



Trade Liberalization and Unemployment in Nigeria

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Abstract

This study examines how trade liberalization affected Nigeria's unemployment rate from 1981 to 2024, utilizing exchange rates, trade openness, and foreign direct investment (FDI) as explanatory factors. The work uses a parsimonious error correction model (ECM) to capture both long-term and short-term dynamics. The findings show that while FDI has a little impact, trade openness considerably raises unemployment in the short term. Higher unemployment is positively correlated with exchange rate depreciation. With a negative and significant ECM term, deviations from long-run equilibrium appear to be adjusting at a pace of 19.7% each period. The results show that trade liberalization may make unemployment in Nigeria worse if it is not accompanied by conducive domestic labor and industrial policies. To optimize employment advantages from trade openness, the report suggests conducting targeted labor market measures, stabilizing the currency rate, encouraging labor-intensive FDI, bolstering local sectors, and enacting phased liberalization policies.

Keywords: Trade openness, unemployment, unit root, cointegration, ECM



Introduction

Globally, trade liberalization has been embraced as a tactic to promote economic expansion and advancement. In order to integrate into the global economy, both developed and developing nations have been pursuing outward-oriented policies since the 1980s. These policies aim to increase efficiency, draw in investment, transfer technology, open up new markets, and create jobs. Liberalization is promoted by organizations such as the World Bank and IMF as a means of reducing poverty and promoting sustainable development. Under structural reforms, it has been encouraged in Africa, especially Nigeria, to increase economic activity, diversify output, and improve competitiveness (Mathew, 2013).

Despite Nigeria's abundance of natural and human resources, unemployment is still a major problem. Over 4.7 million Nigerians of working age were unemployed in 2023, with the national unemployment rate standing at 5.4%, according to the National Bureau of Statistics (NBS). Those with post-secondary education had a higher unemployment rate (9.4%), and there were notable regional variations (e.g., Abia at 18.7%). The unemployment rate increased from 5.0% in Q3 2023 to 5.3% in the first quarter of 2024. Youth unemployment was 8.4%, and urban unemployment was greater than rural rates. Although the gap between urban and rural areas remained, the rate decreased to 4.3% by the second quarter of 2024, indicating a slight improvement (NBS, 2025). Despite these variations, unemployment nevertheless reduces purchasing power, limits production, and restricts aggregate demand. Additionally, a sizable portion of the unemployed population consists of college graduates, indicating persistent imbalances between the supply and demand for labor.

The neoclassical free-market paradigm, which holds that lowering trade barriers improves global resource allocation, encourages specialization, and increases efficiency through comparative advantage, serves as the theoretical cornerstone of trade liberalization. According to this theory, trade openness promotes capital accumulation, boosts productivity, eases knowledge transfer, and attracts both international and domestic investment. It is anticipated that increased output will result in the creation of jobs and better well-being as capital-labor ratios increase and technology spreads (Saibu, 2004). Trade openness is therefore seen as a driver of



economic growth and labor market development, especially in developing nations aiming to join the global economy.

The Structural Adjustment Program (SAP), which was implemented in 1986 to resolve balance of payments imbalances and restructure the productive basis of the economy, legally accepted trade liberalization in Nigeria. Tariff reductions, exchange rate deregulation, state-owned enterprise privatization and commercialization, and more general market-oriented changes were all included in the reforms. Increasing efficiency, diversifying exports, fostering private sector involvement, and generating job opportunities were among the policy's goals. The results, however, have continued to be inconsistent. The performance of the external sector was somewhat enhanced by liberalization, but deindustrialization in some industries, plant closures, the displacement of unskilled labor, and an increase in unemployment and poverty are all attributed to it, according to detractors. The argument over the actual impact of trade liberalization on unemployment in Nigeria is still fueled by these divergent results. Nigeria continues to face structural unemployment despite implementing trade liberalization measures to boost employment and the economy. This is because job creation has not kept up with the country's rapid labor force expansion, particularly among young people and recent graduates. Trade openness was supposed to increase industrial productivity and competitiveness, but the results have been inconsistent; in certain industries, increased import competition has led to factory closures, low capacity utilization, and job losses. Employment improvements have also been hampered by structural limitations, such as a small industrial base, a strong reliance on crude oil exports, poor infrastructure, and inconsistent policy. Furthermore, there is still conflicting empirical data regarding the relationship between trade and unemployment in Nigeria, making it difficult to determine whether liberalization has decreased or increased unemployment.

Global research, including Jing Liu, Li, Bai, and Yu (2025), demonstrates that trade openness generally improves individual welfare and happiness, especially in low- and middle-income countries, mainly through export-driven economic growth, though these advantages can be mitigated by inflation, unemployment, and income inequality. Regional and country-specific research shows conflicting results: in Nigeria, trade



openness, through imports and exports, increases manufacturing productivity and lowers unemployment (Imoagwu et al., 2023; Umoh, Ekpeno, & Effiong, 2013). However, other analyses show limited effects on poverty reduction and labor participation (Akinlo, Adeleke, & Aremo, 2013; Umoru, 2013). According to Gonesse, Sibanda, and Ngonisa (2023), exports reduce unemployment in the SADC region, but imports may increase it. Similarly, in Saudi Arabia, employment outcomes are mediated by macroeconomic stability and diversification (Alfalih, 2023; Cao et al., 2025). Sectoral differences are evident in Asian data, with export-oriented businesses reaping greater benefits than import-competing ones (Cheong & Sonnenschein, 2010; Kakarlapudi, 2010). When taken as a whole, these studies highlight the fact that trade liberalization can increase employment and welfare but that its sustainability and inclusivity depend on structural changes, labor market laws, macroeconomic stability, and complementary policies.

