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The Impact of Trade Balances and Inclusive Growth on Economic Development in Nigeria

Victor Edet Ebiefie, PhD[1] & Benson Edet Ekpenyong, PhD[2]
Department of Economics, Faculty of Social Sciences, University of Uyo, Nigeria.
ebiefievictor@gmail.com[1], ekpenyongbenson@gmail.com[2]

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Abstract

This study investigates the combined impact of trade balances, inclusive growth, and economic development. Accordingly, an inclusive growth index was computed for Nigeria using ten indicators through principal component analysis in EViews 9 to examine how trade balance and inclusive growth variables impact economic development. The error correction mechanism and autoregressive distributed lag model were employed to estimate the effect of trade balances and the inclusive growth index on economic development, given the order of integration. The results revealed a negative relationship between the inclusive growth index, openness, exchange rate, inflation rate, interest rate, and economic development in Nigeria. Conversely, a positive relationship was found between the balance of payments, foreign direct investment, reserves, capital market, total labour force, and economic development in both the long and short run. Overall, the model was relevant in explaining the dynamics of trade balances and inclusive growth in Nigeria, with a relatively high explanatory power of approximately 53 percent for the per capita gross domestic product equation. The paper recommends that the government consciously direct policy actions towards enhancing inclusivity in economic growth and trade balances to achieve their full potential and improve economic development in Nigeria. This should be facilitated by promoting specialisation in the export of primary commodities

that match imports, improving capital market efficiency, creating employment through a well-managed labour force, and reducing poverty, inflation, and interest rates. A balanced trade policy that enhances inclusivity in economic growth is essential for sustainable development in Nigeria.

Keywords: inclusive growth, foreign direct investment, exchange rate, interest rate, poverty, per capita gross domestic product, economic development.

Introduction

1.1 Background to the Study

Inclusive growth, according to the Organisation for Economic Co-operation and Development (OECD), is deemed to have occurred when various indicators of improved well-being (beyond income) have also advanced for citizens. The OECD further emphasised that growth should be regarded as a means rather than an end, with priority placed on the quality of growth rather than its quantity. The concept of inclusive growth highlights the importance of broad participation in the growth process, both in terms of decision-making regarding the organisation of growth and in active involvement in the growth itself. It also underscores the necessity for all individuals to share equitably in the benefits of growth. Thus, inclusive growth entails both participation and benefit-sharing (Ramos and Ranieri, 2013; Mesagan and Dauda, 2016).

Nigeria's economic growth rate averaged over 6 percent in the last decade, but surprisingly this has not translated into a reduction in poverty and unemployment. This decade of growth with poverty and joblessness has led to a further widening of the level of inequality while also reducing the standards of living of the people. The main concern is therefore how to ensure that through inclusive planning and plan-led efficient resource allocation, the economic growth rates easily manifest in low levels of poverty, reduced inequality, and higher employment rates with a view to pursuing diversification of the growth base from oil to non-oil that involves everyone in the growth process while ensuring that micro, small, and medium enterprises have the necessary skills and facilities to create value and generate income (Eregha and Mesagan, 2017).

In relating trade balances and inclusive growth to economic development, alleviating poverty, employment generation, equality, and sustainability, which are the major tenets of inclusive growth, we expressed the view that poverty reduction can be done using improved trade balances of the SSA countries. Exports have historically served as the prime engine for economic growth in Africa. The well-endowed countries in the continent that exploit their endowments for export have generally seen more prosperity than those lacking such endowments. International integration can promote

inclusive growth when workers and firms are able to adjust to enter into growing economic activities and adopt technologies availed through international trade. International openness through trade, trade facilitation, and investment has a direct effect on the creation of economic opportunities. Trade is key to economic development because trade facilitates the adaptation and movement of both workers and firms towards sectors with growing demand and the incorporation of new technologies with the objective of promoting productivity and employment growth of a wide group of workers and firms (World Bank, 2011).

Whereas economic growth is the increase in the real output of a nation's goods and services over a particular span of time, economic development is the process of an increase in the level of production in an economy alongside the improvement of living standards and the advancement of technology sustained over time. In essence, economic development has to do with how the growth is distributed to enhance the standard of living of the citizenry (Onwioduokit, 2020).

Statement of the Problem

Over the past three decades, specifically from 1980 to date, the Nigerian economy has experienced consistent growth in real GDP, with an average annual growth rate of 7.4 percent. Notably, since the advent of democratic governance in 1999, the Nigerian economy has undergone sustainable and far-reaching economic reforms that have positively impacted various economic indicators. However, these improvements have not necessarily translated into enhanced welfare for the general population.

Economic growth that is not sustained or inclusive is insufficient to eradicate poverty. The inability of Nigeria's impressive but exclusive economic growth rates to alleviate poverty has contributed to persistent challenges confronting the country, which pose both direct and indirect threats to peace and stability across Africa and globally. These challenges manifest in the forms of youth restiveness, terrorism, kidnapping for ransom, banditry, prostitution, internet fraud, and other social vices. While such issues exist in other economies, they appear to be particularly endemic in Nigeria.

