))

Hypothesized No of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob. **
None *	0.989232	154.0600	58.43354	0.0000
At most 1*	0.977087	128.3857	52.36261	0.0000
At most 2*	0.911835	82.57040	46.23142	0.0000
At most 3*	0.759070	48.39046	40.07757	0.0047
At most 4*	0.643272	35.04658	33.87687	0.0361
At most 5*	0.572886	28.92393	27.58434	0.0335
At most 6*	0.439082	19.65811	21.13162	0.0793
At most 7*	0.318536	13.0392	14.26460	0.0774
At most 8*	0.090138	3.2117	3.841466	0.0731

Note: Max-eigen value test indicates 6 co-integrating eqn(s) at the 0.05 level of significance; * denotes rejection of the hypothesis at the 0.05 level; ** MacKinnon-Haug-Michelis (1999) P-values.

Source: Authors' Computation using EView 10

Table 5 and 6 – Unrestricted co-integration rank test (Trace) and co-integration rank test (Maximum) respectively suggested a long-run co-integrating vector relationship between financial openness and poverty in Nigeria between the periods 1986-2021. Meanwhile, the normalized co-integrating coefficients explained further this long-run relationship as shown in Table 7.

Table 7: Normalized Co-integrating Coefficients

POVR	INTC	UNEM	RGDP	ODA	FDI	GINI	RL	INFL
1.00000	6.22	14.28	-0.0028	5.03E-09	-6.19	-6.33	-70.83	-3.66
	(0.51)	(1.77)	(0.000)	(6.2)	(1.89)	(1.26)	(6.09)	(0.13)

Note: Standard error in parentheses

Source: Authors' computation using EView 10

Table 7 showed the normalized cointegrating coefficients. There is always a caution in interpreting the results. The positive signs are interpreted as decreases while the negative sign are interpreted as increases (Obum, 2022). From the result, an increase in RGDP, FDI, and (GINI), INFL and ODA suggested a reduction in poverty, while INTC, UNEM suggested increase in poverty. Table 8 present the Granger causality result. The Granger causality result will help to ascertain the ability of financial openness to predict poverty in the future period.

Table 8: Pairwise Granger Causality Tests

Null Hypothesis	F-Statistic	Prob.	Remark
INTC does not Granger cause POVR	1.982	0.1559	Reject
UNEM does not Granger cause POVR	0.355	0.704	Reject
RGDP does not Granger cause POVR	0.57629	0.5683	Reject
ODA does not Granger cause POVR	0.05268	0.9488	Reject
FDI does not Granger cause POVR	2.82509	0.0757	Reject
GINI does not Granger cause POVR	8.98984	0.0009	Accept
RL does not Granger cause POVR	2.3321	0.1150	Reject
INFL does not Granger cause POVR	1.32188	0.2822	Reject

Note: 0.05 level of significance

Source: Authors' Computation using EView 10.

Table 8 present the result of the Granger causality test. From Table 8, it was suggested that INTC (our proxy for financial openness) does not lead to a reduction in poverty and poverty reduction does not run to POVR. This implies that there is no causality between POVR and INTC; financial openness cannot predict poverty with the framework. Intuitively, there is policy need to re-examine interest rate control policy in Nigeria. Moreover, the result showed that there's no causality between UNEM and POVR either in both directions. In other words, neither of the policies in employment nor poverty was effective on both unemployment and poverty. From the causality result, there's no causality running from RGDP to POVR or in either directions. This also implies that neither growth policy nor poverty reduction policies are effective on both variables. Meanwhile, there is a unidirectional causality between GINI and POVR, which implies that any initiated and effectively implemented poverty reduction policy can reduce either inequality or poverty.

Table 9: Diagnostic Tests

	Test	F-Statistics	Probability
1	Normality (Jarque-Bera Statistic)	3.2894	0.00000
2	Serial Correlation Breusch-Godfrey (LM Test)	3.816139	0.005433
3	Heteroskedasticity (Breusch-Pagan-Godfrey)	3.882237	0.00148

Source: Authors' computation using EView 10

The diagnostic tests as presented in Table 9 suggested normal distribution for the variables. The Jargue-Bera value of 3.2894 supported the position. It also suggested that the variables are free from autocorrelation and homoscedasticity. The model parameter test suggested that the model is relatively stable, although the CUSUM crosses the 0.05 percent critical line. As shown in the graphic hereunder. However, the CUSUM square are within the 0.05 percent critical lines. As shown in Figures 1 and 2.