There are substantial gaps in the literature. There is still conflicting empirical data regarding Nigeria; studies have found either positive, negative, or negligible benefits of trade liberalization on employment. Furthermore, a number of studies rely on out-of-date statistics that overlook recent structural shifts in Nigeria's labor market and trade dynamics, and many concentrate on productivity, poverty, or export performance rather than directly examining unemployment. These drawbacks highlight the need for a more thorough and up-to-date analysis of how trade liberalization affects unemployment in Nigeria.

This paper examines the impact of trade liberalization on unemployment in Nigeria from 1981 to 2024 in light of these circumstances. The research is organized as follows: The literature review is presented in Section 2, the study methodology is described in Section 3, the data are analyzed and interpreted in Section 4, and a summary, conclusion, and policy recommendations are included in Section 5.

2.1 Literature Review

2.1.1 Unemployment

When people who are ready and able to work are unable to obtain adequate paid employment, they are said to be unemployed (Ijaiya, 2010). The International Labour Organization (2007) defines jobless people as individuals who have actively sought employment, are willing and able to work for pay, and are currently unemployed. Conceptually, unemployment can also be defined as the difference between current employment and the level of employment that would exist at full equilibrium, or as the difference between the supply and demand for labor at a specific real pay. The fundamental idea behind these definitions is that unemployment refers to those who are prepared and able to work but are nevertheless unemployed. Despite widespread acceptance of this idea, variations in labor market systems and reporting practices have made it difficult to measure and apply. In a similar vein, Baker (2002) defines unemployment as the state in which capable and willing people are either unemployed or unable to find a job.

2.1.2 Trade liberalization

Trade liberalization is the process of lowering or doing away with obstacles that prevent goods and services from moving freely between nations. It is defined by Blackett (2007) as the removal of quantitative constraints like import quotas, the decrease or elimination of import tariffs, the removal of export taxes, the removal of protection for emerging industries, the removal of non-tariff barriers, and occasionally the devaluation of the local currency. Trade liberalization is anticipated to produce economic benefits like increased investment, improved productivity, and employment creation in developing nations like Nigeria, which have a plentiful labor pool.

Orji (2003) goes on to define trade liberalization as the removal of both tariff (duties and surcharges) and non-tariff (license regulations and quotas) impediments to the flow of products and services in the global market. The first steps toward a liberalized trade regime are policies that lessen anti-export biases, such as lowering import license premiums. In order to promote economic growth, trade liberalization also seeks to establish an atmosphere that is favorable to capital inflows, knowledge transfer, and the adoption of contemporary manufacturing techniques. The economic justification



for liberalization has been hotly contested, especially in developing nations where early liberalization initiatives were frequently accompanied by rising rates of poverty, unemployment, underemployment, and unfavorable working conditions.

2.1.3 The Links between Trade Liberalization and Unemployment

There are several, frequently conflicting ways that trade openness, which entails lowering trade barriers and joining the global market, influences unemployment. On one hand, it can create jobs by expanding markets, stimulating production, attracting foreign direct investment, and promoting efficiency in competitive and export-oriented sectors (Saibu, 2004; Mathew, 2013). However, in labor-intensive, uncompetitive industries, greater import competition may result in layoffs, decreased capacity utilization, and plant closures (Hanson & Harrison, 1999; Olayiwola, 2010). Furthermore, trade openness frequently results in a decrease in demand for low-skilled workers and an increase in demand for trained labor, leading to structural unemployment in situations where the workforce is underskilled (Umoru, 2013). The ultimate impact of trade liberalization on unemployment is also influenced by institutional quality, labor regulations, and infrastructure, with weak frameworks exacerbating job losses despite potential gains (Akinlo et al., 2013; Cheong & Sonnenschein, 2010). Consequently, trade openness can both alleviate and worsen unemployment, depending on sectoral competitiveness, skill alignment, and policy effectiveness.

2.2 Theoretical Literature

The foundation of this subject is the Ricardian trade theory, which was created by David Ricardo in 1817 and is based on the concepts of specialization and comparative advantage. According to the theory of comparative advantage, countries should focus on producing commodities and services in which they are comparatively more efficient in order to maximize trade benefits overall. Ricardo used the example of commerce between Portugal and England, where Portugal produced wine and England produced cloth, to demonstrate this idea. It was anticipated that both nations would gain from trade as a result of this specialization, including the development of jobs in their respective sectors.

When this idea is applied to Nigeria, the main export good that the nation produces is crude oil. Theoretically, there should be plenty of job prospects in the oil industry both here and possibly overseas. Nigeria's trade liberalization hasn't, however, resulted in a commensurate increase in employment. For example, nations like the United States, China, Japan, and the United Kingdom that import Nigerian oil do not supply enough industries or related items to create significant jobs in Nigeria. This discrepancy reveals a drawback of trade liberalization in Nigeria: although the nation exports valuable resources, the advantages in terms of job creation are still modest because of weak industrial linkages and value addition.