The attainment of strong economic growth without corresponding reductions in poverty, inequality, and unemployment underscores the core of the inclusive growth debate. Thus, the central question arises: does inclusive growth exist in Nigeria? Despite notable economic performance, the benefits of growth have not trickled down to the poor. As a result, poverty and unemployment remain significant constraints to the country's developmental aspirations (AEO, 2014). In a paradoxical development, the proportion of Nigerians living in poverty rose steadily from 65.5 percent in 1996 to 69.0 percent in 2010. Additionally, the Gini coefficient, which is a measure of inequality, increased from 0.429 in 2004 to 0.447 in 2010. Available data further reveal worsening poverty in rural areas, with a headcount poverty ratio of 66 percent in 2010 (AEO, 2012).

Further affirming the lack of inclusive growth in Nigeria are the sobering unemployment rates. According to the National Bureau of Statistics (NBS) 2022 Annual Socio-Economic Report, the national unemployment rate stood at 33 percent, up from 32.5 percent in 2021. Youth unemployment was even more severe, reaching 53.4 percent for those aged 15–24 in the fourth quarter of 2020, a sharp rise from 40.8 percent in the second quarter of the same year. For the 25–44 age group, unemployment was recorded at 22 percent, while it stood at 18 percent and 21 percent for the 45–59 and 60–64 age groups, respectively. Unemployment was also higher in rural areas (26 percent) compared to urban centres (17 percent).

The consequences of widespread youth unemployment are evident in the increasing prevalence of armed robbery, hostage-taking, illicit drug trafficking and abuse, militancy, and insurgency, including the Boko Haram crisis. In a related vein, the Human Development Index showed only marginal improvement over a ten-year period, rising from 38 percent in 1981 to 39 percent in 1990, then from 40 percent in 1991 to 42 percent in 2000. Between 2001 and 2020, it declined from 43 percent to 36 percent. Financial deepening, measured by credit to the private sector as a percentage of GDP, rose from 6.15 percent to 6.78 percent between 1981 and 1990, from 7.01 to 7.51 percent from 1991 to 2000, and reached 18.96 percent in 2010. However, it declined slightly to 18.67 percent in 2021.

Trade balances were negative during 1981, 1982, and 1983, with figures of –1.816 billion, –2.564 billion, and –1.401 billion, respectively. However, between 1984 and 1990, trade balances improved by 64 percent, reaching approximately 64.168 billion. Between 1991 and 2000, they increased by 96 percent, and from 2001 to 2011, the figure rose to 4.240 trillion. Unfortunately, from 2011 to 2021, trade balances declined to –3.190 trillion, a drop attributed to factors such as oil theft, the Boko Haram insurgency, and unrest in the Niger Delta region. These social and economic disruptions have contributed to the absence of inclusive growth in Nigeria.

The trend in Nigeria's inclusive growth index reflects these dynamics. The index stood at 0.293 in 1986, increased to 0.355 in 1987 and 0.369 in 1991, then peaked at 0.439 in 1993, before falling to 0.325 in 1994. This fluctuation is likely attributable to the autocratic leadership prevalent at the time. With the return to democracy in 1999, the index rose to 0.402 in 2001. The bank consolidation policy implemented by monetary authorities positively influenced the index, which increased to 0.406 in 2007.

The adoption of Vision 20:2020 between 2010 and 2013 further boosted the inclusive growth index, which rose to 0.623 in 2010, 0.683 in 2011, 0.733 in 2012, and 0.726 in 2013. However, it declined to 0.726 in 2015, down from 0.744 in 2014. This may be linked to the regime change and the introduction of the Economic Recovery and Growth Plan (ERGP), a medium-term framework implemented from 2017 to 2020 aimed at stimulating economic growth and enhancing inclusivity. On balance, the index suggests marginal improvements, reaching 0.753 in 2017 (Effiong, Udah, and Ebi,

2022). This study, therefore, seeks to explore the relationship between trade balances and inclusive growth and their impact on economic development in Nigeria.

2.1 Review of Literature

2.1.1 The concept of economic development

Economic development is concerned with rising output trends and enhancements in the social and political structure of the people. Proponents of the dependency model contend that economic development refers to the problems of underdeveloped countries and economic growth to those of developed countries. Maddison (1970) made the distinction between the two terms in this sense when he wrote, "The rising of income levels is generally called economic growth in rich countries, and in poor ones it is called economic development." In this study, macroeconomic indicators such as per capita gross domestic product, unemployment, and the human development index (HDI) will be used as measures of economic development.

2.1.2 The concept of inclusive growth

Inclusive growth refers to both the pace and pattern of growth, which are considered to be interlinked and therefore need to be addressed together. The idea that both the pace and pattern of growth are critical for achieving a high, sustainable growth record, as well as poverty reduction, is consistent with the findings in The Growth Report: Strategies for Sustained Growth and Inclusive Development (Commission on Growth and Development, 2008).

2.2 Theoretical framework

The dependency theory serves as a springboard to this study.

The Dependency Theory

Dependency theory is a framework for understanding the underdevelopment of developing countries. It was first proposed by Raúl Prebisch in the 1950s and was later vigorously analysed and applied by scholars such as Frank, Sunkel, Furtado, Santos, Emmanuel, and Amin during the 1970s (Jhingan, 2007). The theory posits that the dependence of less developed countries (LDCs) on developed countries (DCs) is the primary cause of their underdevelopment. It seeks to identify the factors that have contributed to the persistent economic stagnation of underdeveloped nations.

