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Economic Policy Uncertainty and Foreign Direct Investment in Nigeria: Evidence from Quantile Regression

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Abstract. Nigeria has faced significant challenges in attracting Foreign Direct Investment (FDI), with economic policy uncertainty (EPU) emerging as a key deterrent. Persistent policy instability, regulatory inconsistencies, and macroeconomic volatility have created an unpredictable investment climate, discouraging foreign investors. Moreover, theoretical and empirical literature has been inconsistent in explaining the impact of EPU on FDI. Therefore, this study investigated the effect of EPU on FDI in Nigeria from April 2016 to June 2023, employing Quantile Regression and the VAR Granger Causality/Block Exogeneity Wald Test to analyze the relationship. The study concluded that EPU had a detrimental impact on FDI, particularly at higher quantiles, were increased uncertainty significantly reduced investment inflows. Additionally, exchange rate fluctuations dampened FDI, while strong GDP growth and increased domestic credit to the private sector were more effective in attracting investment. The causality test further confirmed that EPU Granger-caused FDI, reinforcing its role as a significant driver of investment trends in Nigeria. Based on these findings, the study recommended that the Nigerian government adopt predictable economic policies to create a more stable investment climate and implement sound macroeconomic strategies to stabilize the exchange rate, thereby improving Nigeria's attractiveness to foreign investors.

Keywords: Economic policy uncertainty, foreign direct investment, quantile regression, Nigeria

1. Introduction

Economic growth is a fundamental goal for all economies, as it drives prosperity, reduces poverty, and enhances overall development (Vîrjan et al, 2023; Aljadani et al, 2025). One of the key instruments for achieving sustainable economic growth is Foreign Direct Investment (FDI), which plays a crucial role in capital formation, technology transfer, employment generation, and industrial expansion (Appiah et al, 2023; Sare et al, 2025). Recognized as a major driver of growth, FDI aligns with Sustainable Development Goal (SDG) 8, which promotes sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all. Countries that effectively attract FDI benefit from increased productivity and improved industrial capacity. However, the success of FDI largely depends on a stable and predictable economic environment, as investors seek markets with clear policies and minimal uncertainty. In Nigeria, while efforts have been made to foster a conducive investment climate, economic policy uncertainty remains a critical challenge, impacting investor confidence and the sustainability of foreign inflows, thereby posing a significant barrier to achieving long-term economic development (Iddrisu et al, 2025; Odionye et al, 2024)

Economic policy uncertainty refers to the unpredictability surrounding government policies, regulations, and macroeconomic direction, which can significantly influence investment decisions (Adeloye et al, 2024; Okonkwo & Okereke, 2025). When uncertainty is high, investors may delay or withdraw their investments due to concerns over policy reversals, inconsistent regulations, or abrupt shifts in economic strategies. Nigeria, as a key investment destination in Africa, has experienced fluctuations in foreign inflows due to various uncertainties, including changes in fiscal policy, foreign exchange regulations, and trade policies. According to Bureau of Statistics (2024), in Q1 2024, FDI in Nigeria recorded the lowest share of total capital importation, amounting to $119.18 million (3.53%). Nigeria's FDI for 2023 stood at $1.87 billion, reflecting a staggering 1102.46%

decline from 2022, when FDI was - $0.19 billion, representing a 105.64% decrease from 2021. In contrast, FDI in 2021 was $3.31 billion, marking a 38.9% increase from 2020. This reduction is partly attributed to macroeconomic instability and inconsistent policies, which create apprehension among foreign investors (Ejedegba, 2023; Obikaeze et al, 2023).

Over the years, Nigeria has implemented several policies to attract FDI, including the National Industrial Policy, the Foreign Exchange Act, and the establishment of the Nigerian Investment Promotion Commission (NIPC). These efforts aimed to provide incentives such as tax holidays, free trade zones, and investment protection mechanisms. Despite these initiatives, issues such as policy summersaults where governments frequently reverse or modify policies have discouraged long-term investments. For instance, abrupt foreign exchange restrictions, sudden tax law amendments, and shifting trade policies have created an unpredictable business climate. As a result, foreign investors remain cautious, fearing that policies favoring them today might be reversed tomorrow (Adegboyo et al, 2021).

In the literature, there is no clear consensus on the relationship between economic policy uncertainty and foreign direct investment. Some scholars argue that uncertainty reduces FDI, as seen in studies by Ogbonna et al (2022), Hammed et al (2025), Nguyen and Lee (2021), and Jardet et al (2023), which found that investors tend to delay decisions in the face of policy instability. Conversely, others suggest that policy uncertainty can increase FDI, as investors take advantage of regulatory gaps and market inefficiencies to maximize returns (Shabir et al, 2022; Choi et al, 2021; Gao et al, 2024). This divergence in findings leaves policymakers at a crossroads should they prioritize stability at the expense of flexibility, or should they allow some level of uncertainty that might attract risk-taking investors? Given Nigeria's reliance on foreign investments to drive industrialization and economic development, understanding the impact of policy instability is crucial for formulating effective strategies. This study, therefore, investigated how economic policy uncertainty affects FDI inflows and whether Nigeria's experience aligns with existing theoretical perspectives. Also, to determine the direction of causality between them.