The Ricardian model does not ensure balanced trade or the creation of jobs, but it does imply that supply and demand are properly satisfied among trading nations. In its broadest meaning, trade liberalization is implementing open-market policies and lifting limitations. Only when trading partners reciprocate and when domestic policies boost employment creation can liberalization be advantageous for emerging nations like Nigeria. The ongoing disputes between host towns and multinational oil corporations like Shell highlight the difficulties of free trade in industries where foreign interests predominate and local employability is weakened. Essentially, the Ricardian theory emphasizes how comparative advantage can lead to economic gains, but its ability to create jobs depends on the nature of trade relationships, value addition in the home economy, and trading partners' willingness to support reciprocal advantages.

2.3 Empirical Literature

Numerous empirical research studies have examined the connection between unemployment and trade liberalization. According to Jing Liu, Li, Bai, and Yu (2025), who used data from the World Values Survey and European Values Survey conducted in 102 countries between 1999 and 2021, trade openness had a positive impact on individual happiness, especially through exports and the trade of goods, with the effect being most noticeable in low- and middle-income areas. The Stolper-Samuelson theorem was supported by this link, which was mostly mediated by economic development brought about by trade; however, macroeconomic variables like unemployment and inflation also mitigated the advantages. Additionally, the study



found a "cross-age" effect, which suggests that different age groups gain from trade liberalization in different ways. These results suggest that, even if trade openness can improve welfare and well-being, nations with high rates of unemployment, inflation, or income inequality should enact supplementary policies to make sure that trade benefits are efficiently converted into wider societal advantages.

Trade openness generally increases individual happiness, especially in low- and middle-income countries, primarily through economic growth generated by exports and goods trade, although inflation and unemployment can erode these benefits, according to Liu, Li, Bai, and Yu's (2025) analysis of data from 102 countries (1999–2021). Similarly, an analysis of trade openness, exchange rates, and unemployment in ECOWAS countries (2025) found that exchange rate variations had a major impact on labor market outcomes, even while higher trade openness may lower unemployment. These results are consistent with a larger body of research that indicates trade liberalization can have favorable welfare and employment effects, but that the extent and allocation of these advantages depend on labor market regulations, macroeconomic stability, and related domestic reforms. All of the data points to the need for institutional and economic frameworks that favor trade openness in order to ensure employment growth.

Using data from 102 countries (1999–2021), Liu, Li, Bai, and Yu (2025) discovered that trade openness has a positive impact on individual happiness, especially in low- and middle-income countries. This effect is primarily due to economic growth brought about by exports and the trade of goods, though these benefits can be mitigated by inflation and unemployment. A 2025 study found that while trade openness can lower unemployment in the ECOWAS area, currency rate changes have a significant impact on labor market results. Similarly, trade openness, foreign direct investment, oil prices, inflation, and real GDP all show strong negative correlations with unemployment in Saudi Arabia between 2016 and 2023, according to Cao et al. (2025), underscoring the importance of macroeconomic stability and economic diversification in improving employment outcomes. When taken as a whole, these studies show that trade liberalization can promote welfare and employment but that its success depends on complementary economic conditions, labor market regulations, and structural changes.

Imoagwu, Umunna, Okaforocha, Ugwunna, and Eze (2023) separated trade liberalization into export and import trade in order to examine the impact of trade liberalization on unemployment in Nigeria between 1981 and 2022.

The study discovered that while inflation and foreign direct investment were stationary at level $I(0)$, the majority of variables, including export trade, import trade, real GDP, unemployment, and exchange rate, were stationary at first difference $I(1)$ using Ordinary Least Squares (OLS), unit root tests, and co-integration analysis. A long-term correlation between trade liberalization and unemployment was validated using the co-integration test. Increased trade activities lower unemployment in Nigeria, according to empirical findings that both import and export trade have a negative and significant impact on unemployment. The study concluded that trade-openness-promoting government measures could greatly reduce unemployment and increase employment prospects.

Using panel ARDL (pooled mean group) estimates, Gonese, Sibanda, and Ngonisa (2023) investigated the association between trade openness and unemployment in Southern African Development Community (SADC) nations from 1980 to 2019. According to the study, imports have a long-term positive impact on unemployment, suggesting that increased import competition may result in job losses, while trade openness and exports dramatically lower unemployment. The results underline the necessity of carefully crafting trade policies in the SADC area, with a focus on importing and exporting goods that promote inclusive growth and job creation.

Alfalih (2023) used ARDL and limits testing for co-integration to examine the effects of trade openness, oil prices, FDI, and real GDP on unemployment in Saudi Arabia from 1991 to 2019. According to the study, adjustments to all four factors have a substantial detrimental long-term impact on unemployment. Oil prices were found to have a non-linear effect, with employment being positively impacted by prices above \$41.2 per barrel and labor market conditions being negatively impacted by lower prices. The results show how vulnerable oil-dependent economies are to outside shocks and emphasize the necessity of economic diversification in addition to trade openness to create long-term jobs.

For instance, Ijeoma (2014) used time series analysis to look at how trade liberalization affected Nigeria's yearly export trade. This finding suggests that the observed time frame (year) may account for roughly 93.8% of Nigeria's yearly export patterns. The stability of Nigeria's democracy may be the reason for the sharp increase in the annual export trend since 2003. It was discovered that in Nigeria, export promotion and import restrictions are strongly correlated.

Umoru (2013) investigated employment and foreign trade flows in Nigeria using a unit root, co-integration, and vector error correction model. Real wages, labor market regulation policy, and foreign direct investment all had positive long-term coefficients, indicating positive long-term effects on job creation in Nigeria; however, trade liberalization and total trade volume had negative long-term coefficients. The study found that the overall volume of foreign commerce has a considerable but adverse impact on employment in Nigeria.

