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FOREIGN FINANCIAL INFLOWS AND UNEMPLOYMENT IN NIGERIA: EVIDENCE FROM TIME-SERIES COINTEGRATION ANALYSIS (1987–2024)

IDACHABA, Opaluwa. Ph.D.[1] & IORNUMBE, Sefa Austine[2]
[1]*Jewel University, Gombe.*
baba.idachaba@outlook.com
[2]*Nasarawa State University, Keffi*
sefa.iornumbe@gmail.com

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ABSTRACT
This study analyzed the relationship between foreign financial inflows and unemployment in Nigeria from 1987 to 2024 using time-series cointegration methods. The Autoregressive Distributed Lag (ARDL) approach, preceded by Augmented Dickey-Fuller (ADF) unit root and Johansen cointegration tests, was applied to data on foreign direct investment (FDI), foreign portfolio investment (FPI), official development assistance (ODA), and remittances, while controlling for inflation and exchange rates. Long-run results indicated that FPI and remittances significantly reduced unemployment, whereas ODA increased it; FDI, inflation, and the exchange rate exhibited insignificant long-run effects. Short-run estimates confirmed a significant unemployment-reducing effect for FPI and inflation. The study's specific empirical contribution is its integrated long-run analysis, which distinguishes the heterogeneous effects of four distinct inflow categories within a unified framework, offering nuanced evidence for Nigeria's employment policy.

Keywords: Foreign Direct Investment**,** Foreign Portfolio Investment, Nigeria, Official Development Assistance, Official Remittances Inflow, Unemployment

Introduction

Unemployment remains a persistent macroeconomic challenge in many developing economies, where limited productive capacity, rapid population growth, and structural labour market weaknesses constrain job creation. In Nigeria, unemployment continues to pose serious economic and social concerns, affecting income distribution, poverty levels, and long-term development prospects. Although recent revisions to the Labour Force Survey methodology have produced lower official unemployment rates, widespread underemployment, labour informality, and slow job absorption indicate that the labour market remains structurally fragile (NBS, 2023).

One policy approach adopted by developing countries to stimulate employment is the attraction of foreign financial inflows. External capital inflows are expected to complement domestic savings, stimulate investment, enhance productivity, and generate employment opportunities through technology transfer, business expansion, and infrastructure development (Musa et al 2021). In Nigeria, successive administrations have implemented investment-promotion policies, including tax incentives, privatization programmes, and free-trade zone initiatives, to attract foreign direct investment (FDI), foreign portfolio investment (FPI), official development assistance (ODA), and remittance inflows. Despite these initiatives, unemployment and underemployment remain persistent, raising concerns about the effectiveness of foreign financial inflows in generating broad-based employment (CBN 2022; NBS, 2024a; NBS, 2024b).).

Theoretically, the employment effects of foreign financial inflows depend on their composition and the structure of the host economy. FDI may generate employment through new production activities but may also concentrate in capital-intensive sectors that generate limited labour demand. Portfolio investment, while improving financial market liquidity, is often short-term and weakly linked to real-sector job creation. Similarly, remittances and development assistance may support consumption and infrastructure financing without necessarily producing sustained employment growth. These mixed theoretical expectations suggest that the relationship between foreign financial inflows and unemployment remains an empirical issue requiring careful investigation (Moosa & Merza 2022).

Empirical evidence such as Orji and Ogbaga (2024); Aladelusi and Olayiwola, (2021); Ali and Kamraju, (2022) presents mixed and sometimes conflicting findings. While some studies report that foreign investment promotes employment through increased productive activity, others find insignificant or even adverse employment effects, depending on the estimation technique, sample period, and the categories of inflows examined. In addition, many earlier studies focus primarily on the growth effects of external financial inflows rather than their direct labour-market implications, leaving limited comprehensive time-series evidence that jointly examines the employment effects of FDI, FPI, remittances, and official development assistance within a unified analytical framework. The absence of such integrated long-run analysis represents an important empirical gap in the Nigerian literature.

Against this backdrop, this study investigates the relationship between foreign financial inflows and unemployment in Nigeria over the period 1987-2024 using time-series cointegration techniques. Specifically, the study seeks to assess the effect of foreign direct investment, foreign portfolio investment, remittance inflows, and official development assistance on unemployment dynamics in Nigeria, thereby providing empirical evidence on whether external financial inflows have meaningfully contributed to employment generation in the country.