Aside from the introduction, the rest of this paper is structured as follows: Section 2 presents the literature review, Section 3 outlines the methodology, Section 4 discusses the empirical results, and Section 5 provides the conclusion and recommendations.

2. Literature Review

2.1 Conceptual Review

Foreign Direct Investment refers to the long-term investment made by individuals, companies, or governments from one country into business ventures or assets in another country (Amade, 2022). According to the International Monetary Fund (2023), Foreign direct investment refers to direct investment equity flows in the reporting economy. It is the sum of equity capital, reinvestment of earnings, and other capital. Direct investment is a category of cross-border investment associated with a resident in one economy having control or a significant degree of influence on the management of an enterprise that is resident in another economy.

Figure 1 shows the trend of FDI in Nigeria between April 2016 and June 2023. The trend exhibits significant fluctuations, reflecting the impact of economic policies, global investment conditions, and domestic macroeconomic challenges. Initially, FDI was relatively high in 2016, showing investor confidence in Nigeria's market. However, a noticeable decline occurred between late 2016 and 2017, attributed to foreign exchange (FX) shortages, regulatory uncertainties, and concerns over Nigeria's heavy reliance on oil revenues.

Between 2018 and 2021, FDI inflows experienced moderate fluctuations. A significant downturn occurred in early 2018, likely due to policy uncertainty and concerns over business regulations. However, a gradual recovery from late 2018 to early 2019 coincided with increased investments in financial services, ICT, and manufacturing. The Central Bank of Nigeria's (CBN) intervention in stabilizing FX access and encouraging foreign participation in key sectors played a role in the temporary improvement. However, the COVID-19 pandemic in 2020 severely impacted investment flows, causing stagnation. In early 2021, FDI rebounded, driven by post-pandemic economic recovery efforts and renewed investor interest in Nigeria's growing technology and fintech sectors.

Despite the brief recovery, a drastic collapse in FDI occurred in late 2021, reflecting investor uncertainty over capital repatriation, multiple exchange rate regimes, and heightened regulatory risks. The government's restrictions on FX repatriation made it difficult for foreign investors to withdraw profits, leading to declining investor confidence. The situation worsened in 2022, as FDI inflows reached historically

low levels, coinciding with election uncertainties, rising inflation, and global economic instability.

The 2022–2023 period saw a historically low FDI inflow, reaching near-zero levels in mid-2022. This was likely due to severe FX liquidity crises, declining investor confidence ahead of the 2023 elections, and restrictions on capital repatriation. The sharp decline reflected Nigeria's worsening business environment, ranking low in the World Bank's Ease of Doing Business index. However, in early 2023, a moderate recovery was observed, possibly due to post-election optimism, proposed economic reforms, and a renewed push to improve investor confidence.

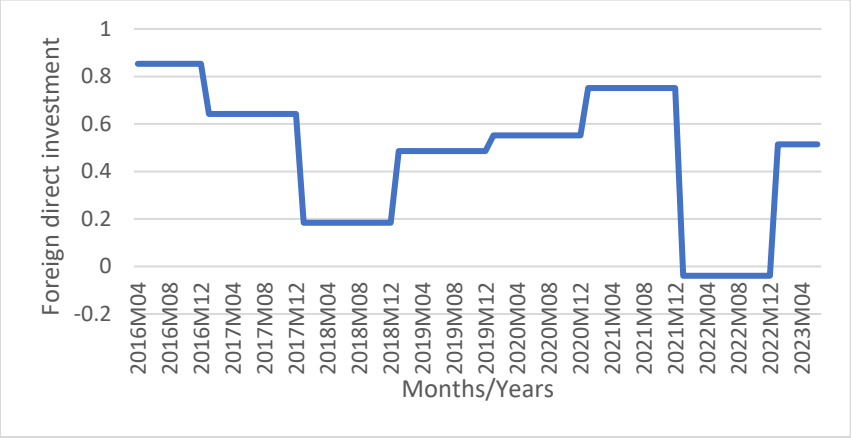

Figure 1: *Trend of FDI net inflows (% of GDP) in Nigeria*

2.2 Economic Policy Uncertainty

Baker et al (2016) define economic policy uncertainty as the uncertainty surrounding government policies, regulations, and economic decisions that affect businesses, investors, and households, leading to unpredictable economic conditions. They quantify EPU using news-based indices, firm-level surveys, and economic forecasts. Gulen and Ion (2016) describe it as the unpredictability in government actions related to taxation, spending, regulations, and monetary policies, which can deter investment and slow down economic growth.

Figure 2 shows the trend of economic policy uncertainty (EPU) in Nigeria from April 2016 to June 2023. Initially, in 2016, EPU was relatively high, reflecting concerns over Nigeria's economic recession, which was triggered by falling global oil prices and a severe foreign exchange (FX) crisis. The uncertainty was further exacerbated by capital control policies and a lack of clarity in government responses to economic challenges. However, following the introduction of the Investor and Exporter (I&E) FX Window in 2017, EPU saw a slight decline, suggesting a temporary improvement in investor confidence and economic predictability.