Akinlo, Adeleke, and Aremo (2013) examined how trade liberalization affected a few specific measures of poverty in Nigeria between 1980 and 2009. The Generalized Method of Moments was the methodology used. Using the GMM, they found that the four estimated models behaved well in terms of goodness of fit, as shown by high adjusted R-squared and coefficients of determination. They discovered that trade liberalization had no appreciable impact on raising Nigeria's labor participation rate. They also came to the conclusion that trade liberalization does not appear to have a positive impact on Nigeria's real per capita consumption expenditures or crude death rate.

Using an autoregressive distributed lag approach to cointegration, Umoh, Ekpeno, and Effiong (2013) provided a sector-specific analysis that concentrated on the manufacturing sector for significant policy insights in order to establish the relationship between Nigerian manufacturing performance and trade openness for the years 1970–2008. The findings indicate that trade openness significantly boosts Nigerian manufacturing productivity over the long and short terms.

Onya, Ojimadu, and Ogu (2013) investigated how international commerce affects poverty and economic growth in emerging nations, with a focus on Nigeria. The

analysis included data from 1990 to 2009 and was based on an OLS regression model. Based on the findings, it may be concluded that international commerce has a favorable impact on poverty in Nigeria.

Biramo Allaro (2012) uses data from the National Bank of Ethiopia (NBE) from 1974 to 2009 to examine how trade liberalization affected Ethiopia's trade balance. The report claims that the nation has implemented significant trade changes, either as a result of internal adjustment during the past 20 years or as part of larger macroeconomic reforms and commitments with international norms. Improved export performance is one of the expected benefits of Ethiopia's trade liberalization policies.

Kareem (2010) used a time series estimate technique to examine the link between employment in Nigeria and international trade flows from 1981 to 2006. The findings revealed no clear correlation between trade flows and employment in Nigeria over the long or medium term. She discovered that the employment rate in Nigeria could be better explained by internal factors like political stability, labor laws, and real wages, as well as external factors like foreign direct investment, the real effective currency rate, and SAP.

Olayiwola (2010) used Vector Error Correction Modeling (VECM) and the cointegration technique of analysis to study the employment performance of Tanzania's textile and apparel industry in relation to trade liberalization. The analysis reveals that while import penetration significantly lowers wages, the effective rate of protection and export intensity have negligible positive effects on labor demand. Because increased import competition results in a decrease in labor demand, the impact of import penetration is greater than that of export orientation. David Cheong and Xiaohong Sonnenschein (2010) examined trade liberalization and employment in Indonesia using Computable Generalized Equilibrium (CGE) models. To encourage the overall and sectoral implications of a possible free trade agreement (FTA) with the European Union, the CGE model is applied to the Indonesian instance. According to the simulation's findings, Indonesia's pursuit of an FTA with the EU would increase trade by about 3% and boost household and worker earnings. According to the models, real GDP will increase by less than 1%. However, the FTA

is expected to have a disparate effect on the various sectors of the Indonesian economy in terms of output, overall employment, and employment by labor type.

After reviewing the effects of liberalization on employment in India, Shastri, Tripathi, and Singh (2010) concluded that organized sector employment saw a significant collapse in the early years of that adjustment process but has subsequently recovered at a rate comparable to that of the perform era. They believed that national economic and social policies and institutions must promote trade liberalization in order for people to profit from it. One aspect of liberalization in India during the time under study was the decline in the growth rate of employment opportunities, which was significantly influenced by the recession. Kakarlapudi (2010) looked into how trade liberalization affected manufacturing jobs in India. By splitting industries into those that are focused on exports and those that compete with imports, he examined the potential effects of trade liberalization on the expansion of organized manufacturing employment at the two-digit level. Employment growth has decreased in the post-liberalization period compared to the pre-liberalization period, according to both the total and manufacturing employment trends. Additionally, it is discovered that job growth in import-competing industries has slowed more than in export-competing industries and that trade liberalization did not increase employment through the scale effect.

Christev, Kupets, and Lehmann (2008) used the GMM estimator to examine the impact of trade liberalization and employment in Ukraine. They presented data on job flows at the three-digit sector level in Ukrainian manufacturing and demonstrated that these flows are primarily caused by industry-specific factors. They did, however, also demonstrate that trade openness does have varying effects on job flows in various trading regions. They discovered that trading with the European Union promotes excess reallocation mostly through job creation, whereas trade with the Commonwealth of Independent States reduces job creation.

3.0 Research Methodology

3.1 Model Specifications

Following the Ricardian theory model and the empirical work of Abu (2010) on the relationship between trade liberalization and unemployment for the period 1986-2018, the present study specified its model as follows:

$$UMPL = f(OPN, FDI, EXR) \text{-----} 3.1$$

The ordinary least squares (OLS) form of the equation is written as:

$$UMPL = a_0 + a_1OPN + a_2FDI + a_3EXR + U \text{-----} 3.2$$

$a_1 < 0; a_2 > 0; a_3 < 0;$

Where:

UMPL = Unemployment

OPN = Trade openness measured by import plus export as a ratio of GDP

EXR = Exchange rate

FDI = Foreign Direct Investment

a_0 = constant

$a_1, a_2,$ and a_3 = co-efficient

u = error term

Apriori

Variable	Expected Sign	Economic Justification
OPN (Trade Openness)	-	Increased trade openness is expected to expand markets, stimulate industrial activity, and create jobs, thereby reducing unemployment.