The specific objectives were to:

i. To examine whether foreign direct investment significantly affects unemployment in Nigeria through productive capacity expansion and employment creation mechanisms

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ii. To investigate whether foreign portfolio investment influences unemployment dynamics by affecting financial market development and real-sector investment flows
iii. To analyse whether remittance inflows reduce unemployment by stimulating household investment, small business formation, and labour demand
iv. To evaluate whether official development assistance contributes to unemployment reduction through infrastructure financing and public-sector employment generation

Literature Review

Unemployment

Unemployment generally refers to a situation in which individuals who are willing and able to work at prevailing wage rates cannot secure suitable employment. In labour market theory, unemployment arises when labour supply exceeds labour demand, often reflecting weak productive capacity, structural rigidities, or insufficient investment capable of generating employment. Within the context of developing economies, unemployment is closely linked to underemployment, labour informality, and sectoral imbalances that limit the capacity of economic growth to translate into adequate job creation.

In Nigeria, the measurement of unemployment has evolved over time, creating important comparability challenges for empirical analysis. Earlier National Bureau of Statistics (NBS) surveys classified individuals as unemployed if they worked less than 20 hours during the reference period while actively seeking employment. However, the adoption of the revised Labour Force Survey aligned with updated International Labour Organization (ILO) guidelines introduced a stricter classification that redefined employment, unemployment, and underemployment categories. Under the revised framework, individuals engaged in even minimal forms of economic activity, including informal and short-duration work, may be classified as employed, resulting in substantially lower reported unemployment rates compared with earlier estimates. Consequently, recent official unemployment figures appear lower not necessarily because of major labour-market improvements but partly due to methodological revisions and expanded recognition of informal economic activities.

These measurement changes present an important challenge for time-series studies covering long historical periods such as 1987-2024, where different statistical definitions coexist within the dataset. Failure to account for these structural measurement differences may produce biased or misleading econometric results, particularly when assessing the employment effects of macroeconomic variables such as foreign financial inflows. Recognizing this issue, the present study adopts a long-run cointegration framework that focuses on the dynamic relationship between foreign financial inflows and unemployment while ensuring data consistency through the use of harmonized series and robustness checks across measurement periods. This approach allows the analysis to capture underlying labour-market dynamics in Nigeria despite definitional adjustments in unemployment statistics.

Foreign Financial Inflows

According to Okoli and Callistus (2024), foreign financial inflows refer to the movement of funds from external sources into a domestic economy for purposes such as investment, trade financing, development assistance, and private transfers. In macroeconomic theory, these inflows influence labour-market outcomes mainly through capital accumulation, productivity improvement, and aggregate demand expansion. By complementing domestic savings, foreign financial inflows can stimulate productive investment, enterprise growth, and infrastructure development, thereby increasing labour demand. However, the employment impact of these inflows depends on their composition, sectoral allocation, and the structural characteristics of the

host economy. Where inflows are concentrated in capital-intensive sectors or short-term financial assets, the employment effects may be limited or indirect. In the Nigerian context, assessing the employment implications of foreign financial inflows also requires careful consideration of the evolving measurement of unemployment, since methodological revisions in labour-force surveys affect the interpretation of observed labour-market trends.

Foreign Direct Investment

Foreign direct investment (FDI) refers to long-term cross-border investment in which a foreign investor acquires a controlling ownership interest in an enterprise or establishes production facilities in another country (Alfalih & Hadj, 2020; Moosa & Merza, 2022). Beyond capital provision, FDI facilitates technology transfer, managerial expertise, and improved corporate governance practices (Alkofahi, 2020). These features suggest a theoretical channel through which FDI can reduce unemployment by expanding productive capacity and generating employment opportunities. Nevertheless, the employment impact depends on the sectoral distribution of investment. In economies where FDI is concentrated in capital-intensive industries, employment gains may be modest despite significant capital inflows. Given Nigeria's structural reliance on capital-intensive sectors, empirical investigation is required to determine whether FDI has translated into measurable reductions in unemployment, particularly in light of changes in unemployment measurement methodology.

Foreign Portfolio Investment

Foreign portfolio investment (FPI) involves the cross-border acquisition of financial assets such as equities, bonds, and other securities without granting managerial control over firms (Ali & Kamraju, 2022). Developing economies often promote FPI inflows to strengthen capital markets and increase liquidity (CBN, 2022). Theoretically, improved financial market liquidity can support investment expansion and indirectly stimulate employment creation. However, the short-term and volatile nature of portfolio investment means that its transmission to real-sector employment may be weak or unstable. In the Nigerian context, fluctuations in FPI inflows and periodic capital reversals further complicate the evaluation of its labour-market effects, particularly when unemployment data are affected by definitional changes across survey periods.