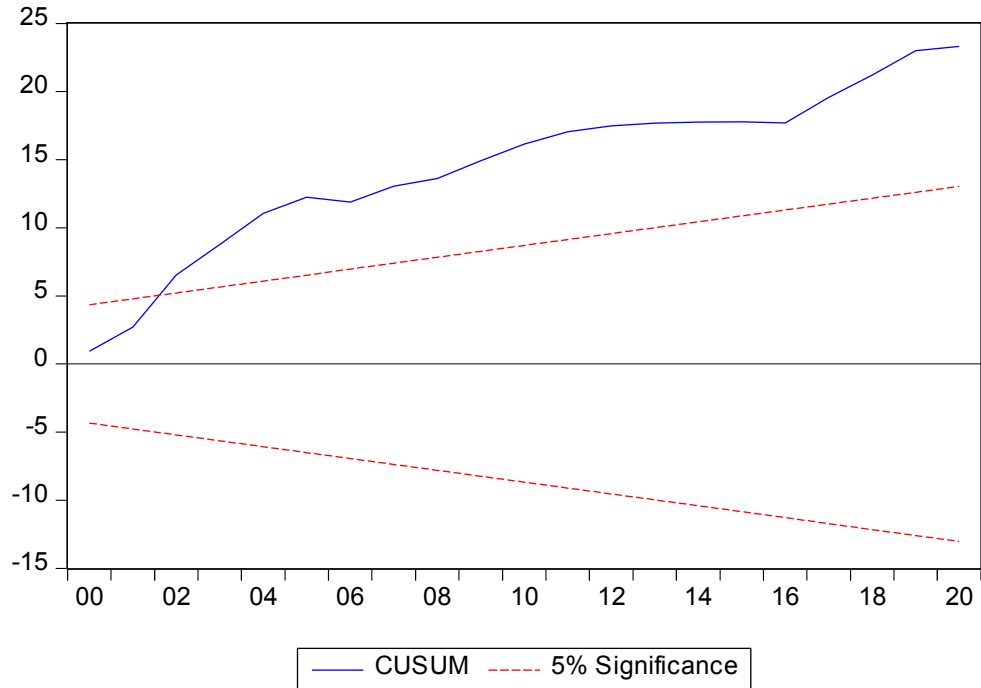


Figure 1: CUSUM

Source: Authors' plot using EView 10

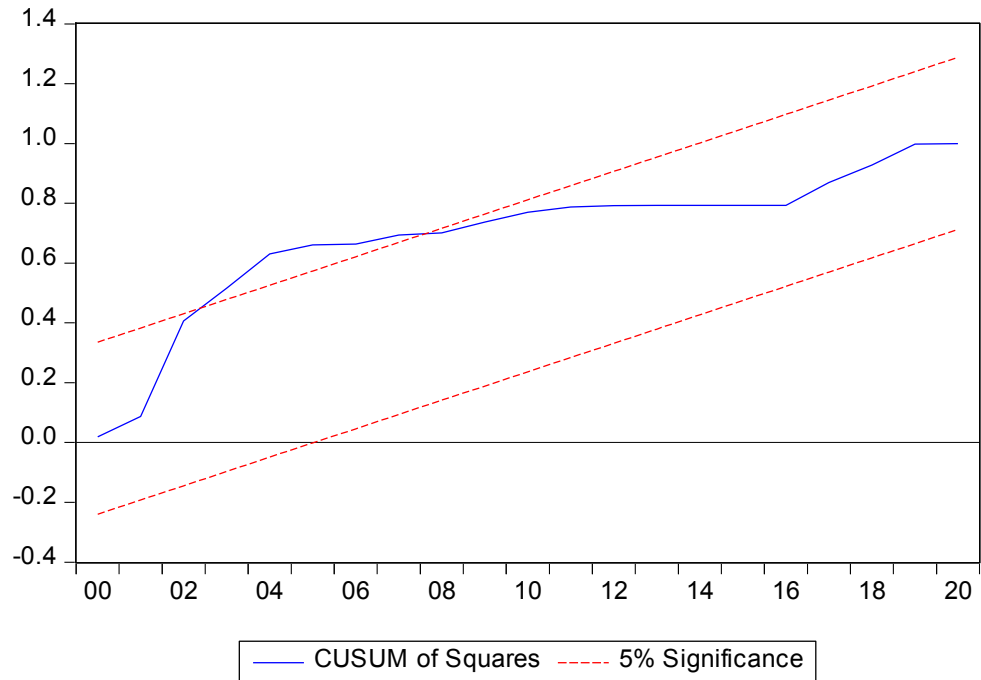


Figure 2: CUSUM SQ

Source: Authors' plot using EView10

Discussion of Findings

From the Johansen co-integration result, it was suggested that there are 8 co-integrating vectors using the unrestricted trace statistics and 6 co-integrating vectors using the maximum-eigen statistics. The presence of co-integrating vectors implies a long-run relationship between financial openness and poverty reduction in Nigeria. Meanwhile, some development finance efforts have been made by the Central Bank of Nigeria including financing of the small and medium scale enterprises. The Central Bank of Nigeria has contributed to investment in the agricultural sector which remains the largest sector in the economy. These investments are to ensure food security and to provide a source of livelihood for the households, aiming at reducing poverty. The agri-business/SME Investment Scheme (AGSMEIS) was launched to improve access to affordable and sustainable finance to agri-business and MSMEs and to generate productive investment opportunities for the poor households in Nigeria. It is of importance to note the success of the Anchor Borrowers' Programme (ABP). This is geared towards achieving food self-sufficiency in the production of major focal commodities in Nigeria and for the reduction of poverty.

The result of the Granger causality suggested the existence of no causality between financial openness and poverty reduction. This implies that financial openness measures including interest rate control has no significant impact on poverty reduction within the reviewing periods. Therefore, strengthening the banking sector reform especially interest rate control will automatically has some positive impact on poverty reduction. While stabilizing the economy by controlling inflation, the apex bank- CBN should monitor the monetary policy rate to a sustainable level that will promote growth through investment.

Meanwhile, there exists a unidirectional causality running from GINI coefficient to POVR. This implies that any government policy to reduce inequality will promote poverty reduction. Quite much monetary and fiscal policy measures have been directed towards achieving the reduction of inequality in Nigeria. In response to the challenges of poverty and inequality, the Monetary Policy Committee in 2020, took major decisions to support the Federal Government's efforts at sustaining lives and livelihoods affected by the economic shocks of COVID-19 and the recession episodes of 2016 and 2020 by extending the moratorium on loans to ease pressure on loan repayments, reduced interest rates from 9.0% to 5.0% and created a ₦50 billion fund to support poor households and Small and Medium Enterprises (CBN, 2020). Some of the fiscal measures are stabilization programme (N-Power, Tradi money among others); tax relief and outright transfer of real resources to firms and households and social security contribution wavers. The federal government approved in June 2020 the USD 5.9 billion (NGN 2.3 trillion) NESP in order to stimulate and diversify the economy, retain and create jobs, and extend more protection to the poor. The finding of this paper is not different from the existing financial openness- poverty reduction literature. Financial openness increases the competition and development in and the4 financial sector and consequently facilitate firm growth, competition and economic growth (Adam, 2011).

Conclusion and policy recommendation

Conclusion

The result of the Granger causality suggested that there is no causality between financial openness and poverty reduction. This implies that financial openness policy measures have no significant impact on poverty reduction within the period. The above analysis is in line with the specific objectives of this paper. The finding has several policy implications.

Policy Recommendations

The following policy measures are suggested: Government need improve on the institutional framework to promote pro-poor growth through monitoring and evaluation of the existing financial reforms and poverty measures in Nigeria. The need for government across levels to attract and retained foreign direct investment through the promotion of existing fiscal and monetary policy measures like tax relief and incentives, holidays especially foreign direct investment in the agriculture and manufacturing sectors which has much capacity to reduce poverty.

Contributions to Empirical Knowledge

Barring the challenges of this paper in terms of data reliability and measurement, this paper has significantly contributed to the theoretical and empirical knowledge of financial openness and poverty reduction. Empirically, this study utilized the Johansen co-integration and Granger causality approaches to the examination of financial openness and poverty reduction in Nigeria. The inclusion of institutional variable (rule of law) emphasized the role of institutional framework to economic development and poverty reduction. The suggested policies of this study would serve as an input or a blueprint for innovative poverty reduction using the mechanism of financial openness.

Suggestion for Further Study

This paper suggested a construction of a new index over and above KAOPEN for measuring financial openness. This new index must incorporate institution and governance indicators as a major variable for economic transition, shared prosperity and poverty reduction. It is also necessary to make projections on the impact of financial openness on poverty reductions in the face of economic shocks. This will enable economic decision especially in these periods of global shocks.

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