Between 2018 and early 2020, the EPU index displayed moderate fluctuations. The uncertainty observed in 2018 was largely driven by concerns over business regulations, multiple FX rates, and upcoming elections. The 2019 general elections further contributed to a rise in uncertainty, as investors and businesses adopted a wait-and-see approach due to potential policy shifts. However, after the elections, EPU temporarily stabilized as the government continued its policy of intervention in FX markets and investment incentives.

In 2020, economic policy uncertainty spiked due to the COVID-19 pandemic, which led to economic lockdowns, disruptions in global supply chains, and declining oil revenues Nigeria's major export. The uncertainty was further intensified by fiscal pressures and the Central Bank of Nigeria's (CBN) controversial policy decisions, including restrictions on FX access and currency devaluation. By early 2021, as the economy started recovering from the pandemic, EPU declined slightly, reflecting gradual stabilization efforts.

From 2022 to early 2023, economic policy uncertainty remained persistently high. This was influenced by election-related uncertainties, inflationary pressures, and the government's handling of monetary policies. The continued existence of multiple exchange rates, restrictions on foreign transactions, and inconsistencies in fiscal reforms contributed to elevated uncertainty. However, towards mid-2023, there was a slight moderation in uncertainty, possibly driven by post-election optimism, discussions on economic reforms, and renewed efforts to address FX liquidity constraints.

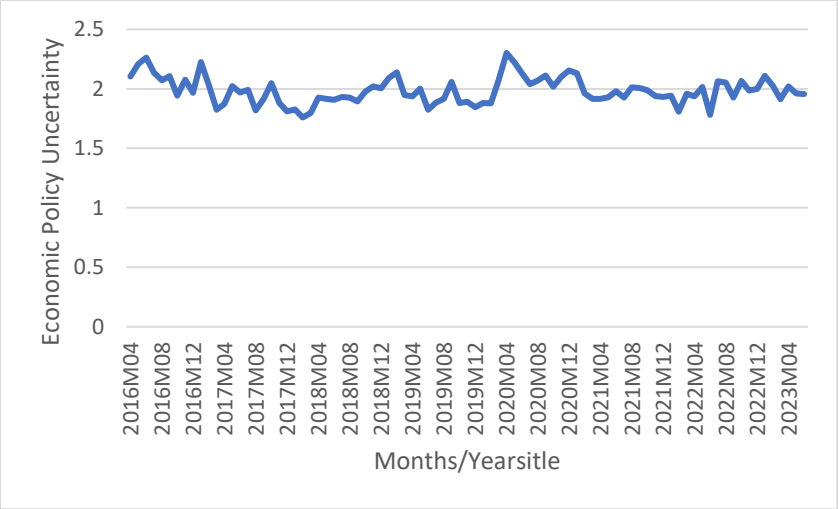

Figure 2: *Trend of Economic Policy Uncertainty in Nigeria*

2.3 Theoretical Framework

This study is anchored on Institutional Theory, propounded by Douglass North (1990), which emphasizes the role of institutions in shaping economic activities, including foreign direct investment (FDI). Institutions, both formal (laws, regulations, and policies) and informal (social norms and business practices), provide the framework within which economic transactions take place. North (1990) argues that well-structured institutions reduce uncertainty and transaction costs, thereby fostering economic growth and investment. Conversely, weak or unpredictable institutions create uncertainty, deterring foreign investors from committing capital due to the risks associated with policy instability, regulatory inconsistencies, and weak enforcement mechanisms.

Institutional theory is highly relevant to this study as economic policy uncertainty (EPU) is a critical aspect of institutional stability. In Nigeria, frequent changes in tax policies, exchange rate regulations, and trade policies contribute to heightened uncertainty, discouraging foreign investment. Foreign investors seek environments with stable and predictable policies to minimize risks and ensure the security of their investments. When economic policies are unstable or ambiguous, investors may delay or cancel planned investments, leading to reduced FDI inflows.

The theory has its ability to explain the role of governance and policy stability in attracting FDI. It acknowledges that beyond economic fundamentals, institutional factors such as policy transparency, property rights, and regulatory effectiveness play a crucial role in shaping investment decisions. The theory however lacks quantifiable measures for institutional factors, tends to overemphasize institutions, and sometimes overlooking economic fundamentals such as market size and labor costs.

Empirical studies have applied institutional theory to examine the impact of policy uncertainty on FDI. Julio and Yook (2012) found that political and economic uncertainty reduces cross-border investment, as firms delay capital commitments during periods of policy instability. Baker, Bloom, and Davis (2016) demonstrated that higher policy uncertainty leads to lower FDI inflows globally. Similarly, Handley and Limao (2015) showed that trade policy uncertainty discourages foreign firms from entering unstable markets.

2.4 Empirical Review

Hammed et al. (2025) investigated the impact of economic policy uncertainty on various components of foreign investment inflows into Nigeria, including foreign direct investment, foreign portfolio investment, and other investment portfolios. The study employed a recently developed uncertainty index for Nigeria and utilized the Autoregressive Distributed Lag (ARDL) approach to analyze monthly data spanning from January 2010 to November 2022. Their findings established that an increase in domestic EPU significantly reduced the volume of foreign investment inflows in both the short and long run. However, while the adjustment to disequilibrium in the system was found to be instantaneous for FDI, it was slower for FPI.

