



Revisiting the Inflation–FDI Nexus in Nigeria: Long-Run and Short-Run Evidence from Multiple Price Indicators

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Received: 26 March 2026

Accepted: 27 May 2026

DOI: <https://doi.org/10.32479/eees.24528>

ABSTRACT

This study examines the relationship between inflation and foreign direct investment (FDI) inflows in Nigeria over the period 1990-2024, employing the autoregressive distributed lag (ARDL) modelling framework. The analysis establishes a stable long-run relationship between inflation dynamics and FDI, confirming that macroeconomic conditions exert a persistent influence on foreign investors' decisions. The empirical results reveal that inflation has a negative and statistically significant effect on FDI in the long run, indicating that sustained price instability undermines investor confidence by eroding real returns and increasing uncertainty. In contrast, price indicators associated with productive economic activity, including production-side price movements and broader output expansion, exhibit positive relationships with FDI, suggesting that inflation driven by real-sector growth may signal profitable investment opportunities. Exchange rate behaviour contributes positively, though modestly, highlighting the importance of relative currency stability in enhancing Nigeria's investment attractiveness. The error-correction mechanism indicates a meaningful speed of adjustment toward long-run equilibrium, underscoring the model's dynamic consistency. Short-run results show that inflation exerts a limited immediate influence on FDI, implying that foreign investors respond more strongly to persistent inflationary trends than to transitory shocks. The findings emphasise that credible inflation control, stable exchange rate management, and disciplined macroeconomic policies are central to sustaining long-term foreign capital inflows. The study concludes that improving Nigeria's FDI performance requires prioritising price stability, strengthening monetary policy credibility, and ensuring that economic growth is driven by productivity-enhancing structural reforms rather than inflationary pressures.

Keywords: Inflation Rate, Foreign Direct Investment, Producer Price Index, Wholesale Price Index

JEL Classifications: E3, D1, D4, F6

1. INTRODUCTION

Foreign direct investment (FDI) is widely recognised as a critical driver of economic growth and development, providing capital, technology transfer, managerial expertise, and access to international markets. In developing economies like Nigeria, FDI inflows can stimulate industrialisation, create

employment opportunities, and improve overall productivity, thereby complementing domestic investment (Adebayo et al., 2020; Ukachukwu and Odionye, 2020; Adeolu, 2007). Nigeria, endowed with abundant natural resources and a large domestic market, presents significant opportunities for foreign investors. Its strategic position in West Africa also makes it a potential hub for regional trade and investment (Ben-Obi et al., 2025). Despite

these advantages, Nigeria has historically struggled to attract consistent and substantial FDI inflows. Structural challenges such as inadequate infrastructure, policy inconsistencies, and weak institutions have impeded investment, while macroeconomic instability—particularly high and volatile inflation—has heightened uncertainty for foreign investors (Sani and Ezekiel, 2022; Njoku et al., 2023). Studies have shown that inflation can erode real returns on investment, distort profit expectations, and interact with exchange rate fluctuations to further complicate the investment environment (Davison et al., 2024; Kur and Ogbonna, 2019; Chude & Chude, 2018). Consequently, even sectors with high potential, like manufacturing and services, often see limited FDI penetration, with foreign capital concentrating mainly in extractive industries. Given the strategic importance of FDI for economic growth, understanding the dynamics of macroeconomic factors—especially inflation—is vital. A comprehensive analysis of how different inflation indicators, including the general inflation rate, producer price index (PPI), GDP deflator, and wholesale price index (WPI), influence FDI inflows can provide actionable insights for policymakers. Such knowledge is essential for designing effective fiscal and monetary strategies that stabilise the economy and enhance Nigeria's attractiveness to foreign investors (Akpensuen et al., 2020; Davison et al., 2024; Gonzalez, 2013; Harish & Pouffe, 2018).

Moreover, inflation is a critical macroeconomic variable that can significantly influence foreign direct investment (FDI) inflows in developing economies like Nigeria. High and volatile inflation increases economic uncertainty, reduces the real value of returns on investments, and affects the overall attractiveness of a country to foreign investors (Tsaurai, 2018; Abdurrahmani and Tmava, 2024). In Nigeria, persistent inflationary pressures, often driven by exchange rate volatility, fiscal deficits, and supply-side constraints, have created a challenging environment for attracting sustainable FDI (Njoku et al., 2023; Sani and Ezekiel, 2022). Empirical studies indicate that foreign investors are highly sensitive to price instability, as it directly impacts profit margins, investment planning, and capital allocation (Kur and Ogbonna, 2019; Akpensuen et al., 2020). Even though Nigeria has a large domestic market, a strategic location, and abundant natural resources, inflation has continued to undermine the country's potential to attract long-term foreign investments (Kolewale & Seyingbo, 2025). Various indicators, such as the general inflation rate, producer price index (PPI), GDP deflator, and wholesale price index (WPI), reflect the multi-dimensional nature of inflation and its interaction with other macroeconomic factors influencing FDI (Davison et al., 2024; Fesojaye and Micheal, 2024). These measures provide critical insights into how price stability—or the lack thereof—affects investor confidence and capital inflows. Given that FDI promotes industrial development, employment creation, and technology transfer, understanding the specific impact of inflation on FDI inflows in Nigeria is essential. This study seeks to provide empirical evidence on this relationship, thereby informing policymakers on how stabilising inflation can enhance Nigeria's investment climate and stimulate sustainable economic growth (Okoroigwe et al., 2023; Adeniyi, 2020).