Variable	Expected Sign	Economic Justification
FDI (Foreign Direct Investment)	+	Higher FDI inflows can generate employment through capital investment, technology transfer, and business expansion.
EXR (Exchange Rate)	-	A depreciation of the domestic currency can make exports more competitive, stimulate production, and reduce unemployment.

3.2 Data Collection and Sources

The nature of a research endeavor suggests the type of data to be collected. In view of this, this study obtained data from the secondary sources such as journals, books, conference papers, the Central Bank of Nigeria’s (CBN) statistical bulletin, the National Bureau of Statistics (NBS), and World Bank publications, among others.

3.3 Method of Data Analysis

A variety of econometric methods were used in the study to examine the connection between unemployment and trade liberalization. To make sure the variables were appropriate for regression analysis, the stationarity of the time series data was first checked using the Augmented Dickey-Fuller (ADF) unit root test. The long-term dynamics of the model were then captured by applying the Johansen cointegration test to ascertain whether a long-run equilibrium relationship between the dependent and independent variables exists. The Error Correction Mechanism (ECM), which measures the rate at which disequilibrium is addressed over time, was used to examine short-run adjustments. In order to ensure accurate and unbiased parameter estimates, the study also used the Ordinary Least Squares (OLS) method to estimate the model. This approach was selected due to its BLUE features, which stand for best linear unbiased efficient estimator. Additionally, diagnostic tests were performed: the Durbin-Watson (DW) test examined autocorrelation in the error term, the F-test evaluated the overall significance of the model, and the R² test determined the

percentage of variance in the dependent variable that could be accounted for by the regressors. E-Views software was used to facilitate all estimations and analysis.

4. Data Presentation and Analysis

4.1 Unit Root Analysis

The Augmented Dickey Fuller (ADF) unit root test was used to establish the stationarity of the time series data used in this study. The results of the ADF unit root test are in table 4.1 as follows:

Table 4.1: ADF Unit Root Test

Variables	ADF Stat. at Levels	1% Crit. Value	5% Crit. Value	ADF Stat. at first Diff.	1% Crit. Value	5% Crit. Value	Order of integration
UNR	-0.123624	-3.653730	-2.957110	-5.829905*	-3.661661	-2.960411	I(1)
OPN	-2.680420	-3.653730	-2.957110	-8.788595*	-3.661661	-2.960411	I(1)
EXR	1.633659	-3.653730	-2.957110	-4.053419*	-3.661661	-2.960411	I(1)
FDI	-1.131183	-3.653730	-2.957110	-5.934654*	-3.661661	-2.960411	I(1)

Source: Computed from E-view

Note: *(**) indicates (1%) and (5%) Significant Levels

The unit root test in table 4.2 above shows that all the variables were stationary at first difference [that is, I(1)] at 1% and 5% significance levels. Therefore, the time series data used in this study were stationary.

4.2 Johansen Cointegration Test

In order to ascertain whether a long-run equilibrium relationship exists between the dependent and explanatory variables, the Johansen cointegration test was carried out. The result is in Table 4.

Table 4.2: Johansen Cointegration Test
Lags interval (in first differences): 1 to 1

Unrestricted Cointegration Rank Test (Trace)

Hypothesized	Trace	0.05		
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.949498	179.1425	95.75366	0.0000
At most 1 *	0.725023	86.58467	69.81889	0.0013
At most 2	0.489548	46.56151	47.85613	0.0658
At most 3	0.380793	25.71529	29.79707	0.1375

Trace test indicates 2 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

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

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized	Max-Eigen	0.05		
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.949498	92.55783	40.07757	0.0000
At most 1 *	0.725023	40.02315	33.87687	0.0082
At most 2	0.489548	20.84623	27.58434	0.2856
At most 3	0.380793	14.85880	21.13162	0.2989

Max-eigenvalue test indicates 2 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

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

Source: E-views output, 2024

From the result in table 4.2, trace and max-eigen statistics indicate 2 cointegrating equations. This means that a long-run equilibrium relationship exists between the dependent and explanatory variables.

4.3 Error Correction Mechanism Model

In order to adjust for the short run, the ECM model that established a relationship between trade liberalization and unemployment in Nigeria was estimated as follows:

Table 4.3: Parsimonious ECM Estimates

Dependent Variable: UMPL

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	6.532152	1.393503	4.687576	0.0001
OPN	1.217579	0.441161	2.759944	0.0114
OPN(-1))	0.781275	0.399862	1.953864	0.0635
FDI	0.229656	0.270379	0.849387	0.4048
FDI(-1))	0.186985	0.272357	0.686545	0.4995
EXR	0.034678	0.005038	6.882746	0.0000
ECM	-0.197359	0.023240	-8.492212	0.0000
R-squared	0.907723	Mean dependent var	10.06258	
Adjusted R-squared	0.874167	S.D. dependent var	3.901496	
S.E. of regression	1.383973	Akaike info criterion	3.725494	
Sum squared resid	42.13839	Schwarz criterion	4.141813	
Log likelihood	-48.74516	Hannan-Quinn criter.	3.861204	
F-statistic	27.05152	Durbin-Watson stat	1.937129	
Prob(F-statistic)	0.000000			

Source: E-Views Output, 2024

With R-squared = 0.908, adjusted R-squared = 0.874, F-statistic = 27.052 ($p = 0.000$), and Durbin-Watson = 1.937, the model exhibits excellent overall fit, indicating that there is no significant autocorrelation and that the explanatory variables together account for the majority of the variation in unemployment. The findings show that while FDI has had little effect, trade openness and currency rate swings have raised unemployment. Therefore, policymakers ought to think about ways to strike a balance between job growth and trade liberalization. A steady long-term relationship is confirmed by the error correction term ($ECM = -0.197$, $t = -8.492$, $p = 0.0000$), which is negative and significant and shows that about 19.7% of deviations from equilibrium are corrected each period.