The theory is based on the premise that resources flow from the periphery, comprising poor and less developed nations, to a core of wealthy nations, thereby enriching the developed countries at the expense of the underdeveloped ones. According to this perspective, poor states become further impoverished while rich states become wealthier as a result of their integration into the global economy (Todaro, 2003;

Amin, 1976). Dependency theory asserts that the poverty experienced by peripheral countries is not due to a lack of integration or insufficient integration into the world system, as often argued by free-market economists. Rather, it stems from the **manner** in which they are integrated.

From this standpoint, a notable school of thought is that of the bourgeois scholars, who argue that underdevelopment and continued dependence on developed nations are the result of domestic shortcomings. They attribute these issues to weak integration mechanisms, limited capital diffusion, low technological advancement, fragile institutional frameworks, poor leadership, corruption, and mismanagement (Ajayi, 2000; Momoh and Hundeyin, 1999).

Criticisms of dependency theory centre on its perceived incoherence, lack of systematic structure, and its failure to account for production relations and the internal class dynamics of developing countries. Also, the theory is criticised for overlooking the role of market forces and the mechanisms of capitalism. One significant consequence of dependency, according to critics, is the use of external debt as a tool through which developed nations exploit LDCs. This is done by dictating project selection, pricing decisions, equipment supply, technical expertise, and personnel (Ijirshar, Fefa, and Gadoo, 2016).

Ultimately, the main propositions of dependency theory have been challenged on several grounds: it is said to lack theoretical completeness, fail to adequately explain both development and underdevelopment, ignore production relations, and misattribute underdevelopment to unequal exchange. Furthermore, the concept of 'dependence' is often ambiguously defined, and the theory has been criticised for neglecting market dynamics and for its limited empirical validation.

2.3 **Empirical Literature**

2.3.1 Studies on Inclusive Growth and Economic Development

Azizi, Yazdani, Aref, and Taleghani (2011) evaluated the impact of macroeconomic policies on poverty, an indicator of inclusive growth in Iran. The study assessed the effectiveness of government intervention on poverty through the adoption of a general equilibrium model and a Social Accounting Matrix for the year 2002. The findings revealed that a significant proportion of Iranian households were living below the poverty line, implying that macroeconomic policies did not enhance inclusive growth in Iran during the study period.

Anyanwu (2013) examined the correlates of poverty in relation to inclusive growth in Africa, aiming to contribute to the design of inclusive growth policies. Using multivariate models and data from 43 African countries between 1980 and 2011, the study explored the correlates of poverty—measured using the headcount index at the international poverty line of US$1.25 per day. The empirical estimates suggested that higher levels of income inequality, primary education alone, mineral rents, inflation, and

large populations tend to increase poverty, thereby impeding poverty reduction and inclusive growth in Africa. Conversely, higher real per capita GDP, net official development assistance (ODA), and secondary education had significant negative effects on poverty, thus promoting poverty reduction and inclusive growth. Trade openness was found to have a positive but statistically insignificant effect on poverty, despite substantial liberalisation efforts across the continent.

Oseni and Oseni (2015) investigated the potential of Micro, Small, and Medium Enterprises (MSMEs) in driving inclusive economic growth and development in Nigeria through a contextual analysis. The study sought to understand why economic growth over the years had not translated into substantial development outcomes and what interventions were necessary to reverse the trend. It found that the oil sector, which is not labour-intensive, accounts for over 80 percent of government revenue and is a major contributor to national GDP. The study also highlighted the urgent need to address high poverty and unemployment levels. It recommended impactful measures such as creating an enabling environment, providing essential infrastructure, and implementing accessible funding programmes. Furthermore, the financial system, being crucial in any economy, must become more supportive of MSMEs by abolishing lending conditions that hinder their growth, as MSMEs are vital engines of economic development.

Onwioduokit (2020) explored the role of education and inclusive growth in achieving and sustaining economic development in Nigeria. The study adopted the Autoregressive Distributed Lag (ARDL) model to examine both short-run and long-run relationships between education and development, proxied by the Human Development Index (HDI), and between education and economic growth within an inclusive growth framework. Long-run results from the ARDL model indicated that secondary school enrolment (SSE) is positively correlated with economic development (HDI). The results also suggested a direct relationship between GDP per capita (GDPPC) and economic development. In the short run, the coefficient of HDI indicated that past economic development supports current development. Evidence from the estimated error correction model showed that school enrolment positively affects short-run economic growth, while population growth contributes to economic growth with a lag.

Abiodun (2022) examined the direction of causality between financial sector development and inclusive growth using panel data from 32 sub-Saharan African (SSA) countries covering the period 2000–2019. Findings from the Dumitrescu-Hurlin panel causality test revealed unidirectional causality for SSA as a whole and for the West and Southern African sub-regions. In contrast, no causality was found in the East and Central African sub-regions. At the country-specific level, the results varied: 24 of the 32 countries showed no evidence of causality, while 8 countries exhibited unidirectional causality. The study concluded that in most SSA countries, both inclusive growth and financial sector development are too weak to causally influence each other, as bi-directional causality was absent.