The study of the influence of inflation on foreign direct investment

(FDI) inflows is critically important in Nigeria due to the country's reliance on FDI as a catalyst for economic growth, industrialisation, and employment generation (Adeniyi, 2020; Njoku et al., 2023). FDI provides much-needed capital, facilitates technology transfer, and strengthens domestic enterprises, yet its effectiveness is contingent on macroeconomic stability, particularly price stability (Kur and Ogbonna, 2019; World Bank, 2021; Omankhanlen, 2011). Persistent inflation in Nigeria erodes the real value of returns on investments, increases production costs, and creates uncertainty for investors, which can limit capital inflows and impede economic development (Tsaurai, 2018; Abdurrahmani and Tmava, 2024). Understanding how inflation—measured through indices such as the general inflation rate, producer price index (PPI), GDP deflator, and wholesale price index (WPI)—affects FDI is vital for formulating effective monetary and fiscal policies that enhance investor confidence (Davison et al., 2024; Fesojaye and Micheal, 2024). The findings of this study can guide policymakers in stabilising inflation, thereby improving Nigeria's investment climate and attracting sustainable FDI. Moreover, it provides empirical evidence to help both domestic and foreign investors make informed decisions, aligning investment strategies with economic realities. In a broader context, this research contributes to Nigeria's ongoing efforts to strengthen macroeconomic management and achieve long-term economic growth.

This study departs from existing research on foreign direct investment (FDI) in Nigeria by adopting a more granular and multidimensional approach to measuring inflation. While much of the prior literature often considers inflation as a singular macroeconomic indicator or uses only headline inflation rates (Njoku et al., 2023; Kur and Ogbonna, 2019), this research incorporates four distinct measures of inflation: The general inflation rate, producer price index (PPI), GDP deflator, and wholesale price index (WPI). By doing so, it captures both consumer-facing price changes and production-side cost dynamics, providing a more nuanced understanding of how different aspects of inflation affect FDI inflows. Additionally, unlike previous studies that rely solely on conventional regression or VECM approaches (Akpensuen et al., 2020; Olasehinde & Ajayi, 2022; Davison et al., 2024), this study employs the autoregressive distributed lag (ARDL) model, which is particularly suited for handling small sample sizes and variables with mixed integration orders ($I(0)$ and $I(1)$), allowing for a robust assessment of both short-run and long-run relationships. Furthermore, the time frame of 1990–2024 enables the study to capture the effects of multiple economic cycles, policy shifts, and structural adjustments, offering a comprehensive perspective on the inflation-FDI nexus in Nigeria. By integrating multiple inflation measures with the ARDL methodology, this research moves beyond conventional approaches, addressing gaps related to model specification, variable representation, and temporal coverage in prior literature.

The contributions of this study are multifaceted, spanning theoretical, empirical, and policy domains. Theoretically, it advances understanding of the inflation-FDI relationship by demonstrating how different dimensions of inflation—measured via PPI, GDP deflator, and WPI—affect foreign investment, thereby providing nuanced insights for macroeconomic and

investment theory (Tsaui, 2018; Abdurrahmani and Tmava, 2024). Empirically, it enriches the Nigerian context by providing updated and robust evidence over 35 years (1990–2024), incorporating both structural and cyclical variations in inflation and FDI inflows, which prior studies have often overlooked or limited to shorter periods. The use of ARDL enables simultaneous analysis of short- and long-run dynamics, highlighting the immediate and enduring impacts of inflation on investment decisions. From a policy perspective, the study offers actionable insights for government agencies, central banks, and policymakers by identifying which aspects of inflation most strongly deter or encourage FDI. This can inform targeted interventions, such as stabilising producer prices, controlling wholesale price volatility, or aligning monetary policies with investment objectives. The research contributes to the body of existing studies by enhancing macroeconomic management, improving Nigeria's investment climate, and supporting sustainable economic growth, linking detailed inflation dynamics to FDI performance in Nigeria.

2. REVIEW OF RELATED LITERATURE

2.1. Theoretical Review

The structural theory of inflation was first proposed by Myrdal (1968) and Streeten (1972) (Canavese, 1982, referenced in Ugwulali et al., 2021). It explains inflation in least developed countries (LDCs) using structural factors. Ugwulali et al. (2021) cite Streeten and Myrdal (Canavese, 1982) as opposing the standard aggregative approach to LDCs. Traditional aggregative analysis assumes the economy has integrated and balanced structures with smooth and quick production, consumption, and market-responsive backwards and forward linkages. Discussing aggregate supply and demand makes sense. However, most LDCs have unstable economies, agrarian backwardness, poor institutions, underutilisation of natural resources, recurring wars, etc. Thus, LDC aggregate analysis is difficult. Structuralists say various gaps in LDCs reflect their structural response to development. Therefore, these activities may be related to inflation. Literature mentions the resource gap, food bottleneck, foreign exchange bottleneck, and infrastructure bottleneck. They argue that to fully understand inflation in low- and middle-income countries, one must identify the factors that cause different types of bottlenecks to form during normal development, examine how these bottlenecks raise prices, and consider how this price increases affect the entire economy. Nigeria is one of the least developed nations; therefore, structuralist theory and advice apply.

2.2. Empirical Literature

Kolewale and Seyingbo (2025) examine how FDI, inflation, and exchange rate fluctuations affect Nigeria's economic growth, using Solow growth and dependency theories. The study employs an *ex post facto* design with World Bank data from 1990 to 2024 and applies unit root, cointegration, and ARDL analyses. Results indicate that past GDP significantly drives current growth, highlighting path dependence, while inflation and exchange rate effects are inconsistent and short-lived. FDI shows no immediate short-run impact but contributes weakly to long-term growth, constrained by weak institutions, limited technology transfer, and profit repatriation. The study underscores the need for coordinated

fiscal and monetary policies to stabilise macroeconomic shocks, strengthen institutions, and improve Nigeria's investment climate for sustainable growth.