The parsimonious ECM estimates shed light on how Nigerian unemployment is impacted by trade openness, foreign direct investment (FDI), and exchange rates. Even in the absence of additional variables, a rather high baseline unemployment level is indicated by the positive and highly significant constant term ($C = 6.532$, $t = 4.688$, $p < 0.0001$). This suggests that trade liberalization can expose domestic businesses to import competition, which can result in plant closures, lower local production, and job losses, even as it may also open up markets and draw investment. To lessen negative employment effects, policymakers should take into account complementary measures like skill development and assistance for home industry.

OPN has a strong and favorable impact on unemployment, as evidenced by its coefficient of 1.218 ($t = 2.760$, $p = 0.0114$). Its positive but marginally insignificant lagged value ($OPN(-1) = 0.781$, $t = 1.954$, $p = 0.0635$) indicates that, in the short term, greater trade openness has led to higher unemployment, perhaps as a result of import rivalry impacting domestic industries. suggests that unemployment has grown in the short term as a result of greater trade liberalization.

Due to the capital-intensive character of foreign investments, FDI has a positive but statistically negligible impact on unemployment; current FDI ($FDI = 0.230$, $t = 0.849$, $p = 0.405$) and lagged FDI ($FDI(-1) = 0.187$, $t = 0.687$, $p = 0.500$) do not significantly reduce unemployment. This emphasizes how capital-intensive many foreign investments are, pointing to the necessity of policies that encourage labor-intensive FDI.

The positive and highly significant exchange rate ($EXR = 0.035$, $t = 6.883$, $p = 0.0000$) suggests that unemployment rises as the local currency depreciates, most likely as a result of higher production costs and decreased competitiveness of domestic industries. This demonstrates how currency fluctuations increase production costs, which lowers domestic companies' competitiveness and leads to layoffs. Therefore, maintaining a stable currency rate is essential to protecting jobs.

5. Summary

In order to capture both short-term and long-term dynamics, this study used an error correction model (ECM) to analyze the impact of trade liberalization on unemployment in Nigeria from 1981 to 2024. Foreign direct investment (FDI), exchange rate (EXR), and trade openness (OPN) were all included in the analysis as explanatory factors. In the near term, trade openness significantly reduces unemployment, according to the parsimonious ECM estimates. Lagged trade openness also has a positive but marginally significant effect. There appears to be little job creation from foreign capital inflows, as evidenced by the negligible impact of both current and lagged FDI on unemployment. Unemployment is positively and significantly impacted by the exchange rate, suggesting that currency depreciation raises unemployment by decreasing competitiveness and boosting production costs. The findings suggest that trade liberalization could make Nigerian unemployment worse if it does not complement domestic industrial strategies.

5.2 Conclusions

Trade liberalization raises unemployment in the near term: Increased rivalry in local industries can lead to plant closures and employment losses, even when liberalized trade opens up new markets and draws investment. Unemployment has not been considerably decreased by FDI: Nigeria needs policies that encourage labor-intensive foreign investments because the majority of foreign capital inflows are capital-intensive and do not result in significant employment. Currency depreciation increases production costs and decreases competitiveness, which in turn increases unemployment. This is one way that exchange rate instability contributes to unemployment.



5.3 Recommendations

- i. To lessen the detrimental effects of greater import competition brought on by trade liberalization on employment, the government should enact policies that encourage domestic manufacturing and production.
- ii. Rather than capital-intensive businesses, foreign investment should be directed toward areas that create a significant number of job opportunities.
- iii. To preserve competitiveness and safeguard domestic jobs, macroeconomic policies should work to lower exchange rate volatility.
- iv. To guarantee that the labor force gains from trade openness, active labor market interventions are required, such as skills training, vocational programs, and entrepreneurial support.
- v. Trade liberalization needs to be sector-specific and gradual in order to safeguard vital domestic industries until they are able to compete globally without resulting in a significant loss of jobs.

Reference

- Abachi, T. P. (1998). *Inflation-unemployment trade-off in less developed countries (LDCs): The case study of Nigeria* [Unpublished master's thesis, Department of Economics, Ahmadu Bello University].
- Adelegan, J. O. (2000). Foreign direct investment and economic growth in Nigeria: A seemingly unrelated model. *African Review of Money, Finance and Banking. Supplementary Issue of Savings and Development*, 5–25.
- Adelowokan, O. A., & Maku, A. (2013). Trade openness, foreign investment and economic growth in Nigeria: A long-run analysis. *European Journal of Globalization and Development Research*, 7(1), 8–17.
- Ahmed, F. B. (2013). Impact of trade liberalization on economic growth in Pakistan. *Interdisciplinary Journal of Contemporary Research in Business*, 5(5), 228–240.