Akpilic (2025) investigated the factors influencing foreign direct investment, with a particular emphasis on global uncertainties. Using panel data from 122 countries and applying the system Generalized Method of Moments (GMM), the study found that the determinants of FDI varied depending on the level of economic development. Specifically, global uncertainties, as measured by the World Uncertainty Index, were found to significantly reduce FDI inflows in emerging, middle-income, and low-income economies, as investors tended to shift toward safer assets and delay long-term investment projects. In contrast, advanced economies demonstrated greater resilience to global uncertainties, largely due to their more stable macroeconomic conditions and robust institutional frameworks.

Gao et al. (2024) investigated the impact of economic policy uncertainty (EPU) on foreign direct investment (FDI) using data from 264 Chinese cities between 2005 and 2014 and found a negative relationship between EPU and FDI inflows. Their heterogeneity tests revealed that this effect was more pronounced in cities with higher marketization, stronger financial development, and a larger industrial sector, indicating that while these cities attract more foreign investments, they are also more vulnerable to policy uncertainty. Additionally, the study found that FDI became more sensitive to EPU fluctuations after the 2008 Global Financial Crisis, suggesting that heightened global uncertainty exacerbates investor risk aversion.

Odinoye et al (2024) investigated the heterogeneous impact of capital flight and economic policy uncertainty (EPU) on domestic investment in Nigeria using the quantile-based nonlinear autoregressive distributed lag (QNARDL) model. The findings revealed that capital flight negatively affected domestic investment, particularly in the upper quantiles, suggesting that higher levels of capital flight led to a more significant decline in investment. Additionally, both domestic and global EPU had a significant adverse impact on investment. The study further established a unidirectional causality from EPU both domestic and global to capital flight, indicating that policy uncertainty weakens the business climate, heightens investor fears, and discourages investment.

Phan et al. (2024) investigated the impact of economic policy uncertainty (EPU) on foreign direct investment (FDI) inflows, with a specific focus on greenfield investment and cross-border mergers and acquisitions (M&As). Using a panel dataset covering 213 countries from 2003 to 2020, the study employed the panel ordinary least squares (OLS) with fixed effects estimator. The findings revealed that higher levels of EPU led to a decline in overall FDI inflows. Additionally, the Covid-19 pandemic further reduced FDI inflows, although its effects varied between different types of FDI. The study also found that while greenfield investment declined during periods of heightened uncertainty, cross-border M&As increased when uncertainty was triggered by the health crisis, suggesting that firms sought acquisitions as a strategic response to economic instability.

Elejeda (2023) investigated the empirical relevance of macroeconomic instability and policy uncertainty on aggregate investment behavior in Nigeria. Using time series data from 1990 to 2020, obtained from the Central Bank of Nigeria (CBN) statistical bulletin, the study employed the Ordinary Least Squares (OLS) estimation model and utilized the Generalized Autoregressive Conditional Heteroskedasticity (GARCH) model to measure instability and uncertainty. The findings revealed that macroeconomic instability, worsened by policy uncertainty resulting from inconsistent government economic policies, significantly constrained investment performance in Nigeria since the 1990s.

3. Methodology

3.1 Data Requirement and Source

The study was carried out in Nigeria, spanning from April 2016 to June 2023. The dataset included foreign direct investment net inflows (% of GDP), economic policy uncertainty (EPU), the official exchange rate (LCU per USD, period average), annual GDP growth rate, and domestic credit to private sector (% of GDP). The EPU data were obtained from the Economic Policy Uncertainty Index developed by Tumala et al. (2023), while all other variables were sourced from the World Development Indicators and subsequently computed.

Model Specification

The functional form of the model takes

$$FDI_t = f(EPU_t, EXR_t, GDPgr_t, DCPS_t) \quad 1$$

Where:

FDI_t = Foreign Direct Investment at time t

EPU_t = Economic Policy Uncertainty at time t

EXR_t = Exchange Rate at time t

$GDPgr_t$ = GDP Growth Rate at time t
$DCPS_t$ = Domestic credit to private sector at time t
Equation 1 is specified in econometric model as
$FDI_t = \beta_0 + \beta_1 EPU_t + \beta_2 EXR_t + \beta_3 GDPgr_t + \beta_4 DCPS_t + \varepsilon_t$ 2
Where: β_0 = Intercept term. β_1, β_2, β_3, and β_4 = Coefficients measuring the impact of each independent variable on FDI and ε_t = Error term capturing unobserved factors
In order to reduce heteroscedasticity, normalize the distribution of variables, and improve the interpretability of coefficients, equation 2 is respecified in log form as:
$lnFDI_t = \beta_0 + \beta_1 lnEPU_t + \beta_2 lnEXR_t + \beta_3 GDPgr_t + \beta_4 DCPS_t + \varepsilon_t$ 3
On a priori we expect $\beta_1 < 0$; $\beta_2 \lessgtr 0$; $\beta_3 > 0$; and $\beta_4 > 0$.