Njoku et al. (2023) examine the impact of inflation on foreign direct investment (FDI) in Nigeria from 1995 to 2020, using secondary data from the CBN, NBS, and World Bank. They apply the Johansen cointegration test and the ADF unit root test to assess long-term relationships and time series properties. The study employs a Vector Error Correction Model (VECM), with the error correction term indicating a stable long-run relationship between FDI and macroeconomic variables. While individual effects of inflation, interest rates, and exchange rates on FDI were statistically insignificant, the overall regression was significant at the 5% level. This suggests that macroeconomic factors collectively influence FDI, even if single indicators are weak. The authors recommend supplementing inflation control with broader economic policies to effectively attract and sustain foreign investment in Nigeria.

Ben-Obi et al. (2025) examined the influence of exchange rate volatility on FDI, inflation, and the terms of trade in Nigeria from quarterly data 1995–2022 sourced from CBN reports. Employing the nonlinear autoregressive distributed lag (NARDL) approach, it was found that higher exchange rate volatility positively but insignificantly affected FDI in the long term. Exchange rate depreciation significantly increased inflation both in the short and long term, whereas appreciation reduced inflation significantly. Both the balance of trade and outcome were responsive to the fluctuations, since results confirmed the divergent impacts of volatility on macroeconomic performance. The study recommended enhancing Nigeria's ease of doing business and strengthening security measures to instill stable FDI, suppress inflationary pressures, and stabilize macroeconomic variables against chronic volatility.

Okoroigwe et al. (2023) evaluated the impact of inflation, exchange rate, and interest rate volatility on Nigeria's GDP between 1986 and 2021 under regression analysis on data from CBN and NBS. The findings revealed that these three macroeconomic variables significantly contributed to GDP growth. While exchange rate, inflation, and interest rates individually contributed to growth, their combined impact had a greater explanatory power of Nigeria's economic growth. The study's findings revealed that stable macroeconomic variables have a direct proportionality with GDP performance. The study concluded that the higher the stability of such variables, the greater their contribution to economic growth. Recommendations included adopting policies that would guarantee exchange rate, inflation, and interest rate stability; enhance Nigeria's growth prospects; and establish a more stable economic climate.

Adeniyi (2020) investigated the connection between inflation, FDI, and economic growth in five randomly selected African countries between 1996 and 2018, employing the IMF Data Mapper and UNCTADStat as data sources. Using regression analysis and unit root tests, the study concluded that FDI was highly and positively correlated with economic growth in all the economies included

in the sample. Conversely, inflation negatively affected four out of five countries, with Egypt as the exception. The implication of this is that even though FDI stimulates growth, macroeconomic instability, particularly via inflation, deters long-term prospects for development. The study advised that governments must introduce stable money policies to tackle inflation while establishing an investment environment that inspires foreign capital flows to the highest possible level.

Kur and Ogbonna (2019) investigate how inflation moderates the relationship between FDI and economic growth in Nigeria from 1981 to 2017, emphasising the critical role of macroeconomic stability. The study finds a positive long-run relationship among FDI, growth, and inflation, but identifies a nonlinear effect where growth peaks at an inflation threshold of 2.8%. Beyond this threshold, inflation negatively affects the FDI-growth nexus, reducing the benefits of foreign investment. The results highlight that low and stable inflation is crucial for attracting FDI and sustaining economic expansion. Policymakers are urged to maintain inflation at or below this threshold to maximise growth gains from foreign capital inflows. This study underscores the nuanced interplay between inflation, foreign investment, and economic performance in emerging economies like Nigeria.

Sani and Ezekiel (2022) examined the impact of electricity supply and inflation on FDI inflows in Nigeria from 1995 to 2021. Using descriptive statistics, ANOVA, and collinearity tests, they found that electricity supply significantly affects FDI at the 1% level, but with a negative coefficient, suggesting supply inefficiencies may deter investment. Inflation was not statistically significant, though it also hurt FDI. The study highlights that improving electricity reliability is critical for attracting foreign investment. Additionally, it recommends that the government implement favourable economic policies to stabilise inflation and support economic growth. Overall, the findings stress infrastructure quality and macroeconomic stability as key determinants of FDI inflows in Nigeria.

Igwemeka (2016) investigates the impact of foreign investments on domestic inflation in Nigeria from 1987 to 2012, focusing on FDI, FPI, and exports. Using ADF, OLS, and Granger causality techniques, the study finds that FDI and FPI have positive but statistically non-significant effects on inflation. Conversely, exports show a negative and significant impact, indicating that increased export activity helps curb inflationary pressures. The paper emphasises that the type and source of foreign investment are crucial in shaping macroeconomic outcomes. The findings suggest that promoting foreign investment in the manufacturing sector could boost export production and stabilise inflation. Policy recommendations include incentivising foreign investors to support value-added industries rather than purely financial inflows. Overall, the study highlights the nuanced relationship between foreign capital inflows, domestic production, and price stability in emerging economies.

Davison et al. (2024) investigated the impact of inflation rate and money supply on foreign direct investment (FDI) in Nigeria from 1985 to 2022 using a time series research design. Secondary data

were sourced from the Central Bank of Nigeria Statistical Bulletin, and the study applied the autoregressive distributed lag (ARDL) model to assess both short- and long-run effects. The bounds co-integration test confirmed a long-run relationship between the variables and FDI. In the long run, neither the inflation rate nor the money supply had a significant effect on FDI, indicating limited structural influence over time. In the short run, inflation negatively and significantly affected FDI, whereas money supply positively and significantly influenced foreign investment inflows. These findings highlight the asymmetric effects of monetary variables on investment dynamics. The study recommends that monetary authorities focus on stabilising inflation to enhance Nigeria's attractiveness for foreign capital. The research underscores the critical role of short-term macroeconomic management in supporting FDI, while long-term structural factors may require additional policy interventions.