3.1 Method

To achieve the stated objective, an inclusive growth index was computed using ten indicators that constitute the index and then the data for the identified inclusive growth variables, which include life expectancy, control of corruption, GDP per capita, unemployment, government expenditure on education, electric power consumption, number of bank branches, credit to SMEs, financial sector efficiency, and personal income share in national income (GDP), to compute an inclusive growth index by summing up to derive a single value using the principal component analysis from the E-view 9 approach in generating the Inclusive Growth Index for Nigeria.

Thus:

$$IGI_t = \frac{LEXP + CONCOR + GDPPC + EMP + GOVEXE + EPC + NBB + CTS + FSE + PIS}{IGI_{t-1}}$$

With data from the World Bank (2021) indicators, taking 1981 as the base year, data for the ten variables listed was collected; summed up for the individual years studied and divided by the based year data by using principal component analysis from E-view 9. The computation shows that the IGI_{1981} (the base year) is -2.23; the index lies between 0 and 1. So if the value is close to zero, then growth is not inclusive, but the closer the value to one, the more inclusive growth is.

From the model specified, the per capita GDP and poverty were used to measure economic development.

3.1.1 Model Specification:

3.2.1 For Per Capita Gross Domestic Product and Inclusive Growth Equation

PCGDP = F (Inclusive growth index) Equation 3.1

Equation 3.1 states that the per capita gross domestic product (PCGDP) is dependent upon inclusive growth and trade balances. In demystifying the above model, the index of inclusive growth using the listed indicators, trade balances variables is inserted. It follows that Equation 3.1 becomes the formula presented by Equation 3.2 as follows:

PCGDP = F (IGI, TB) Equation 3.2

In accordance with Equation 3.2, IGI refers to inclusive growth index, TB is trade balances which will be measured by openness (OPEN), exchange rate (EXCHR), balance of payments (BOP), foreign direct investment (FDI), external reserve (RES), capital market (MC), and total labour force (TLF). Controlling the above model using other variables, Equation 3.3 was represented as follows:

IGI =F (LEXP, CONCOR, UNEMP, GOVEXE, EPC, NBB, CTS, FSE, PIS) Equation 3.3

where: IGI – Inclusive growth index, LEXP – Life Expectancy, CONCOR – Control of Corruption, UNEMP –Unemployment, GOVEXE – Government Expenditure on Education, EPC

- Electric Power Consumption, NBB – Number of Bank Branches, CTS – Credit to SME's,
- FSE – Financial Sector Efficiency, and PIS – Personal Income Share in the GDP.

Therefore, Equation 3.2 becomes the formula presented by Equation 3.4 as follows:

PCGDPR = f(IGI,OPEN, BOP, FDI, EXCHR, RES, INTR, INF, MC TLF) Equation 3.4

where: PCGDPR - Per Capita Growth Domestic Product Rate, OPEN – Openness that is export + import / GDP, BOP – Balance of payments, FDI – Foreign Direct Investment, EXCHR - Exchange Rate, INTR – Interest Rate, INFL – Inflation Rate, MC – Capital Market – a measure of capitalize index, and TLF – Total Labour Force.

By the transformation of Equation 3.4, the estimable form of the model can be expressed as shown by Equation 3.5:

$$PCGDPR_t = \omega_0 + \omega_1 IGIt + \omega_2 OPENt + \omega_3 BOP_t + \omega_4 FDI_t + \omega_5 EXCHR_t + \omega_6 RES_t + \omega_7 INTR_t + \omega_8 INFLt + \omega_9 MCt + \omega_{10} TLF + V \quad \text{Equation 3.5}$$

Where; Wo is the constant of regression ($\omega_0 \neq 0$), ω_1 to ω_{16} are the parameter estimates of the explanatory variables to capture their direction and magnitude of effect on economic development, and V is the stochastic term.

The a priori expectation is that $\omega_1 < 0$; $\omega_2 > 0$, $\omega_3 > 0$; $\omega_4 > 0$; $\omega_5 < 0$; $\omega_6 > 0$; $\omega_7 < 0$; $\omega_8 < 0$, $\omega_9 > 0$, $\omega_{10} > 0$.

3.1.3 Model estimation procedure

The ADF and PP unit root tests were adopted to determine the order of integration, while the causality test seeks to detect the direction of causality. The co-integration test was used to determine the existence of a long-run equilibrium relationship (Gujarati & Porter, 2009).

If the order of integration of the time series variables is of order one (i.e., I(1)), then the Johansen co-integration test is suitable; but if the order of integration is a combination of order zero and one (i.e., I(0) and I(1)), the ARDL-bounds co-integration test procedure is suitable. This study used both the Johansen and ARDL tests for co-

integration. ARDL was used for inclusive growth and trade, and an error correction mechanism was used for the equation. The analytical software of the study is E-Views 9 software.