3.2 Estimation Technique

This study employs the quantile regression technique. Unlike ordinary least squares (OLS), which estimates the mean relationship between the dependent and independent variables, quantile regression provides a more comprehensive analysis by capturing the impact of explanatory variables across different points (quantiles) of the FDI distribution. This is particularly useful in understanding how the determinants of FDI behave at various levels, such as low, median, and high FDI inflows.

Quantile regression is preferred in this study for several reasons. First, FDI inflows are often skewed and subject to extreme values, making mean-based estimation methods less reliable. Second, it allows for heterogeneity in the impact of explanatory variables, meaning that the effect of economic policy uncertainty may vary across different levels of FDI inflows. Third, it is robust to outliers, which is crucial given the volatility of FDI in Nigeria due to economic shocks, policy changes, and global financial conditions.

Mathematically, the quantile regression model for this study is specified as:
$Q_\tau\left({FDI_t}/{X_t}\right) = \beta_0^\tau + \beta_1^\tau lnEPU_t + \beta_2^\tau lnEXR_t + \beta_3^\tau GDPgr_t + \beta_4^\tau lnDCPS_t + \varepsilon_t$ 4
Where $Q_\tau\left({FDI_t}/{X_t}\right)$ represent the $\tau - th$ quantile of FDI given the explanatory variables, and β^τ captures the impact of each determinant at different points of the FDI distribution.

4. Results

4.1 Descriptive Analysis

Figure 1 shows the descriptive trends of key macroeconomic variables in Nigeria from 2016 to 2023. The FDI graph reveals fluctuations, with significant declines around 2019 and 2023, suggesting periods of investor uncertainty, possibly linked to policy instability or economic shocks. Meanwhile, EPU exhibits persistent volatility, especially between 2016 and 2021, which could indicate uncertainty in government policies, regulatory changes, or external economic pressures affecting investment decisions. After 2021, a relative stabilization in EPU suggests improved policy clarity, which might support investment recovery.

The Exchange Rate graph demonstrates a continuous depreciation of the Nigerian currency over the observed period, reflecting macroeconomic instability, inflationary pressures, and external shocks. This depreciation can negatively impact foreign investment by increasing transaction costs and reducing investor confidence. The GDP Growth Rate graph displays fluctuations, with noticeable downturns in 2019 and subsequent recovery in 2021, likely driven by post-COVID-19 economic recovery measures. However, growth appears to stabilize at a lower level afterward, indicating persistent structural challenges in sustaining economic expansion.

Domestic credit to the private sector in Nigeria exhibited a downward trend, with a more pronounced decline in 2018, likely due to tightening monetary policies, economic uncertainty, or reduced lending capacity by financial institutions. However, a gradual recovery began in 2019 and continued until 2021, driven by improved economic conditions, policy interventions, or increased access to credit. Since then, credit to the private sector has been on a decline, which could be attributed to factors such as rising interest rates, inflationary pressures, regulatory constraints, or reduced investor confidence in the economy.