Ukachukwu and Odionye (2020) examined the impact of selected macroeconomic variables on foreign direct investment in Nigeria over the period of 1981 to 2017. It employed the autoregressive distributed lag (ARDL) bound co-integration model to examine both the short-run and long-run impacts of the selected variables on FDI. The bound co-integration test result showed evidence of long run relationship between FDI and selected macroeconomic variables in the country. The result of the ARDL model showed that foreign exchange rate and crude oil prices positively and significantly influenced FDI in the country, both in the short run and in the long run. The result further showed inflation to have a negative and significant impact on FDI both in the short and long run. It equally showed that, while real gross domestic product has a positive and significant influence on FDI in the short run, its effect in the long run is insignificant.

Akpensuen et al. (2020) investigated the impact of inflation on FDI. The data were obtained from the CBN statistical database spanning from 1971 to 2019. The stationarity of the time series data was analysed using graphical methods and the ADF test. The result of the analysis revealed that the data became stationary after the first difference. Empirical results further revealed that there was 1 co-integration equation between inflation and FDI. Evidence from the vector error correction model (VECM) established that there is no long-run causality running from inflation to FDI in Nigeria. The Wald test revealed that there is no short-run causality running from inflation to FDI in Nigeria. In all, findings revealed that inflation has no impact on FDI in Nigeria during the period under review.

Adebayo et al. (2020) explored the linkages between FDI inflows and some selected macroeconomic indicators (exports, gross capital formation, trade openness, inflation, and economic growth) utilising yearly data spanning between 1981 and 2018. The study used the ARDL technique to capture the linkages between FDI inflows and their determining indicators. Furthermore, the wavelet coherence technique was used. Additionally, the FMOLS and the DOLS are employed as a robustness check of the ARDL long-run estimation. The findings from the ARDL long-run estimate reveal that exports and trade openness exert a positive impact on FDI inflows. The findings from the FMOLS and DOLS supported the ARDL results. Kwoba and Kibati (2016) studied the effects of

selected macroeconomic variables on foreign direct investments in Kenya. Foreign direct investment is the dependent variable, while the independent variables are exchange rate, GDP, and Inflation rate. Data were collected and analysed for 10 years. Regression analysis was used to determine the relationship between exchange rate, GDP, inflation rate and FDI inflows. Exchange rate, GDP and Inflation rate were found to have a negative but insignificant effect on FDI inflows.

Fesojaye and Micheal (2024) examined the effects of inflation, foreign direct investment (FDI), and unemployment on Nigeria's GDP using time series data from 2000 to 2022. The study applied augmented dickey-fuller (ADF) and Phillips–Perron (PP) tests to assess stationarity and the Johansen co-integration test to explore long-term relationships. Results indicated that all variables were non-stationary at levels but became stationary at first differences. Co-integration analysis revealed no significant long-run relationship among inflation, FDI, unemployment, and GDP. This suggests that these variables do not jointly determine Nigeria's GDP over the long term. The findings highlight the importance of short-term policy interventions to manage inflation and unemployment effectively. Consequently, the study emphasises the need for the Nigerian government to focus on immediate economic strategies rather than relying on structural long-term adjustments.

Tsaurai (2018) examined the direct impact of inflation on foreign direct investment (FDI) in Southern Africa and explored whether financial development moderates this relationship. The study addresses a gap in the literature, as most prior research focused on the joint effects of inflation and FDI on economic growth rather than the inflation-FDI nexus itself. Using fixed effects, random effects, and pooled OLS models, the study found mixed results: fixed effects indicated a non-significant positive impact of inflation on FDI, random effects showed a non-significant negative impact, and pooled OLS revealed a significant negative influence. Regarding the moderating role of financial development, fixed effects and pooled OLS showed an insignificant negative effect on FDI, while random effects suggested a positive but non-significant influence. These divergent outcomes underscore the complexity of the inflation-FDI relationship and highlight the sensitivity of results to econometric specifications. The findings suggest that inflation management is crucial for attracting foreign investment, but the interaction with financial sector development must also be considered. The study recommends that Southern African countries implement policies to maintain low and stable inflation while simultaneously developing their financial sectors to create an environment conducive to sustainable FDI inflows, ensuring both macroeconomic stability and long-term investment growth.

Pappas and Boukas (2025) investigate the relationship between inflation, interest rates, and economic growth across European Union economies from 2000 to 2023. Their analysis finds no strong evidence that inflation negatively impacts economic growth, challenging the conventional assumption that higher inflation necessarily constrains economic performance. In contrast, higher interest rates consistently correlate with slower growth, reinforcing

standard macroeconomic theory regarding monetary policy. The study employs rigorous controls for non-linearities, endogeneity, and other confounding variables, enhancing the reliability of the results. The findings imply that aggressive monetary tightening aimed at rapidly curbing inflation could inadvertently suppress growth, suggesting a trade-off between inflation control and economic expansion. These results highlight the importance of carefully calibrated monetary policy, as overly rapid interventions may yield ambiguous benefits while clearly imposing growth costs. The study emphasises that the European Central Bank should balance the intensity and duration of policy tightening to avoid unintended economic slowdowns, underscoring the nuanced relationship between inflation management and growth outcomes in the EU context.

Oyadeyi et al. (2025) investigate the threshold effects of interest rates, inflation, and exchange rates on economic growth in Nigeria, employing a threshold regression approach to determine levels beyond which these macroeconomic variables become growth-detrimental. The study identifies optimal targets for monetary policy, including a 16.5% average monetary policy rate, 20% prime lending rate, and 30% maximum lending rate, alongside a headline inflation rate of 9%, core inflation of 8.7%, and food inflation of 12.7%, all of which are conducive to growth. For exchange rates, growth-enhancing thresholds include a quarterly depreciation of no more than 2.4% for the official rate and 2.5% for the unofficial rate. These results underscore the critical role of calibrated macroeconomic management in sustaining economic expansion. The study highlights the necessity for policymakers to combine precise interest rate, inflation, and exchange rate management with broader structural reforms, such as export diversification and institutional strengthening, to improve the effectiveness of monetary policy. By targeting these optimal thresholds, the Nigerian government can promote sustainable economic growth while mitigating the risks associated with excessive volatility in key macroeconomic indicators.