4.1 Results and Discussion

4.1.1 Per Capita Gross Domestic Product, Trade Balances and Inclusive Growth Index Equation Results

Table 4.1a: Long run coefficients of per capita gross domestic product, trade balances, and inclusive growth index equation
Dependent variable: PCGDP

Variable	Coefficient	Std. Error	t-Statistic	Prob.
IGI	-0.517527	1.900057	-0.272374	0.7890
OPEN	-29.40530	33.45679	-0.878904	0.3933
BOP	2.378606	0.975070	2.439421	0.0276
FDI	2.080668	2.167895	0.959764	0.3524
EXCHR	-0.078938	0.045063	-1.751720	0.1002
RES	0.077544	0.028570	2.714170	0.0160
INTR	-0.952907	1.375626	-0.692708	0.4991
INFLA	-0.594298	0.180130	-3.299269	0.0049
MC	0.000581	0.000318	1.825604	0.0879
TLF	0.911756	1.263159	0.721807	0.4815
C	21.644288	19.004642	1.138895	0.2726

Source: Researcher's Computation (2025), Using E-Views 9.

4.1.1 Long-run coefficients of Per Capita Gross Domestic Product and Trade Balances, Inclusive Growth Index Equation

The long-run equation of per capita gross domestic product and the inclusive growth index equation is reported in Table 4.1a. According to the ARDL long-run estimates, the relationship between the dependent variable economic development (proxied by PCGDP) and the inclusive growth index (IGI) is negative, implying that an increase of about one unit of IGI will reduce *PCGDP* by 0.51%. This is in line with the *a priori* expectation that inclusive growth has a negative relationship with economic development in the period under study. This suggests that the growth rate of Nigeria within the period under review did not have any substantial impact on the economy despite the huge growth rate due to a myriad of socioeconomic problems such as youth restiveness, unemployment, poverty, and the activities of Boko Haram and herdsmen, as well as a high inflation rate.

Similarly, the result also revealed that balance of payment (BOP) is positively but significantly related to PCGDP; hence, an increase in BOP will increase economic

development by 2.38%. This result conforms to *a priori* expectation, suggesting that during the period under review, the combined balances of export and import (trade balance) significantly impacted economic development. Moreover, FDI also conforms to *a priori* expectation in sign and magnitude. The coefficient of FDI shows that an increase in FDI by 1 unit will lead to about a 2.08% increase in economic development. Although not statistically significant, it shows that in the period under study, the rate of foreign direct investment accruable to Nigeria was hampered by the activities in the business environment occasioned by government-regulated fiscal and monetary policies.

Furthermore, there exists a negative relationship between EXCHR and PCGDP. The result revealed that an increase in EXCHR by 1 unit will cause economic development to reduce by 0.07%. This is in line with *a priori* expectation. The result therefore means that the negative coefficient of EXCHR to PCGDP causes foreign debt where foreign loans are badly negotiated or are improperly invested, suggesting that it eventually became a burden that undermined the naira exchange rate, therefore causing a rise in EXCHR in the period under study.

The sign and magnitude of RES show that a unit change in RES will lead to about a 0.077% increase in PCGDP. This suggests that there exists a positive and significant relationship between RES and economic development in the period under review. This result is in line with *a priori* expectation showing that reserve is a key factor that promotes economic development. The size of a country's reserve holding determines its stand in the international community. Also, the coefficient of interest rate (INTR) shows that there exists a negative relationship between INTR and PCGDP. The results of the estimates suggest that a unit rise in INTR will lead to a reduction of about -0.95% in economic development. This result is in line with *a priori* expectation, suggesting that INTR exhibited a negative chain rule relationship with economic development, meaning that a rise in interest rate will lead to a fall in national income in accordance with product market behaviour and vice versa, ceteris paribus. Further, the relationship between inflation rate (INFLA) and PCGDP is negative but significantly related. The sign and magnitude of INFLA show that a unit increase in INFLA will reduce PCGDP by –0.59%. This result is in line with *a* priori expectation, and it suggests that the inflation rate reduces the purchasing power parity of the people and causes the demand-supply gap to widen, precipitating a change in the exchange rate. It also promotes capital flight in the period under review.

The coefficient of the capital market (MC) suggests that a rise in MC by 1 unit will lead to a 0.0005% increase in PCGDP. This result is in line with *a priori* expectation, but its statistical insignificance shows that bits impact during the period was not enough to cause any effect on PCGDP. Finally, the coefficient of total labour force (TLF) is positively related to PCGDP. This is in line with *a priori* expectation. The result shows that a rise in TLF by 1 unit will lead to a 0.91% reduction in economic development. This result suggests that the rising total labour force and low attendance low capital stock

jointly limit the production capacity of Nigerians and the economy in the period under study.

Table 4.1b: Short-run coefficients of per capita gross domestic product, trade balances and inclusive growth index equation result
Dependent Variable: PCGDP