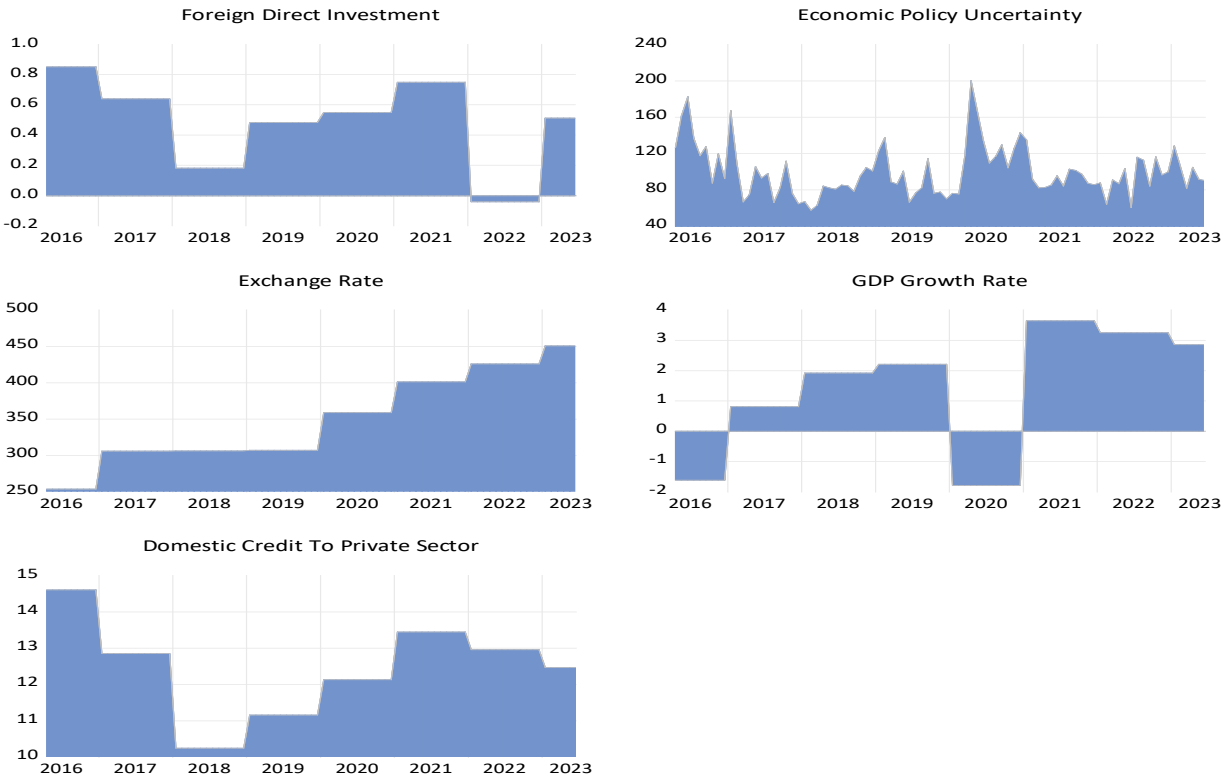

Figure 3: *Area Plot of the Descriptive Statistics of the Variables*

4.2 Descriptive Statistics

Table 1 presents the descriptive statistics of the variables used. Foreign Direct Investment, measured as a percentage of GDP, has a mean value of 0.479, indicating that, on average, FDI inflows constitute approximately 0.48% of Nigeria's GDP over the period examined. The standard deviation of 0.281 suggests moderate variability in FDI inflows, reflecting fluctuations in investment attractiveness. The maximum FDI recorded is 0.853% of GDP, while the minimum is -0.039%, indicating periods of both significant inflows and occasional disinvestment or capital outflows. Economic Policy Uncertainty (EPU), measured as an index with a base value of 100, has an average of 100.000, signifying a balanced level of uncertainty over the study period. The standard deviation of 27.813 indicates considerable variations in uncertainty levels, potentially due to economic shocks or policy changes. The highest recorded EPU value is 200.180, reflecting a period of extreme uncertainty, while the lowest is 57.395.

The exchange rate, measured in Nigerian Naira per US dollar, has an average value of 347.622, showing the typical exchange rate level over the period. With a standard deviation of 60.499, the exchange rate exhibits significant fluctuations, likely due to currency depreciation, external shocks, or changes in monetary policy. The highest exchange rate recorded is 450.806 NGN/USD, while the lowest is 253.492 NGN/USD, reflecting periods of both relative currency stability and volatility.

GDP growth rate (GDPGR), measured in percentage terms, has a mean value of 1.415%, indicating slow economic growth over the study period. The standard deviation of 1.971% suggests significant variations in economic performance, likely driven by external shocks, fiscal policies, and global economic conditions. The highest growth rate recorded is 3.647%, reflecting periods of economic expansion, while the lowest is -1.794%, representing times of economic contraction or recession.

Domestic credit to the private sector (DCPS), measured as a percentage of GDP, has an average value of 12.412%, indicating the extent of financial sector support to private enterprises. The standard deviation of 1.268 suggests moderate fluctuations in credit availability. The highest value recorded is 14.608%, while the lowest is 10.247%,

reflecting variations in credit supply influenced by monetary policy, financial sector stability, and economic conditions.

Table 1: Descriptive Statistics

	FDI	EPU	EXR	GDPGR	DCPS
Mean	0.479	100.000	347.622	1.415	12.412
Median	0.552	92.893	306.921	1.923	12.852
Maximum	0.853	200.180	450.806	3.647	14.608
Minimum	-0.039	57.395	253.492	-1.794	10.247
Std. Dev.	0.281	27.813	60.499	1.971	1.268

Source: *Computed by Authors from WDI*

4.3 Correlation

Table 2 shows the correlation matrix, which presents the pairwise relationships between the variables in the study. Foreign Direct Investment (FDI) exhibits a negative and significant correlation with Economic Policy Uncertainty (EPU) (r = -0.283**, $\rho < 0.05$), indicating that higher uncertainty in economic policies is associated with lower FDI inflows. FDI also has a significant negative correlation with the exchange rate (EXR) (r =-0.376**, $\rho < 0.05$), meaning that as the exchange rate depreciates, FDI inflows tend to decline. Additionally, FDI is negatively correlated with GDP growth rate (GDPGR) (-0.423** $\rho < 0.05$), indicating that foreign investors may withdraw investments during economic downturns due to reduced business opportunities and profitability.

Conversely, FDI has a strong positive correlation with domestic credit to the private sector (DCPS) (r= 0.501**, $\rho < 0.05$), meaning that an increase in financial sector support for businesses is associated with higher FDI inflows. This significant relationship suggests that better access to credit fosters an investment-friendly environment, as foreign investors may be more willing to invest in a well-financed economy with efficient capital allocation.