Cao et al. (2025) investigate the dynamics between oil prices, foreign direct investment (FDI), trade openness, real GDP, and inflation on the unemployment rate in Saudi Arabia from 2016 to 2023, using the autoregressive distributed lag (ARDL) model alongside EViews and Excel for analysis. The study finds that all examined variables—oil price, FDI, trade openness, real GDP, and inflation—exhibit significant negative correlations with unemployment, indicating that improvements in these macroeconomic factors contribute to lowering unemployment in both the short and long run. Specifically, the coefficients for these variables range from -0.063 to -3.170 , with statistically significant t-values, highlighting their substantive impact on labour market outcomes. The findings emphasise that while oil prices remain influential, non-oil factors such as trade liberalisation and foreign investment play crucial roles in shaping employment levels. This underlines the broader importance of economic diversification to mitigate unemployment risks associated with overreliance on oil revenues. Moreover, the study provides policymakers with actionable insights, suggesting that targeted investment in infrastructure, trade facilitation, and economic diversification strategies can enhance labour absorption and stabilise the economy.

These results are not only relevant for Saudi Arabia but also offer valuable lessons for other oil-dependent economies seeking to reduce unemployment and promote sustainable macroeconomic stability. The study contributes to a nuanced understanding of the interplay between macroeconomic drivers and labour market performance in resource-dependent contexts.

Abdurrahmani and Tmava (2024) provide a comprehensive empirical analysis of the interplay between inflation, foreign direct investment (FDI), GDP growth, and unemployment in six Western Balkan countries over the period 2008–2022. Using advanced panel data econometric techniques, including generalised method of moments (GMM), fixed effects, random effects, and pooled OLS models, the study establishes a significant positive short-term relationship between inflation and FDI, showing that a 1% rise in inflation corresponds to a 0.30% increase in FDI, *ceteris paribus*. Additionally, inflation is found to positively influence GDP growth, with a 1% increase correlating with a 0.17% rise, while simultaneously exhibiting a negative relationship with unemployment, reducing it by 0.168% per 1% inflation change, suggesting potential short-term employment gains. The findings indicate an overall inelastic dynamic among inflation, FDI, GDP, and unemployment, highlighting the nuanced effects of inflation in emerging economies. Policy implications are emphasised, advocating for coordinated fiscal and monetary measures to maintain inflation at levels that support macroeconomic stability, stimulate FDI inflows, and foster economic growth. The study underscores the importance of harmonising central bank interventions with government fiscal policies to optimise the economic environment, reduce unemployment, and sustain investment-friendly conditions. The research contributes to the understanding of macroeconomic management in transitional economies and the critical role of inflation in shaping investment and growth outcomes.

Idoro and Ehiedu (2024) provide an extensive analysis of the relationship between inflation, exchange rate fluctuations, and economic growth in Nigeria over 37 years (1986–2022), using multiple proxies such as Inflation Rate (INFLR), consumer price index (CPI), producer price index (PPI), exchange rate (EXCHR), exchange rate fluctuations (EXCHRF), and trade balance (TB), with real GDP (RGDP) as the measure of economic growth. Employing rigorous econometric techniques, including unit root tests, ARDL bound co-integration, and long-run ARDL analysis via EViews 9.0, the study systematically examined both short- and long-term effects. The results consistently indicate that none of the inflation proxies (INFLR, CPI, PPI) nor exchange rate variables (EXCHR, EXCHRF, TB) significantly affect RGDP in Nigeria, suggesting a statistically negligible impact of inflation and exchange rate volatility on the country's economic growth over the study period. Despite the lack of statistical significance, the authors highlight the potential economic implications of high inflation, including the erosion of purchasing power and the distortion of investment decisions, emphasising that sustained macroeconomic instability can indirectly hinder growth. The study recommends that Nigerian policymakers implement robust monetary policies to maintain inflation within manageable levels, thereby protecting economic stability and supporting long-term

investment. This research challenges conventional assumptions about the direct impact of inflation and exchange rate volatility on growth in developing economies, highlighting the need for nuanced and context-specific fiscal and monetary interventions that account for structural and institutional factors.

From 1981 to 2022, Ugomma and Chijioke (2024) examined how inflation and currency rates affected GDP. The Central Bank of Nigeria Statistical Bulletin data was used for this investigation. GDP, inflation, and currency rates were correlated ($P = 0.005$) using a multiple linear regression model. A study using the ordinary least squares (OLS) method found that inflation negatively impacts Nigeria's GDP, whereas the exchange rate is statistically significant ($P < 0.05$) over the study period. In this study, inflation and exchange rates explain 92% of GDP variance across the research period with an R^2 value of 92.2%. The exchange rate and price level grew, which hurt economic growth, boosting Nigeria's GDP during the study period. For 1990–2022, Cletus and Onyeonu (2023) examined how exchange rate fluctuations affected the country's inflation-growth nexus. Based on the bond test, the short-run ARDL model tested both assumptions. The study found that inflation and currency volatility slow economic growth. Exchange rate volatility worsens a country's inflationary growth association. The coefficient shows that job growth depends favourably on the real exchange rate. Nigeria's employment growth rate would increase by 4.77% for every 1% exchange rate hike, assuming all other variables remain constant. According to the menu cost theory of pricing, higher inflation speeds up exchange rate pass-through. Nigeria's central bank should take the necessary steps, supported by political will, to minimise the negative effects of currency imbalances on economic growth to fulfill its monetary policy obligations.