Official Development Assistance

Official development assistance (ODA) refers to concessional resource transfers from foreign governments and international organizations to developing countries in the form of grants or low-interest loans intended to support development programmes (Adeleke et al., 2020). ODA can influence employment through infrastructure financing, social-sector investments, and project-based labour demand. When effectively implemented, these programmes can stimulate productive activities and indirectly generate employment opportunities (Singhania & Saini, 2021). However, the employment impact of ODA depends largely on institutional capacity, project implementation efficiency, and the sustainability of funded programmes. Consequently, assessing the unemployment effects of ODA in Nigeria requires long-run empirical evaluation that accounts for structural changes in labour-market measurement.

Official Remittance Inflow

Remittances consist of income transfers sent by migrants to their home countries, including workers' remittances and compensation of employees (Adenutsi & Ahortor, 2021; Miriam et al., 2025). These inflows influence labour markets by supporting household consumption, financing small-scale enterprises, and easing credit constraints, which may indirectly stimulate employment generation. At the macroeconomic level, remittances also play an important role in stabilizing household income and sustaining domestic demand, thereby supporting growth in developing

economies (Yoshino et al., 2020). In Nigeria, the labour-market implications of remittance inflows must be interpreted cautiously because recent unemployment statistics partly reflect methodological revisions that broaden the classification of employment, particularly within informal activities. This reinforces the need for a long-run econometric framework capable of capturing the structural relationship between remittance inflows and unemployment dynamics despite definitional changes in labour-force statistics.

Empirical Review

Foreign Direct Investment (FDI) and Unemployment

Foreign direct investment is theoretically expected to influence unemployment through capital accumulation, technology transfer, and labour demand expansion. Empirical studies, however, yield mixed evidence regarding the magnitude and significance of this relationship. Okoli and Callistus (2024) investigated FDI effects on unemployment in Nigeria for the period 1990-2020 using Dynamic Ordinary Least Squares (DOLS) to address potential endogeneity and serial correlation. The study reported that FDI significantly reduced aggregate and urban unemployment but had no significant impact on rural unemployment. While the use of DOLS strengthens the validity of long-run coefficient estimates compared with standard OLS or single-equation ARDL, the study's reliance on aggregate FDI without sectoral disaggregation may mask differential employment effects across sectors. Furthermore, the exclusion of recent data post-2020 limits its relevance in capturing post-pandemic labour-market adjustments.

Ogbaga (2024) employed ARDL bounds testing to analyse Nigerian FDI from 1986–2022, reporting significant long-run negative coefficients for FDI on unemployment, with values of -0.85 percent for FDI and -0.99 percent for FPI. While the ARDL framework allows for mixed order integration (I(0) and I(1)) and accommodates both long-run and short-run dynamics, the reported coefficients appear unusually large, raising questions about potential model misspecification or data inconsistencies. Moreover, ARDL is sensitive to lag selection and structural breaks, which may bias estimates if not properly addressed. Compared with DOLS, which explicitly corrects for endogeneity and serial correlation, ARDL provides only limited correction, potentially affecting coefficient reliability. These discrepancies illustrate the methodological trade-offs in estimating the FDI–unemployment nexus and underline the need for robust, cointegration-based approaches.

Foreign Portfolio Investment (FPI) and Unemployment

Foreign portfolio investment is largely speculative and short-term in nature, which may constrain its direct effect on labour demand. Azebi (2025) used an ARDL-ECM approach for Nigeria (1986-2022) and found that only FPI significantly reduced unemployment, while other foreign inflows, including FDI, had insignificant effects. The study suggests that FPI's role in deepening financial markets may indirectly support employment through capital availability, yet ARDL-ECM does not fully account for simultaneous interactions between multiple inflow channels, leaving the potential for omitted-variable bias. The short-term orientation of portfolio flows also raises questions about the sustainability of observed effects.

Nxumalo and Makon (2021) extended the analysis to a panel of 12 emerging market economies using panel ARDL and ECM to assess the relationship between FDI, FPI, and institutional quality. They found significant cointegrating relationships and unidirectional causality from FDI and FPI to institutional quality, which indirectly affects employment through improved governance and investment climate. However, the study's cross-country design and truncated period (2007-2017) limit its applicability to the Nigerian context, as structural and policy differences may alter inflow–labour-market transmission mechanisms. The empirical evidence on

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FPI remains fragmented, with studies reporting both significant and negligible effects on employment, highlighting the need for country-specific, long-run analysis.