Table 2: Correlation Matrix

		FDI	EPU	EXR	GDPGR	DCPS
FDI	Pearson Correlation	1.000				
	Sig. (2-tailed)					
EPU	Pearson Correlation	-.283**	1.000			
	Sig. (2-tailed)	(0.008)				
EXR	Pearson Correlation	-.376**	-0.074	1.000		
	Sig. (2-tailed)	(0.000)	(0.496)			
GDPGR	Pearson Correlation	-.423**	-.467**	.490**	1.000	
	Sig. (2-tailed)	(0.000)	(0.000)	(0.000)		
DCPS	Pearson Correlation	.501**	.318**	0.108	-.227*	1.000
	Sig. (2-tailed)	(0.000)	(0.003)	(0.318)	(0.0340	

Source: *Author, 2025. Note: *** and ** denote significance at 1% and 5% respectively*

4.4 Unit Root Test

Table 3 presented the unit root test results using the Phillips-Perron (PP) test and the Augmented Dickey-Fuller (ADF) test. The results indicated that Economic Policy Uncertainty (EPU) was stationary at level (I(0)), suggesting that it did not exhibit a unit root and was not influenced by past trends. However, all other variables Foreign Direct Investment (FDI), Exchange Rate (EXR), GDP Growth Rate (GDPGR), and Domestic Credit to Private Sector (DCPS) were non-stationary at level but became stationary after first differencing (I(1)). This implied that these variables exhibited

persistence over time, meaning that past values significantly influenced future changes, and external shocks could have long-term effects on their behavior.

Table 3: Unit Root Test

	PP		ADF	
	Level	First Difference	Level	First Difference
FDI	-2.369	-9.119***	-2.302	-9.119***
	(0.154)	(0.000)	(0.174)	(0.000)
EPU	-5.065***		-5.065***	
	(0.000)		(0.000)	
EXR	-0.891	-9.659***	-0.951	-9.597***
	(0.787)	(0.000)	(0.767)	(0.000)
GDPGR	-2.225	-9.151***	-2.179	-9.151***
	(0.199)	(0.000)	(0.215)	(0.000)
DCPS	-1.953	-9.139***	-1.944	-9.139***
	(0.307)	(0.000)	(0.311)	(0.000)

Note: *** denote significance at 5%*

4.5 Regression Result

Table 4 presents the quantile regression results for the effect of economic policy uncertainty, exchange rate, GDP Growth Rate, and domestic credit to private sector on foreign direct investment across different quantiles (10th to 90th percentiles). Form the result EPU has positive impact on FDI in the 10^{th} and 20^{th} quantile. This shows that in Nigeria, Economic Policy Uncertainty (EPU) initially encourages FDI at lower quantiles, particularly at the 20th quantile, where a 1% increase in EPU raises FDI by 0.149%. However, as FDI levels increase, policy uncertainty becomes a deterrent, significantly reducing investment from the 30th quantile onward. The negative effect intensifies in the upper quantiles, with a 1% rise in EPU leading to FDI declines of 0.301%, 0.322%, and 0.401% at the 70th, 80th, and 90th quantiles, respectively. This suggests that while Nigeria may experience slight increases in FDI at low investment levels possibly due to speculative capital inflows or short-term risk-taking sustained and high FDI inflows require a stable policy environment. At higher levels of investment, foreign investors in Nigeria become more cautious, prioritizing economic predictability and long-term stability. The findings are in line with Odunoye (2024), Hammed et al (2025) as well as Phan et al. (2024).

Exchange rate have a consistently negative impact on FDI across all quantiles, with the effect being more severe in the lower quantiles. At the 10th, 20th, and 30th quantiles, a 1% increase in exchange rate depreciation reduces FDI by 3.071%, 2.783%, and 2.578%, respectively, indicating that lower levels of FDI are highly sensitive to exchange rate instability. As FDI increases, the negative effect weakens but remains significant, with declines of 1.204%, 1.038%, and 0.787% in the middle quantiles (40th to 60th). The impact continues to diminish in the upper quantiles, though it remains statistically significant, with FDI reductions of 0.666%, 0.617%, and 0.561% at the 70th, 80th, and 90th quantiles, respectively. This pattern suggests that exchange rate volatility in Nigeria discourages foreign investment, particularly at lower levels, where investors may lack the financial resilience to absorb currency risks. The result is in line with Okonkwo et al (2021); Nwagu (2023)

The effect of GDPGR on FDI varies across quantiles, showing a negative and significant impact in the lower quantiles but turning positive in the upper quantiles. At the 10th, 20th, and 30th quantiles, a 1% increase in GDPGR reduces FDI by 0.658%, 0.569%, and 0.505%, respectively, indicating that when FDI inflows are low, economic growth does not necessarily translate into increased foreign investment, possibly due to structural economic constraints or policy uncertainties. However, as FDI moves to the middle and upper quantiles, the effect becomes less negative and eventually turns positive, with a slight but insignificant impact at the 50th quantile (-0.030%). In the 60th to 90th quantiles, the relationship becomes positive and significant, with a 1% increase in GDPGR raising FDI by 0.047%, 0.084%, 0.099%, and 0.117% at the 60th, 70th, 80th, and 90th quantiles, respectively. This suggests that higher economic growth in Nigeria is more effective in attracting larger FDI inflows, as investors are more likely to respond

positively when the economy is already experiencing substantial foreign investment. The findings supported Fazaalloh (2024); Olorogun et al (2022).