- Ajayi, S. I. (2001). What Africa needs to do to benefit from globalization. *Finance & Development*, 38(4), 6–9.
- Akanni, K. A., Adeokun, O. O., & Akintola, J. O. (2004). Effects of trade liberalization policy on Nigerian agricultural exports. *Journal of Agriculture and Social Research*, 4(1), 13–28.
- Akinlo, A. E. (2012). How important is oil to Nigeria's economic growth? *Journal of Sustainable Economic Development*, 8(2), 234–245.
- Akinlo, A. E., & Aremo, G. A. (2013). The effect of trade liberalization on some selected poverty indicators in Nigeria (1980–2009). *IOSR Journal of Economics and Finance*, 2(2), 17–22.
- Akmal, N. (2010). Impact of trade liberalization on agriculture in Pakistan: A review. *Journal of Agricultural Research*, 48(1), 121–130.
- Aluko, S. (2007). Obasanjo let in IMF to destroy Nigeria [Staff recorded briefings]. *LaRouche & EIR*.
- Anawor, O. F., Ukwani, N. O., & Ikeme, M. (2013). The impact of trade liberalization on Nigeria agricultural sector. *Journal of Economics and Sustainable Development*, 4(8), 1–12.
- Anono, A. Z. (2012). An empirical analysis of the relationship between unemployment and inflation in Nigeria from 1977–2009. *Business Journal, Economics and Review*, 1(12), 42–61.
- Anthony, O., Onyinye, I. A., & Joan, C. O. (2015). Inflation and unemployment nexus in Nigeria: Another test of the Phillips curve. *Asian Economic and Financial Review*, 5(5), 766–778. <http://www.aessweb.com/journals/5002>
- Baker, N. (2002). *Relative impact of trade liberalization on developing countries* (pp. 1–27). Center for Economic and Policy Research.
- Balogun, E. A., & Dauda, R. O. (2012, February 23). *Poverty and employment impact of trade liberalisation in Nigeria*. Munich Personal RePEc Archive. <http://mpira.ub.uni-muenchen.de/41006/>

- Black, J., Hashimzade, N., & Myles, G. (2021). *A dictionary of economics* (9th ed.). Oxford University Press.
- Blackett, A. (2007). *Trade liberalization, labour law and development: A contextualization*. International Institute for Labour Studies.
- Briggs, I. N. (2007). *Nigerian mainstream trade policy into national development strategies* (ATPC Work in Progress No. 52). Economic Commission for Africa.
- Brühlhart, M., Carrère, C., & Trionfetti, F. (2012). How wages and employment adjust to trade liberalisation: Quasi-experimental evidence from Austria. *Journal of International Economics*, 86(1), 68–81.
- Casacuberta, C., Fachola, G., & Gandelman, N. (2003). Impact of trade liberalisation on employment, capital and productivity dynamics: Evidence from the Uruguayan manufacturing sector. Departamento de Economía, FCS, Universidad de la República.
- Central Bank of Nigeria. (2009). *Annual report and statement of account*.
- Cheong, D., & Sonnenschein, X. (2010). *Trade liberalisation and employment in Indonesia: A CGE analysis*.
- Cicera, J. (2001). *Trade liberalization and poverty: A handbook*. Center for Economic Policy Research.
- Dennis, A., Alfred, J., & Steven, L. C. (2010). *International economics*. McGraw-Hill/Irwin.
- Eddy, L. (2005). *Trade liberalisation and employment* (DESA Working Paper No. 5). United Nations Department of Economic and Social Affairs.
- Erol, T. (1999). *Trade liberalisation and employment generation: The experience of Turkey in the 1980s*. World Bank.
- Fajana, S. (2000). *Functioning of the Nigeria labour market*. Labofiin and Co.
- Federal Government of Nigeria. (2004). *Import prohibition order*. Federal Ministry of Finance.

- Francisco, H. G., Philippe, G. L., & Wai-Poi, M. (2007). *Trade liberalisation, employment flows and wage inequality in Brazil* (WPS4108). World Bank.
- Ghose, A. (2000). *Trade liberalisation and manufacturing employment*. International Labour Organisation.
- Gilbert, J. (2003). Trade liberalisation and employment in developing economies of the Americas. *Journal of Economics and International Finance*, 155–174.
- Golder, B. (2000). *Trade liberalisation on manufacturing performance and employment: The case of India*. International Labour Organisation.
- Hanson, G., & Harrison, A. (1999). Trade liberalisation and wage inequality in Mexico. *Industrial and Labor Relations Review*, 52(4), 271–288.
- Hasan, R. (2011). Trade liberalization and unemployment: Theory and evidence from India. *Journal of Development Economics*, 97(2), 269–280.
- International Labour Organization. (2001). *The liberalisation and employment: Working paper on the social dimension of globalisation* (Second item on agenda).
- Jenkins, R., & Sen, K. (2006). International trade and manufacturing employment in the South: Four country case studies. *Oxford Development Studies*, 34(3), 177–198.
- Kareem, K. (2007). *Trade flows and employment outcomes in Nigeria* [Working paper].
- Kiran, K. (2014). *Impact of trade liberalisation on employment: Evidence from India's manufacturing sector*. Munich Personal RePEc Archive. <http://mpra.ub.uni-muenchen.de/35872/>
- Lanouar, A. (2012). Impact of trade liberalization on labor market of developing countries: What can the literature tell us? *Journal of Economics and Behavioural Studies*, 4(6), 307–318.
- Linder, S. (1961). *An essay on trade and transformation*. John Wiley and Sons.