Official Development Assistance (ODA) and Unemployment

Official development assistance, typically in the form of concessional loans and grants, is intended to stimulate productive activity and reduce unemployment by financing infrastructure and social-sector projects. The literature reports mixed outcomes, reflecting sectoral allocation differences and methodological variations. Nchofoung et al. (2022), examining 37 African countries (1996-2019) using Fixed Effects, Random Effects, FGLS, and Driscoll/Kraay estimators, found that ODA negatively affected industrial employment while positively influencing agricultural employment, indicating that the employment impact is sector-specific. Sakhibaksh et al. (2024) applied ARDL to Afghanistan (1990-2021) and found that ODA significantly reduced unemployment in the long run. Huong et al. (2023) analysed Vietnam (1992-2022) and reported that while ODA initially reduced income inequality, the effect diminished over time and was not consistently significant. The divergent findings underscore the importance of methodological choice. While panel estimators capture cross-sectional heterogeneity and control for unobserved country effects, single-country ARDL studies focus on temporal dynamics but may overlook structural dependencies. Moreover, sectoral disaggregation is critical: aggregate ODA may obscure differential effects on labour demand across industries. For Nigeria, no comprehensive time-series study has jointly examined FDI, FPI, ODA, and remittances in relation to unemployment, leaving a critical empirical gap.

Remittance Inflows and Unemployment

Remittances are expected to influence employment indirectly by supporting household consumption, small-scale investment, and aggregate demand. Mohammed et al. (2023), using ARDL for Ghana (1990-2021), reported that remittances positively correlated with long-run unemployment, particularly affecting female employment. The short-run coefficients were negative, indicating temporal variations in labour-market responses. While this study illustrates gender-specific effects, its Ghanaian context limits applicability to Nigeria due to differences in migration patterns, labour-force structure, and domestic investment channels. Empirically, the mixed findings on remittances reflect measurement issues and the indirect nature of the employment channel. Remittances may alleviate income constraints without necessarily creating formal-sector jobs, particularly in economies with large informal sectors like Nigeria. Consequently, evaluating remittance effects on unemployment requires long-term analysis that integrates all inflow channels and accounts for measurement inconsistencies in official labour-force statistics, especially given the methodological revisions by the NBS.

Theoretical Framework

This study adopts the Neoclassical Theory of Capital Flows, complemented by Keynesian labour-market, to examine the effects of foreign financial inflows on unemployment in Nigeria. The neoclassical perspective, formalized by Solow (1956), argues that capital moves across borders in response to differences in expected returns, flowing from capital-abundant regions to those with higher marginal productivity of capital. In principle, such flows enhance investment, improve productivity, and contribute to economic growth. In the context of developing economies like Nigeria, however, the neoclassical assumption of perfect markets is unrealistic. Structural constraints—including weak financial institutions, informality, and regulatory inefficiencies—limit the smooth transmission of capital into productive employment.

To address these limitations, this study modifies the neoclassical assumptions by incorporating labour-market frictions. Specifically, the Keynesian framework highlights that

investment demand drives employment directly: higher capital inflows can generate jobs if accompanied by effective utilisation of labour, particularly in sectors with absorptive capacity. Structuralist perspectives further emphasize that in economies with large informal sectors and skills mismatches, capital inflows may create only limited employment unless targeted toward labour-intensive industries or skill development initiatives.

By integrating neoclassical capital mobility with labour-market realities, the theoretical framework provides a mechanism linking foreign financial inflows to unemployment outcomes. Foreign direct investment may create jobs through firm expansion and technology transfer; portfolio inflows influence employment indirectly via financial deepening and investment financing; official development assistance and remittances affect labour demand by supporting infrastructure, social-sector projects, and household consumption. The framework thereby justifies the study's focus on multiple inflow channels and their differentiated impact on employment in Nigeria, while acknowledging the constraints imposed by market imperfections and labour-market structural features.

Methodology

This study employs an ex post facto research design, analyzing historical secondary data from 1987 to 2024 to examine the relationship between foreign financial inflows and unemployment in Nigeria. Data sources include the Central Bank of Nigeria (CBN) Statistical Bulletin, NBS reports, and other official databases. The study uses time-series econometric methods, specifically the Autoregressive Distributed Lag (ARDL), to capture both short-run dynamics and long-run equilibrium relationships among variables ensuring model robustness and accounting for regime shifts in Nigeria's economy.