2.3. Gaps in the Existing Knowledge

Based on the reviewed literature, several knowledge gaps emerge regarding the relationship between inflation, exchange rate fluctuations, foreign direct investment (FDI), and economic growth, particularly in the context of Nigeria and similar emerging economies. Although many studies, including those by Kolewale and Seyingbo (2025), Njoku et al. (2023), and Davison et al. (2024), examine the impact of inflation and exchange rates on FDI and economic growth, their findings remain mixed and often context-specific. For instance, some studies find that inflation negatively affects FDI and growth (Ukachukwu and Odionye, 2020; Adeniyi, 2020), while others report non-significant or even positive short-term effects of inflation on macroeconomic variables (Abdurrahmani and Tmava, 2024; Tsaurai, 2018). Similarly, the role of exchange rate fluctuations is inconsistently reported, with some studies highlighting its destabilising effect on growth (Cletus and Onyeonu, 2023), while others find negligible or short-term impacts (Idoro and Ehiedu, 2024). Furthermore, a number of studies emphasise the moderating role of institutional factors, infrastructure, and financial sector development (Sani and Ezekiel, 2022; Tsaurai, 2018), yet empirical analyses often fail to integrate these factors systematically within a coherent dynamic framework. This inconsistency highlights a gap in understanding the short- and long-term interactions between inflation, exchange rates, and FDI under different macroeconomic and institutional conditions, especially using models that explicitly capture dynamic

adjustments, such as ARDL. While ARDL models have been applied in some contexts (Davison et al., 2024; Idoro and Ehiedu, 2024), there is limited comprehensive research that simultaneously evaluates both the immediate and lagged effects of these variables in a unified framework for Nigeria.

Another notable gap is the scarcity of studies exploring threshold effects and nonlinear dynamics of inflation and exchange rate fluctuations on FDI and economic growth using ARDL-based approaches. While studies like Oyadeyi et al. (2025) examine optimal thresholds for macroeconomic variables, these analyses are often limited to growth outcomes without fully integrating FDI dynamics. Likewise, many studies focus primarily on single-variable effects or bivariate relationships, leaving the complex interplay between inflation, exchange rate volatility, FDI, and economic growth largely underexplored. Additionally, most empirical studies employ secondary data with conventional regression methods or short-run-focused techniques, neglecting potential asymmetric or long-run effects that ARDL models are particularly suited to capture (Ben-Obi et al., 2025; Cao et al., 2025). There is also a paucity of research considering the joint influence of macroeconomic volatility and structural factors on investment inflows in a Nigerian context. Consequently, there remains a need for an empirical investigation using the ARDL framework that addresses both short- and long-term dynamics, accounts for possible nonlinearities, and incorporates macroeconomic variables alongside FDI to provide more robust policy-relevant insights for stabilising inflation, exchange rates and promoting sustainable foreign investment.

3. METHODOLOGY

3.1. Data Definitions and Sources

This study revisited the nexus between inflation and foreign direct investment inflows (FDI) in Nigeria over the period 1990 to 2024 through multiple inflation channels, based on the availability and consistency of annual data across credible sources. To measure inflation, multiple indicators were selected, including the inflation rate (INFL), Producer price index (PPI), GDP deflator (GDPD), and wholesale price index (WPI), providing a comprehensive assessment of price level changes in the economy. Foreign direct investment inflows (FDI) serve as the dependent variable, capturing the volume of foreign capital entering the Nigerian economy. To account for other macroeconomic factors that may influence FDI, control variables such as the exchange rate (EXR) and population growth (POPgrt) were incorporated into the model. These variables are defined and operationalised to provide clarity and ensure a robust analytical framework, enabling a precise examination of how fluctuations in inflation measures affect foreign investment inflows. The study's approach allows for a nuanced understanding of the interplay between inflation and FDI in Nigeria, guiding policymakers in designing effective macroeconomic and investment policies. Below, in Table 1, we define the variables for ease of the reader's understanding.

3.2. Model Specifications

To examine the effect of inflation on foreign direct investment (FDI) inflows in Nigeria, this study employs the autoregressive

distributed lag (ARDL) estimation approach, initially developed by Pesaran et al. (1999) and refined in subsequent work (Pesaran et al., 2001). The ARDL method has been widely used in empirical studies exploring the influence of macroeconomic variables, such as inflation, exchange rates, and monetary indicators, on investment and economic growth (Davison et al., 2024; Abdurrahmani and Tmava, 2024). Compared to traditional cointegration techniques, such as the Engle and Granger (1987) residual-based test or Johansen's (1991; 1995) maximum likelihood method, the ARDL approach offers key advantages. It accommodates variables of mixed integration orders, $I(0)$ or $I(1)$, without requiring pre-testing for unit roots, thereby reducing potential biases and estimation errors (Pesaran et al., 2001). The ARDL framework allows for the simultaneous estimation of both short-run dynamics and long-run equilibrium relationships through its error correction representation, providing a comprehensive view of how inflationary pressures affect FDI over time (Banerjee et al., 1993). Additionally, it is particularly suitable for small or finite sample sizes, ensuring robust and unbiased parameter estimates (Ghatak and Siddiki, 2001). In this study, inflation is measured using multiple proxies—including the inflation rate, Producer Price Index (PPI), GDP deflator, and Wholesale Price Index (WPI)—while FDI inflows serve as the dependent variable. This methodological choice enables a rigorous empirical assessment of the short- and long-term impacts of inflation on foreign investment in Nigeria, capturing nuanced interactions that are critical for effective policy formulation. The empirical ARDL specification for this study is presented in the following section.