- Mathew, M. (2013). Impact of trade liberalization on economic growth on selected sub-Saharan Africa countries.
- Mba, S. A., & Agu, O. C. (2013). The effectiveness of government employment policies in Nigeria. *IOSR Journal of Humanities and Social Science*, 12(6), 65–71.
- McCulloch, N., Winters, L. A., & Cirera, X. (2001). *Trade liberalisation and poverty: A handbook*. Centre for Economic Policy Research & Department for International Development.
- Messerlin, P. A. (1995). *The impact of trade and foreign direct investment on labour markets: The French case* (OECD Jobs Study Working Papers No. 9). Organisation for Economic Co-operation and Development.
- Mohammed, A. (2000). *Impact of trade policy reforms on industrial capacity and employment in Bangladesh*. Structural Adjustment Participatory Review Initiative.
- Moser, G., Scott, R., Reinold, V. T., Robin, K., & Inutu, L. (1997). *Nigeria: Experience with structural adjustment*. International Monetary Fund.
- Mustafizur, R., Wasel, B. S., & Salim, R. (2007). Impact of trade liberalisation on employment of Bangladesh. In *Center for Policy Dialogue* (pp. 23–37). International Labour Organisation.
- National Bureau of Statistics. (2012). *Social statistics in Nigeria*.
- Nordström, H., & Winters, L. A. (2009). *Trade, income disparity and poverty* (WTO Special Studies No. 5). World Trade Organization.
- Obadan, M. I. (2003). *National development planning and budgeting in Nigeria: Some pertinent issues*. Broadway Press.
- Obioma, E. (1999). Contemporary issues in global trade and finance and their implications. *Journal of Economic Management*, 6(1), 1–12.
- Obokoh, L. O. (2008). Trade liberalization and small and medium sized enterprises (SMEs) failures in Nigeria. *Banks and Bank Systems*, 3(3), 51–61.



- Ogunrinola, I. O., & Osabuohien, E. (2010). Globalization and employment generation in Nigeria's manufacturing sector (1990–2006). *European Journal of Social Sciences*, 12(4), 581–593.
- Ogunyela, Y. I., & Mukhtar. (2009). Gender issue in agriculture and rural development in Nigeria: The role of women. *Humanities and Social Sciences Journal*, 4(1), 19–30.
- Okojie, E. I. (2010). An empirical analysis of the impact of trade on economic growth in Nigeria. *Jos Journal of Economics*, 4(1), 1–12.
- Olomola, A. P. (1998). Openness and long-run economic growth in Nigeria (1960–98). *Journal of Economic Management*, 5(1), 122–125.
- Onya, C. C., Pascaland, K., & Ogu, C. (1990). *International trade and poverty in developing countries: A case study of Nigeria*. Madonna University.
- Orji, A. (2003). *Does trade openness make sense at this time in Nigeria?* [Paper presented for the Trade and Macroeconomic Working Group, TRADEMAC].
- Oyejide, T. (1990). *Supply response in the context of structural adjustment in sub-Saharan Africa* (AERC Special Paper No. 1). Initiative Publishers.
- Penelope, P., & Thirlwall, A. P. (2008). *Has trade liberalisation in poor countries delivered the promise expected?* University of Kent.
- Prus. (2001, February 15). www.sussex.ac.uk/. Retrieved February 27, 2015, from <http://www.sussex.ac.uk/>
- Rim, B. M. (2007). The impact of trade liberalisation on Tunisian manufacturing: Structure, performance and employment. *Region Development*, 88–111.
- Rodrik, D. (1992). The limits of trade policy reforms in developing countries. *Journal of Economic Perspectives*, 6(4), 87–105.
- Saibu, O. M. (2004). Trade openness and economic growth in Nigeria: Further evidence on the causality issue. *South African Journal of Economic and Management Sciences*, 7(2).
<https://www.researchgate.net/publications/249992198>

- Sen, K. (2008). *International trade and manufacturing employment outcomes in India: A comparative study* (UNU-WIDER Research Paper No. 87). United Nations University World Institute for Development Economics Research.
- Shadare, O. J., & Elegbede, S. T. (2012). Graduate unemployment in Nigeria: Causes, effects and remedies. *British Journal of Arts and Social Sciences*, 5(2), 55–67.
- Shastri, R. K., Ravindra, T., & Anushree, S. (2010). Impact of liberalisation on employment in India. *International Journal of Vocational and Technical Education Review*, 2(3), 33–35.
- Smith, S. C. (2011). *Economic development* (11th ed.). Pearson Education.
- Sodipe, O., Ogunrinola, A., & Oluranti, I. (2011). Employment and economic growth nexus in Nigeria. *International Journal and Social Sciences*, 2(11), 57–127.
- Tran, N. K., & Yoon, H. (2009). Impact of trade liberalisation on employment in Vietnam: A system generalised method of moments estimation. *The Developing Economies*, 47(1), 81–103.
- Uma, S., Venoj, A., & Joseph, K. J. (2012). *Impact of trade liberalisation on employment: The experience of India's manufacturing industries*. Centre for Development Studies.
- Umoh, O. J., & Effiong, E. L. (2013). Trade openness and manufacturing sector performance in Nigeria. *The Journal of Applied Economic Research*, 7(2), 147–169.
- Winters, L. (2000). *Trade liberalisation and poverty* (PRUS Working Paper No. 7). University of Sussex.
- Winters, L. A. (1999). Trade and poverty: Is there a connection? In D. Ben-David, H. Nordström, & L. A. Winters (Eds.), *Trade, income disparity and poverty*. World Trade Organization.
- Winters, L. A. (2004). Trade liberalization and economic performance: An overview. *The Economic Journal*, 114(493), F4–F21.



Winters, L. A., McCulloch, N., & McKay, A. (2004). Trade liberalization and poverty: The evidence so far. *Journal of Economic Literature*, 42(1), 72–115.