Model Specification

To examine the effect of foreign financial inflows on unemployment in Nigeria, this study modifies the basic model to include key macroeconomic control variables inflation rate (INF) and exchange rate (EXR), to reduce omitted variable bias. The dependent variable, unemployment rate (UNR), is consistently transformed using natural logarithms to stabilize variance and allow elasticity interpretation. The functional relationship is specified as:

$$LOGUNR_t = f(FDI_t, FPI_t, ODA_t, ORI_t, INF_t, EXR_t) \quad (1)$$

The econometric form is:

$$UNR = \beta_0 + \beta_1 FDI_t + \beta_2 FPI_t + \beta_3 ODA_t + \beta_4 ORI_t + \beta_5 INF_t, + + \beta_6 EXR_t + \varepsilon_t \quad (2)$$

where:

UNR = Unemployment Rate
FDI = Foreign Direct Investment
FPI = Foreign Portfolio Investment
ORI = Official Remittance Inflow
ODA = Official Development Assistance
INF = Inflation Rate
EXR = Exchange Rate
ε_t =Error Term

β_0, β_1, β_2, β_3, and β_4 are parameter coefficients. This specification balances parsimony with theoretical rigor, accounting for key macroeconomic influences while maintaining a consistent logarithmic functional form suitable for time-series cointegration analysis.

Table 1 Measurement of Variables

S/N	Variable	Type	Code	Definition/Measurement	Source
1	Unemployment	Dependent Variable	UNR	Percentage of the labor force that is jobless and actively seeking employment.	Nelson et al (2018)
2	Foreign direct investment	Independent Variable	FDI	Net inflows of investment to acquire a lasting interest in enterprises operating outside the investor's economy.	Adeleke et al (2014)
3	Foreign portfolio investment	Independent Variable	FPI	Investments in financial assets such as stocks and bonds in another country.	Adebayo et al (2020)
4	Official development assistance	Independent Variable	ODA	Government aid designed to promote the economic development and welfare of developing countries.	Okon (2012)
5	Official remittance inflow	Independent Variable	ORI	Transfer of money by foreign workers to their home country, measured by the total value of remittances received.	Udah (2017)
6	Inflation Rate	Control Variable	INF	Annual percentage change in Consumer Price Index (CPI), indicates price stability	Azebi (2025)
7	Exchange Rate	Control Variable	EXR	Annual average official exchange rate of Nigerian Naira to USD (₦/US$), measures currency value and external competitiveness	Mohammed et al. (2023)

Source: Author computation, 2025.

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Data Analysis and Results

Table 2: Descriptive Statistics

	UNR	FDI	FPI	ODA	ORI	INFLR	EXCR
Mean	4.506988	2.89E+09	347870.8	1.50E+09	1.01E+10	19.70579	152.9808
Median	4.453485	1.98E+09	232253.5	3.27E+08	8.46E+09	12.88000	127.2400
Maximum	5.999000	8.84E+09	1764725.	1.14E+10	2.43E+10	72.84000	898.9000
Minimum	3.256000	1.93E+08	81409.03	39188931	2424527.	5.390000	4.530000
Std. Dev.	0.767699	2.52E+09	350871.2	2.20E+09	9.82E+09	17.17379	169.5008
Skewness	0.178588	0.934621	2.596952	2.788077	0.077522	1.718456	2.461381
Kurtosis	2.053313	2.807384	10.26844	12.36333	1.120730	4.764461	10.97890
Observations	38	38	38	38	38	38	38

Source: E-Views 13 Output, 2026

Table 2 presents summary statistics for unemployment (UNR), foreign financial inflows foreign direct investment (FDI), foreign portfolio investment (FPI), official development assistance (ODA), official remittance inflow (ORI) and macroeconomic controls (inflation rate, INFLR; exchange rate, EXCR) for Nigeria from 1987 to 2024. The mean unemployment rate stands at 4.51 percent, with a minimum of 3.26 percent and a maximum of 5.99 percent, indicating moderate fluctuations in labour market conditions over the period.

Foreign direct investment averaged ₦2.89 billion, with a median of ₦1.98 billion, highlighting occasional surges up to ₦8.84 billion. Foreign portfolio investment recorded a mean of ₦0.35 billion but exhibited substantial skewness (2.60) and a maximum of ₦1.76 billion, reflecting episodic capital inflows into financial markets. Official development assistance averaged ₦1.50 billion, ranging from ₦0.04 billion to ₦11.4 billion, while remittance inflows were largest, averaging ₦10.1 billion and peaking at ₦24.3 billion, consistent with Nigeria's position as a top recipient in Sub-Saharan Africa. Inflation averaged 19.7 percent, showing high volatility with a maximum of 72.8 percent, and the exchange rate averaged ₦153 per USD, reflecting substantial currency depreciation over the period. Skewness and kurtosis values indicate that most inflow variables, particularly FPI, ODA, and EXCR, are positively skewed and leptokurtic, suggesting occasional extreme values.