Cointegrating Form				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
D(IGI)	-0.275672	0.952233	-0.289500	0.7762
D(OPEN)	14.858599	8.074797	1.840121	0.0856
D(OPEN(-1))	42.806677	10.425088	4.106122	0.0009
D(BOP)	0.498811	0.136144	3.663854	0.0023
D(BOP(-1))	-0.441819	0.135352	-3.264225	0.0052
D(FDI)	-2.315524	0.780450	-2.966910	0.0096
D(FDI(-1))	-2.659395	0.911189	-2.918600	0.0106
D(EXCHR)	-0.042048	0.016983	-2.475967	0.0257
D(RES)	0.016523	0.008334	1.982599	0.0660
D(INTR)	-0.297770	0.441544	-0.674384	0.5103
D(INTR(-1))	0.931488	0.362971	2.566286	0.0215
D(INFLA)	-0.004983	0.098818	-0.050429	0.9604
D(MC)	-0.000207	0.000189	-1.097739	0.2896
D(TLF)	1.393120	0.449430	3.099746	0.0073
D(TLF(-1))	-0.855925	0.327449	-2.613914	0.0195
CointEq(-1)	-0.532671	0.181491	-2.934972	0.0102
R-squared	0.859728	Mean dependent var		0.258250
Adjusted R-squared	0.835294	S.D. dependent var		4.557283
S.E. of regression	2.752184	Akaike info criterion		5.131838
Sum squared resid	113.6178	Schwarz criterion		6.187387
Log likelihood	-77.63675	Hannan-Quinn criter.		5.513491
F-statistic	13.83064	Durbin-Watson stat		2.267153
Prob(F-statistic)	0.000707			

Source: Researcher's Computation (2025), Using E-Views 9.

5.2.2 Short Run Coefficients of Per Capita Gross Domestic Product, Trade Balances and Inclusive Growth Index Equation Result

The short-run dynamic results of the per capita gross domestic product (PCGDP) and inclusive growth index (IGI) equation are presented in Table 5.4b. The results indicate a negative relationship between the IGI and PCGDP, which aligns with a priori expectations. Specifically, a 1 percent increase in the IGI is expected to result in a 0.28

percent decrease in PCGDP. This suggests that although Nigeria recorded an impressive growth rate during the period under review, such growth did not translate into improved living standards or sustained economic development over time.

The coefficient of openness (OPEN) is positively related to PCGDP in both the current period and the one-period lag. Thus, a unit increase in OPEN is expected to lead to a 14.85 percent and 42.81 percent rise in economic development in the current and lagged periods, respectively. This finding supports a priori expectations, indicating that greater openness of the Nigerian economy during the study period improved the nation's balance of payments, thereby generating trade surpluses.

Similarly, the coefficient of the balance of payments (BOP) is positive and significantly related to PCGDP in the current period, which is consistent with a priori expectations. However, at the one-period lag, the coefficient becomes negative. This indicates that a unit increase in BOP results in a 0.49 percent increase in PCGDP in the current period but a 0.44 percent decrease in the lagged period. The implication is that, although the current period shows an increase in PCGDP, the lagged negative effect suggests an accumulation of BOP deficits and rising foreign debt stock. This, in turn, leads to a heavy debt service burden and drains scarce foreign exchange reserves needed for economic development.

Furthermore, the coefficient of foreign direct investment (FDI) is negative but significant in both the current and first-period lag. Therefore, a unit change in FDI is expected to result in a 23.1 percent and 26.6 percent decline in economic development in the short run. This contradicts a priori expectations. The findings suggest that net foreign capital inflow is being depleted, contributing to a deficit in the trade balance and resulting in BOP disequilibrium during the period under review.

The coefficient of the exchange rate (EXCHR) is also negatively and significantly related to PCGDP. A 1 percent increase in EXCHR is expected to lead to a 0.042 percent decline in PCGDP in the short run. This finding aligns with a priori expectations, suggesting that currency depreciation increases foreign debt burdens, thereby weakening the naira exchange rate and undermining economic development.

In the short run, the coefficient of reserves (RES) is positively related to PCGDP. This implies that a unit increase in RES leads to a 0.016 percent rise in PCGDP, consistent with a priori expectations. This indicates that Nigeria's reserve holdings had a significant and positive impact on economic development during the study period.

The coefficient of interest rate (INTR) is negatively related to PCGDP in the current period but becomes positively related in the one-period lag. In the current period, a unit increase in INTR leads to a 29.7 percent reduction in PCGDP. This result conforms with a priori expectations, indicating that rising interest rates reduce national income via product market constraints, thereby slowing economic development. However, in the one-period lag, the coefficient turns positive and significant, suggesting that a unit change in INTR yields a 93.1 percent increase in PCGDP.

Likewise, the coefficient of inflation rate (INFLA) is negatively related to PCGDP in the current period. A 1 percent increase in INFLA results in a 0.0049 percent decline in PCGDP. This result is consistent with a priori expectations, highlighting that high inflation reduces household purchasing power parity.

The capital market variable (MC) is negatively related to PCGDP, with a unit increase in MC resulting in a 0.0002 percent decrease in PCGDP.

Finally, the coefficient of total labour force (TLF) is positively but significantly related to PCGDP in the current period and negatively related in the one-period lag. In the current period, a 1 percent increase in TLF leads to a 13.93 percent decline in PCGDP. This is consistent with a priori expectations, indicating that the expanding labour force—largely due to rising unemployment—limits production capacity and hinders economic development during the period under study.

The error correction mechanism (ECM) displays the expected negative sign and appropriate magnitude. The ECM coefficient of –0.532671 suggests that approximately 53 percent of short-run disequilibria are corrected annually to restore long-run equilibrium. The t-statistic of –2.934972 confirms that the error correction term is statistically significant at the 5 percent level.