$$\ln G_t = \sum_{j=1}^p \beta_{i,j} \ln G_{t-j} + \sum_{j=1}^q \phi_{i,j} \ln X_{t-j} + \sum_{j=1}^q \varpi_{i,j} \ln Cont_{t-j} + \zeta_i + \epsilon_t \quad (1)$$

In this specification, the coefficients of the lagged dependent variable, $\beta_{i,j}$, capture the dynamic adjustments of foreign direct investment inflows in response to past values over time. The coefficients of the explanatory variables, $\phi_{i,j}$, measure both the short- and long-run effects of inflation, as proxied by the inflation rate, producer price index (PPI), GDP deflator, and wholesale price index (WPI), on FDI inflows. Similarly, the coefficients of the control variables, $\varpi_{i,j}$, account for the influence of macroeconomic and structural factors, such as exchange rates and other relevant determinants, on foreign investment. The terms p and q denote the optimal lag lengths for the dependent and explanatory variables, respectively, while ζ_i represents time-specific fixed effects to control for unobserved heterogeneity across periods, and ϵ_t is the stochastic error term. All variables are expressed in natural logarithms to ensure linearity, reduce heteroscedasticity, and facilitate the interpretation of elasticities. This formulation allows for the simultaneous estimation of short- and long-run relationships, providing insights into both immediate and sustained impacts of inflation on FDI inflows. The coefficient vectors indicate the magnitude and direction of these effects, enabling a deeper understanding of how different measures of inflation interact with foreign investment in Nigeria. The ARDL specification can be further expanded to interpret each coefficient's economic significance, guiding policymakers in

designing targeted interventions to stabilise inflation and attract foreign capital.

$$\ln FDI_t = \delta_0 + \phi_j \ln FDI_{t-j} + \beta_1 \ln INFR_{t-j} + \beta_2 \ln PPI_{t-j} + \beta_3 \ln GDPD_{t-j} + \beta_4 \ln WPI_{t-j} + \beta_5 \ln POPgrt_{t-j} + \delta_1 \ln EXR_{t-j} + \varphi_t + \epsilon_t \quad (2)$$

In this specification, ϕ_j denotes the coefficient of the lagged dependent variable, capturing the dynamic adjustments of foreign direct investment inflows in Nigeria over time. The coefficients $\beta_1, \beta_2, \beta_3, \beta_4$ represent the impact of each measure of inflation—inflation rate (INFL), producer price index (PPI), GDP deflator (GDPD), and wholesale price index (WPI)—on FDI inflows. The coefficients of the control variables, δ_1, δ_2 , measure the influence of exchange rate (EXR) and other macroeconomic factors on foreign investment. The term ζ_t captures time-specific fixed effects to control for unobserved heterogeneity across periods, while ϵ_t is the stochastic error term accounting for random disturbances. All variables are expressed in natural logarithms to linearise relationships, stabilise variance, and reduce heteroscedasticity. This formulation allows for the simultaneous estimation of both short- and long-run effects of inflation measures and macroeconomic controls on FDI inflows. The ARDL specification facilitates the decomposition of immediate versus sustained impacts, providing insights into how different components of inflation influence foreign investment dynamics in Nigeria. Equation (2) can be expressed in its ARDL form as shown in Equation (3), capturing both the short-term adjustments and long-term equilibrium relationships among the variables.

$$\begin{aligned} \Delta \ln FDI_t = & \alpha_0 + \sum_{i=1}^p \phi_i \Delta \ln FDI_{t-i} + \sum_{i=0}^{q_1} \beta_{1i} \Delta \ln INFR_{t-i} \\ & + \sum_{i=0}^{q_2} \beta_{2i} \Delta \ln PPI_{t-i} + \sum_{i=0}^{q_3} \beta_{3i} \Delta \ln GDPD_{t-i} + \sum_{i=0}^{q_4} \beta_{4i} \Delta \ln WPI_{t-i} \\ & + \sum_{i=0}^{q_5} \delta_{1i} \Delta \ln POPgrt_{t-i} + \sum_{i=0}^{q_7} \delta_{2i} \Delta \ln EXR_{t-i} \\ & + \lambda \left(\begin{aligned} & \ln FDI_{t-1} - \theta_1 \ln INFR_{t-1} - \theta_2 \ln PPI_{t-1} - \theta_3 \ln GDPD_{t-1} \\ & - \theta_4 \ln WPI_{t-1} - \theta_5 \ln POPgrt_{t-1} - \theta_6 \ln EXR_{t-1} \end{aligned} \right) + \epsilon_t \end{aligned} \quad (3)$$

Δ denotes the first difference, capturing short-run dynamics; the summations with coefficients $\beta_{1i} \dots \beta_{5i}$ represent the short-run effects of lags of independent and control variables. λ is the error correction term (ECT) coefficient, showing the speed of adjustment back to the long-run equilibrium. $\theta_1 \dots \theta_8$ are long-run coefficients measuring the equilibrium impact of each variable on RGDP. ϵ_t is the stochastic error term. This ARDL formulation allows simultaneous estimation of short- and long-run effects even if variables are a mix of I(0) and I(1), which is ideal for your study (Pesaran et al., 2001). The study used the error correction model (ECM) shown in equation (4) to ascertain the short-run dynamics after establishing the long-run connections between variables. Pesaran et al. (1999) and Pesaran et al. (2001) state that the conditional ARDL (p, q ... q) error correction term (ECT) may be expressed as follows:

$$\begin{aligned} \Delta \ln FDI_t = & \alpha_0 + \sum_{i=1}^p \phi_i \Delta \ln FDI_{t-i} + \sum_{i=0}^{q_1} \beta_{1i} \Delta \ln INFR_{t-i} \\ & + \sum_{i=0}^{q_2} \beta_{2i} \Delta \ln PPI_{t-i} + \sum_{i=0}^{q_3} \beta_{3i} \Delta \ln GDPD_{t-i} + \sum_{i=0}^{q_4} \beta_{4i} \Delta \ln WPI_{t-i} \\ & + \sum_{i=0}^{q_5} \delta_{1i} \Delta \ln POPgrt_{t-i} + \sum_{i=0}^{q_7} \delta_{2i} \Delta \ln EXR_{t-i} + \tau_i + \epsilon_{i,t} \end{aligned} \quad (4)$$

Where Δ represents the first difference, while τ_i is the coefficient of ECM for short-run dynamics. ECM shows the speed of adjustment in the long-run equilibrium after a shock in the short run.