Table 3: Correlation Analysis

	LOGUNR	LOGFDI	LOGFPI	LOGODA	LOGORI	LOGEXCR	LOGINFLR
LOGUNR	1.000000						
LOGFDI	0.228644	1.000000					
LOGFPI	0.323462	0.682801	1.000000				
LOGODA	0.266533	0.611467	0.520199	1.000000			
LOGORI	0.254807	0.680783	0.599244	0.653523	1.000000		
LOGEXCR	0.364853	0.649874	0.769132	0.428540	0.568130	1.000000	
LOGINFLR	0.139318	0.174212	0.365265	0.286946	0.277324	0.352458	1.000000

Source: E-Views 13 Output, 2026

The result of the correlation matrix in Table 3 shows the correlation between the dependent variable and the independent variables. it can be seen that all the correlation coefficients among the independent variables are below 0.70. The table reveals a positive correlation between the dependent variable of the unemployment rate in Nigeria and all its explanatory variables in the study.

Table 4: Augmented Dickey-Fuller (ADF) Unit Root Test

Source: E-Views 13 Output, 2026

Variables	Test	T-statistic at Intercept	Critical value at 5%	Probability	Results
LOGUNR	ADF	-51.50539	-2.976263	0.0001	I(1)
LOGFDI	ADF	-9.156922	-2.945842	0.0000	I(1)
LOGFPI	ADF	-6.045503	-2.945842	0.0000	I(1)
LOGODA	ADF	-7.757249	-2.945842	0.0000	I(1)
LOGORI	ADF	-4.619034	-2.967767	0.0010	I(1)
LOGEXCR	ADF	-5.357142	-2.945842	0.0001	I(1)
LOGINFLR	ADF	-3.886384	-2.945842	0.0051	I(0)

The Augmented Dickey-Fuller (ADF) test results indicate that all key variables, except inflation (LOGINFLR), are non-stationary at levels but become stationary after first differencing, i.e., they are integrated of order one, I(1). Specifically, LOGUNR, LOGFDI, LOGFPI, LOGODA, LOGORI, and LOGEXCR have ADF statistics far below the 5% critical values with p-values close to zero, confirming stationarity at first difference. LOGINFLR, however, is stationary at level, I(0), with an ADF statistic of -3.886 and p-value of 0.0051. These mixed integration orders justify using the ARDL bounds testing approach for cointegration in the study.

Table 5: Bound Test Co-integration Test

Test Statistic	Value	Signif.	I(0)	I(1)
			Asymptotic: n=1000	
F-statistic	6.609340	10%	2.08	3
k	5	5%	2.39	3.38
		1%	3.06	4.15

Source: E-Views 13 Output, 2026

The F-statistic of 6.609 exceeds the critical values at all significance levels for I(0) but falls below the 1% I(1) value. This indicates that the variables are likely cointegrated, suggesting a long-run equilibrium relationship exists among them, with strong evidence at 10% and 5% significance levels.

Table 6: ARDL Results of Long-run Relationship

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOGFDI	-2.104584	1.883145	-1.117590	0.2777
LOGFPI	7.141027	2.708183	2.636833	0.0163
LOGODA	-8.614351	2.973726	-2.896821	0.0092
LOGORI	3.955491	1.425760	2.774304	0.0121
LOGEXCR	-0.048269	0.055122	-0.875685	0.4213
LOGINFLR	-0.084938	0.060165	-1.411760	0.2009
C	2.412401	0.576910	4.181587	0.0086
R-squared	0.779140	Mean dependent var		1.488043
Adjusted R-squared	0.662321	S.D. dependent var		0.179163
S.E. of regression	0.066479	Akaike info criterion		-2.794913
Sum squared resid	0.022097	Schwarz criterion		-1.493017
Log likelihood	76.51352	Hannan-Quinn criter.		-2.350929
F-statistic	8.381708	Durbin-Watson stat		2.750679
Prob(F-statistic)	0.012989			

Source: E-Views 13 Output, 2026

The ARDL long-run results show that foreign financial inflows influence unemployment in Nigeria differently. Foreign direct investment (LOGFDI) has a negative but insignificant effect (-2.105, p=0.278), suggesting limited impact on job creation. Foreign portfolio investment (LOGFPI) significantly reduces unemployment (7.141, p=0.016), indicating that portfolio inflows help stimulate employment-generating activities. Official development assistance (LOGODA) significantly increases unemployment (-8.614, p=0.009), implying aid may not effectively translate into jobs. Official remittance inflows (LOGORI) significantly reduce unemployment (3.955, p=0.012), highlighting the positive role of remittances in supporting households and labor market participation. Exchange rate (LOGEXCR) and inflation (LOGINFLR) are negative but insignificant, showing minimal long-term effects. The model explains 77.9% of unemployment variation, is statistically significant, and shows no autocorrelation.