The R-squared value of 0.859728 and the adjusted R-squared value of 0.835294 indicate that approximately 85 percent of the variation in PCGDP is explained by the current and one-period lag of IGI, OPEN, BOP, FDI, RES, EXCHR, INTR, MC, TLF, and INFLA. The remaining 15 percent may be attributable to factors not included in the model. The F-statistic of approximately 13.83 confirms that the joint effect of all variables is statistically significant, suggesting a good model fit. The Durbin-Watson (D-W) statistic of 2.27 indicates the absence of autocorrelation in the model. Therefore, the results are robust and can be used for economic forecasting and policymaking.

The model's stability was further confirmed using the Cumulative Sum (CUSUM) test, as illustrated in Figure 4.1a. The trend remained within the ±5 percent significance bounds, indicating that the variables included in the PCGDP equation were stable throughout the study period. Consequently, the model is deemed stable and consistent for use in economic policy and forecasting.

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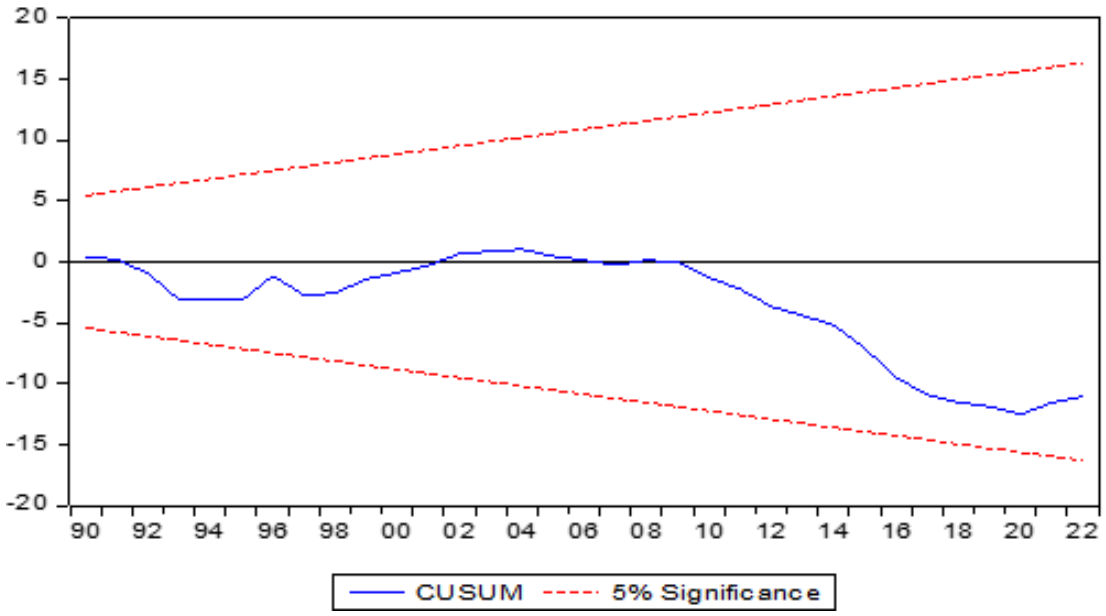

Figure 4.1a: Per capita gross domestic product and inclusive growth index equation CUSUM.
Source: Researcher's Computation (2025).

4.3 Discussion

The short-run and the long-run ARDL dynamics show an intriguing insight, as the regression result offers a negative and insignificant relationship between the two key variables, the inclusive growth index and the dependent variable, economic development proxied by per capita gross domestic product. The results suggest that increases in the underlisted variables, in essence, will lead to decreases in economic development. This suggests that although Nigeria posted an impressive growth rate within the period under review, this impressive growth rate did not have any substantial impact on economic development due to a myriad of socio-economic disturbances, such as youth restiveness, a sobering unemployment rate, a multidimensional poverty rate that led to a high misery index, and the activities of Boko Haram and herdsmen, as well as a high inflation rate.

Furthermore, positive and significant relationships were found between balance of payments, foreign direct investment, reserves, capital market development, total labour force, and economic development in Nigeria. This finding aligns with the views of Oseni and Oseni (2015), as well as Sanni, Musa, and Sani (2019), who reported that inclusive growth exerts a significant positive impact on economic development in Nigeria. They also noted that economic inclusiveness has exerted a significant negative influence on development outcomes in the country.

Moreover, the results of the analysis indicate that openness, foreign direct investment, and capital market development exhibited mixed outcomes, failing to conform to a priori expectations in either the short or long run. While openness did not conform to theoretical expectations in the long run, foreign direct investment and the capital market did. This suggests that although the study period was sufficiently long for these variables to influence economic development, such potential was hampered by constraints such as an inability to accumulate capital stock, overdependence on imports, depletion in net foreign or capital inflows due to trade deficits, excessive labour input without corresponding productivity gains, and inadequate technological progress and trade policy frameworks during the period under review.

In both the short- and long-run estimates of the balance of payments and per capita gross domestic product equations, positive relationships were observed for reserves, total labour force, foreign direct investment, and openness. These findings corroborate the position of Anyanwu (2013), who examined the long- and short-run relationships between exports, imports, and economic growth in Brazil and China using the error correction model. His study revealed positive effects of exports and negative effects of imports in both countries, thereby underscoring the importance of export performance and foreign reserves in enhancing economic growth.