For DCPS, the results indicate a consistently positive and significant effect on FDI across all quantiles, with the impact strengthening as FDI increases. In the lower quantiles (10th, 20th, and 30th quantiles), the effect is positive but less pronounced, as a 1% increase in DCPS leads to FDI increases of 1.072%, 1.427%, and 1.681%, respectively, showing that even at low levels of FDI, access to domestic credit supports investment inflows. The impact becomes stronger in the middle quantiles (40th to 60th quantiles), with a 1% increase in DCPS raising FDI by 3.374%, 3.579%, and 3.889%, highlighting the role of financial sector development in enhancing foreign investment. In the upper quantiles (70th to 90th quantiles), the effect is most pronounced, with FDI increasing by 4.038%, 4.098%, and 4.168% for every 1% increase in DCPS, confirming that a well-developed financial sector significantly boosts foreign investment at higher FDI levels. The findings supported the outcome by Muzaffarli and Mahmudlu (2024)

Table 4: Quantile Regression Result

			Lower Quantile			Middle Quantile			Upper Quantile		
	Location	Scale	10	20	30	40	50	60	70	80	90
EPU	-0.119	-0.019	0.155	0.149**	-0.144**	-0.115**	-0.189**	-0.206**	-0.304***	-0.322**	-0.401**
	(0.020)	(0.013)	(0.280)	(0.030)	(0.031)	(0.025)	(0.029)	(0.044)	(0.003)	(0.034)	(0.022)
EXR	-1.402	0.868	-3.071***	-2.783**	-2.578**	-1.204***	-1.038**	-0.787**	-0.666***	-0.617**	-0.561**
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.010)	(0.021)	(0.000)	(0.034)	(0.040)
GDPR	-0.142	0.268	-0.658**	-0.569**	-0.505**	-0.081**	-0.030	0.047**	0.084**	0.099**	0.117**
	(0.269)	0.003	(0.021)	(0.021)	(0.047)	(0.032)	(0.818)	(0.027)	(0.013)	(0.025)	(0.028)
DCPS	3.131	1.071	1.072	1.427	1.681**	3.374***	3.579***	3.889***	4.038***	4.098***	4.168***
	(0.000)	0.001	(0.287)	(0.100)	(0.029)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)

Note: *** and ** denote significant at 1% and 5% respectively

4.6 Causality Test

Table 5 presented the VAR Granger Causality/Block Exogeneity Wald Test results, which were conducted to validate the reliability of the estimated findings by examining the predictive relationships between variables. The results indicated that economic policy uncertainty (EPU) Granger-caused foreign direct investment (FDI) at a 1% significance level with (χ^2= 8.829, $\rho < 0.05$), confirming that fluctuations in policy uncertainty significantly influenced FDI inflows in Nigeria. This finding supported the argument that investors closely monitored economic policy stability before making investment decisions, as heightened uncertainty deterred FDI. The test results further revealed that exchange rate (EXR), and GDP growth rate (GDPGR) significantly Granger-caused foreign direct investment (FDI) in Nigeria (χ^2= 8.829, $\rho < 0.05$; ($\chi^2 = 8.829, \rho < 0.05$), while domestic credit to the private sector (DCPS) did not with (χ^2= 2.423, $\rho > 0.05$), implying that access to domestic credit was not a primary driver of foreign investment. The joint causality test (χ^2= 18.837, $\rho < 0.05$) confirmed the collective influence of all variables on FDI, stressing the importance of macroeconomic stability in attracting foreign investments to Nigeria.

Table 5: VAR Granger Causality/Block Exogeneity Wald Test Result

Excluded	Chi-Sq	Prob
Dependent Variable: LNFDI		
LNEPU	8.829***	0.003
LNEXR	6.007**	0.022
LNGDPGR	11.013***	0.000
LNDCPS	2.423	0.546
ALL	18.837***	0.000

Note: *** and ** denotes significant at 1% and 5% respectively

5. Conclusion and Recommendations

This study investigated the effect of Economic Policy Uncertainty on foreign direct investment in Nigeria from April 2016 to June 2023, employing quantile regression and the VAR Granger Causality/Block Exogeneity Wald Test to analyze the relationship. The study concluded that economic policy uncertainty had a detrimental impact on foreign direct investment in Nigeria, particularly at higher quantiles, indicating that heightened uncertainty discouraged investment inflows. However, EPU also stood as a key driver of FDI, suggesting that while investors reacted negatively to uncertainty, it still played a role in shaping investment decisions. Additionally, the study found that exchange rate volatility dampened FDI, whereas strong GDP growth and increased domestic credit to the private sector (DCPS) were more effective in attracting investment. The policy implication of these findings was that reducing economic policy uncertainty through consistent and transparent policymaking would enhance investor confidence and promote FDI inflows in Nigeria. Based on these conclusions, the study recommended that the Nigerian government should adopt stable and predictable economic policies to minimize uncertainty and create an investor-friendly environment. Furthermore, enhancing macroeconomic stability through sound monetary and fiscal policies would help mitigate exchange rate fluctuations, thereby improving the attractiveness of Nigeria as an FDI destination.

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