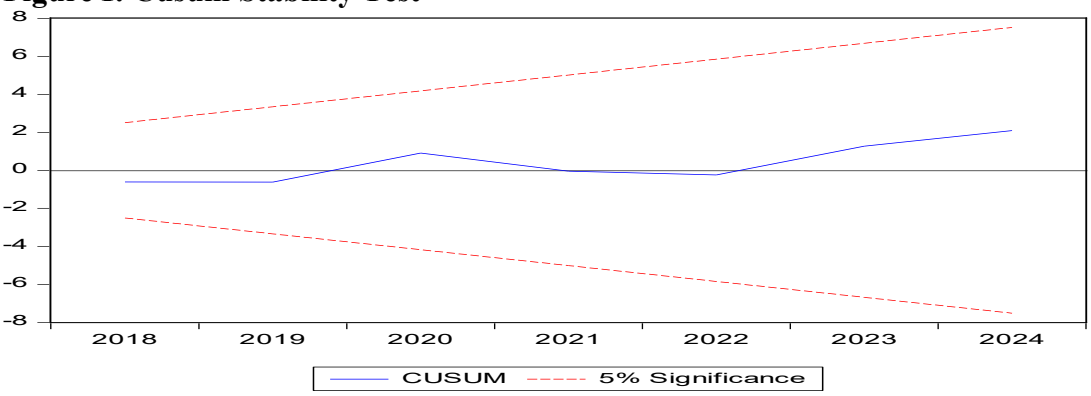
Table 7: Results of the ARDL Short-run Relationship

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LOGFDI)	-0.002379	0.021036	-0.113100	0.9144
D(LOGFPI)	-0.175020	0.029296	-5.974112	0.0019
D(LOGODA)	-0.035650	0.011248	-3.169493	0.0248
D(LOGORI)	0.027053	0.019342	1.398718	0.2208
D(LOGEXCR)	0.012886	0.038034	0.338789	0.7485
D(LOGINFLR)	-0.198068	0.026143	-7.576240	0.0001
CointEq(-1)*	-1.432012	0.141941	-10.08880	0.0002
R-squared	0.779140	Mean dependent var		1.488043
Adjusted R-squared	0.662321	S.D. dependent var		0.179163
S.E. of regression	0.066479	Akaike info criterion		-2.794913
Sum squared resid	0.022097	Schwarz criterion		-1.493017
Log likelihood	76.51352	Hannan-Quinn criter.		-2.350929
F-statistic	8.381708	Durbin-Watson stat		2.750679
Prob(F-statistic)	0.012989			

Source: E-Views 13 Output, 2026

The ARDL short-run results revealed the dynamics between foreign financial inflows and unemployment in Nigeria. Foreign direct investment exhibits an insignificant effect, indicating that short-term variations in FDI do not substantially influence labor market outcomes. Conversely, foreign portfolio investment significantly reduces unemployment, suggesting that such inflows facilitate investment in sectors that absorb labor. Official development assistance also contributes to lowering unemployment, foreign portfolio investment, on the other hand, significantly reduces unemployment, implying that these inflows may support sectors that create jobs. Remittance inflows display a positive but statistically insignificant effect, highlighting their limited short-term impact on employment. Exchange rate fluctuations are also shows insignificant effect, whereas inflation exerts a significant negative effect on unemployment, potentially reflecting short-run adjustments in real wages or labor allocation. The error correction term is negative and highly significant, confirming the rapid adjustment toward long-run equilibrium following deviations. Collectively, the model demonstrates robust explanatory power and reliability, as indicated by the R-squared, F-statistic, and Durbin-Watson values, validating the short-run dynamics of unemployment responses to financial inflows.