5 Conclusion and Recommendation

This study examined the impact of trade balances and inclusive growth on economic development in Nigeria. The autoregressive distributive lag (ARDL) co-integration technique was used to determine the long-run and short-run equilibrium relationship among the variables, and the principal component analysis from E-view 9 was used to generate the inclusive growth index to test for the impact of the inclusive growth index on trade balances and economic development in Nigeria. The study revealed volatility in the inclusive growth index and various components of trade balances, such as openness, foreign direct investment, balance of payments, reserve, interest rate, inflation rate, capital market, total labour force, and economic development in both the short-run and long-run periods. Hence, it was revealed from the findings that economic development responds negatively to fluctuation in inclusive growth in Nigeria. Interest rate, inflation rate, inclusive growth index, and poverty were found to exhibit negative responses to economic development in Nigeria within the period under review.

Recommendations

This study therefore recommends that the Government should consciously direct policy actions towards enhancing inclusivity in economic growth and trade balances to fully realise the potential for improved economic development in Nigeria. This should be facilitated by creating an appropriate and enabling environment for the effective initiation and promotion of inclusive growth, encouraging specialisation in the export of

primary commodities that complement imports, improving capital market efficiency, fostering job creation through a well-managed labour force, and ensuring the reduction of poverty, inflation, and interest rates. These measures will enhance inclusive economic growth, balanced trade policy, and overall economic development in Nigeria.

References

Abiodun, S. O (2022). Dynamic Relationship between Financial Sector Development and Inclusive Growth in Sub-Sahara African Countries. *African Journal of Economic Review, Volume 10 (2),*

Anyanwu, J. C. (2013). Determining the Correlates of Poverty for Inclusive Growth in Africa. Working Paper Series No. 181 African Development Bank, Tunis, Tunisia

Ajayi, I (2000). External Debt, Capital Flight and Economic Growth in Nigeria' A paper Presented at the International Conference on Sustainable Debt and Development Strategy, May 17 – 18, 2000.

Amin, S. (1976). Unequal Development in black African Origins. Journal of Modern African Studies. Vol.10, No. 4 pp503 – 24

AEO (2012): Nigeria Country Profile. A Joint Publication by African Development Bank (AfDB); Organizanation for Economic Cooperation and Development (OECD); and United Nations Development Programme (UNDP).

AEO (2014): Global Value Chains & Africa's Industrialization. A Joint Publication by African Development Bank (AfDB); Organizanation for Economic Cooperation and Development (OECD); and United Nations Development Programme (UNDP).

Azizi, J., Yazdani, S., Aref, E. T. and Taleghani, M. (2011). The effect of macroeconomic policies on poverty in Iran. *International Journal of Economics and Finance*, 3(1): 229 – 233.

Commission on Growth and Development (2008) "The Growth Report: Strategies for Sustained
Growth and Inclusive Development". World Bank, Washington DC.

Effiong, C. E, Ubi, P. Udah, E and Ebi, B. O (2022). Macroeconomic policies and inclusive growth in Nigeria, 1840p. *The Seybold Journal Report*, 17: 1533 – 9211

Eregha, P., and Mesagan, E. (2017). Energy consumption, oil price and macroeconomic performance in energy dependent African countries. *Applied Econometrics*, 46: 74 – 89.

Gujarati, D. N. and Porter, D. C. (2009). *Basic Econometrics*, 5th Edition. McGraw Hill, New York, 401p.

Jhingan, M. L. (2007). *Macroeconomic Theory*. Vrinda Publishers, New Delhi, 581p.

Ijirshar, V. U, Fefa, J and Gadoo, B. N (2016). The Relationship between External Debt and Economic Growth in Nigeria. *International Journal of Economics & Management Sciences 06(01)*

Onwioduokit, E. (2020). Education, inclusive growth and development in Nigeria: empirical examination. *Bullion*, 44(2): 3 – 30.

Maddison, A. (1970). Economic Progress and Policy in Developing Countries. London: Allen and Unwin pp. 313

Mesagan, E. P. and Dauda, R. O. S. (2016). Does Education matter for Inclusive Growth? The
Nigerian Case. *Journal of Economics and Business Research*, 22(1): 168 – 189.

Momoh, A. and Hundeyin, T. (1999).'Perspective on Political Economy in Elements of Politics, edited by Remi Anifowose and Francis Enemuo, (pp 38 -450); Lagos, Nigeria: Sam Iroanusi Publication.

National Bureau of Statistics (NBS) 2022 Report

Oseni, E and Oseni, E. F (2015) Achieving Inclusive Economic Growth and Development in Nigeria through MSMEs. *Journal of Economic and Financial Studies,* 03(04): 30 – 40.

Ramos, R. A and Ranieri, R (2013). After all, what is inclusive growth? International Policy Centre for Inclusive Growth, No. 188, 42p. http://www.ipcundp.org/pub/IPCOnePager188.pdf. (Retrieved on 19th March, 2023).

Todaro, Michael P. (2003). Economic Development. United Kingdom: Harlow Publishers

World Bank (2021). World Development Report 2021: Jobs. World Bank, Washington DC.