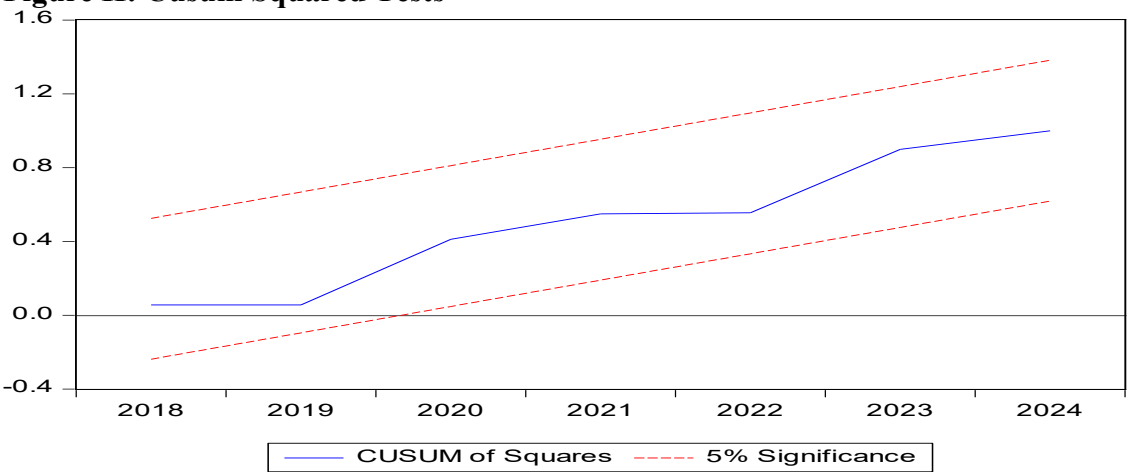
Figure I: Cusum Stability Test



Source: E-Views 13 Output, 2026

The CUSUM stability tests in Figure I revealed that the model is stable and the regression equation is correctly specified as the plots of the charts lie within the critical bounds at a 5% significant level.

Figure II: Cusum Squared Tests



Source: E-Views 13 Output, 2026

The CUSUM squared tests in Figure II revealed that the model is stable and the regression equation is correctly specified as the plots of the charts lie within the critical bounds at a 5% significant level. The figure above shows that the plot of CUSUM squared for the model under consideration is within the 5 percent critical bound. This by implication suggests that the parameters of the model do not suffer from any structural instability over the period of study. That is, all the coefficients in the error correction model are stable.

Discussion of Findings

The long-run results, foreign direct investment (FDI) had a negative but statistically insignificant effect on unemployment. This aligns with Orji and Ogbaga (2024) that FDI flows while it correlated with unemployment in the long run, their effect was not statistically strong, indicating limited impact on job creation unless accompanied by structural reforms and conducive investment conditions. Additionally, Udeorah et al (2025) confirms a negative yet insignificant link between FDI and unemployment, suggesting that capital inflows alone may not create sufficient jobs without effective domestic policy frameworks.

Foreign portfolio investment (FPI) exhibited a significant negative effect on unemployment. Empirical ARDL evidence using bounds-testing approach such as Osabohien et al

(2020) show that FPI inflows contribute to reducing unemployment both in the long and short run, likely through improved financial sector liquidity and stronger investment signals which can indirectly stimulate productive employment. Official development assistance (ODA) in your long-run model unexpectedly increased unemployment. This outcome differs from some literature showing ODA reducing unemployment or poverty, depending on sectoral allocation and implementation. This findings align with Akinbobola and Nwosa (2025), which found that ODA significantly reduced unemployment in certain contexts, though effects vary by country and type of aid. Such mixed evidence shows that ODA's employment impact is context-specific and sensitive to how aid is channeled into productive versus consumption-oriented uses.

Furthermore the findings revealed that official remittance inflows significantly reduced unemployment, consistent with Abduvaliev and Bustillo (2020) highlighting remittances' support for consumption, household investment, and informal employment, which can ease labor market pressures. These studies find remittances positively influence economic outcomes, even if the mechanism to formal sector job creation is indirect.

Conclusion and Recommendations

The study examined the effect of foreign financial inflows on unemployment in Nigeria using time series evidence from 1987 to 2024. The results indicate that the impact of inflows is heterogeneous. Foreign direct investment shows no statistically significant influence on unemployment in both the short and long run, suggesting that the presence of FDI alone does not automatically translate into employment generation. Exchange rate movements and inflation also display weak and statistically insignificant long-run relationships with unemployment, indicating limited direct labour-market transmission. In contrast, foreign portfolio investment and official remittance inflows demonstrate statistically significant unemployment-reducing effects, while official development assistance exhibits a positive association with unemployment in the long run, implying that aid inflows may not be sufficiently channelled toward productive employment-creating activities.

Based on these findings, policy emphasis should focus on improving the employment-generating efficiency of foreign financial inflows rather than merely increasing their volume. Strengthening domestic financial market intermediation to better utilize portfolio inflows and creating institutional mechanisms that encourage productive investment of remittances can yield measurable employment benefits. Additionally, improving monitoring and sectoral targeting of development assistance is necessary to ensure that aid resources support labour-absorbing sectors.

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