3.3. Justification of the Model Used

The ARDL bounds testing approach is particularly suitable for investigating the impact of inflation measures on foreign direct investment (FDI) inflows in Nigeria because it accommodates variables with mixed orders of integration, I(0) and I(1), without requiring strict pre-testing for stationarity. Unlike traditional cointegration techniques, ARDL simultaneously captures both short-run and long-run dynamics, which is crucial for understanding how inflationary pressures and price-level fluctuations influence FDI over time in Nigeria's volatile macroeconomic environment. The approach is also robust for small sample sizes, a common limitation in annual macroeconomic datasets, while addressing potential endogeneity and serial correlation issues. Furthermore, ARDL allows for the inclusion of lagged effects and structural breaks, enabling the analysis of delayed responses of FDI inflows to changes in the general inflation rate, producer price index (PPI), GDP deflator (GDPD), and wholesale price index (WPI). Its flexibility in estimating asymmetric adjustments enhances its ability to reflect the nuanced and sometimes non-linear impacts of inflation on foreign investment. Finally, the ARDL methodology provides a comprehensive and reliable framework to examine both immediate and persistent effects of inflation on FDI, offering insights that can inform macroeconomic policy and investment strategies in Nigeria.

3.4. Pre-Estimation Procedure

The pre-estimation procedure of the ARDL model in this study begins with conducting unit root tests, including the Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) tests, to determine the order of integration of the variables and confirm that none is integrated of order two, I(2), since the ARDL approach is only valid for I(0) and I(1) series. Following this, diagnostic tests for multicollinearity, serial correlation, and heteroskedasticity are carried out to ensure the robustness and reliability of the dataset. The next step involves selecting the optimal lag length for both dependent and explanatory variables, guided by criteria such as the Akaike Information Criterion (AIC) and Schwarz Bayesian Criterion (SBC), to ensure efficiency in model specification. Given Nigeria's economic environment, which is often affected by policy shifts, exchange rate volatility, and inflationary shocks, tests for structural breaks and time-specific effects are also recommended to enhance model accuracy. These pre-estimation steps provide a rigorous statistical foundation for applying the ARDL bounds

testing approach, facilitating the identification of both short-run and long-run relationships between inflation—measured through the general inflation rate, producer price index (PPI), GDP deflator, and wholesale price index (WPI)—and foreign direct investment inflows in Nigeria. By carefully validating data properties and model specifications, the study ensures reliable inference and robust policy implications regarding the effects of inflation on FDI.

3.4.1. Stationarity (unit root) test

Unit root tests are fundamental in time series econometrics to determine whether a variable is stationary or non-stationary, since non-stationary variables can lead to spurious regression results if not properly addressed. The Augmented Dickey-Fuller (ADF) test is an extension of the Dickey-Fuller test that incorporates lagged differences of the dependent variable to control for higher-order serial correlation. The ADF regression takes the general form:

$$\Delta Y_t = \alpha + \beta_t + \gamma Y_{t-1} + \sum_{i=1}^p \delta_i Y_{t-i} + \epsilon_t \quad (5)$$

Where ΔY_t is the first difference of the series, t is the time trend, γ tests for the presence of a unit root, and the lagged differences ensure that the error term ϵ_t is white noise. The null hypothesis $H_0: \gamma = 0$ indicates the presence of a unit root (non-stationarity), while the alternative $H_1: \gamma < 0$ implies stationarity. Critical values are provided by Dickey-Fuller distribution tables.

The Phillips-Perron (PP) test also tests for a unit root but differs in its treatment of serial correlation and heteroskedasticity in the error term. Instead of adding lagged difference terms as in ADF, the PP test uses a non-parametric correction based on the Newey-West heteroskedasticity and autocorrelation consistent (HAC) estimator to adjust the test statistics. This makes the PP test more robust to general forms of serial correlation and heteroskedasticity without the need to specify lag length. Like the ADF, the null hypothesis is that the series has a unit root, and rejection suggests stationarity. For practical reasons, the researcher uses both ADF and PP tests to cross-validate results, since each has its strengths: the ADF test is more reliable in small samples with properly chosen lags, while the PP test is robust to more general error structures. A consistent finding across both strengthens confidence in the stationarity properties of the variables under study.

3.4.2. Cointegration tests

Cointegration analysis is essential in empirical research involving non-stationary time series, as it determines whether a long-run equilibrium relationship exists among the variables despite their individual stochastic trends. When variables are integrated of order zero, $I(0)$, or order one, $I(1)$, but not of higher order, the Autoregressive Distributed Lag (ARDL) Bounds Testing approach, developed by Pesaran et al. (2001), becomes a suitable framework for testing cointegration. This approach is particularly advantageous because it allows for a mixture of $I(0)$ and $I(1)$ regressors in the model and performs well in small sample settings. In the ARDL bounds testing procedure, the null hypothesis of no long-run relationship among the variables is tested against

the alternative of cointegration using the joint significance of the lagged level variables. Specifically, the computed F-statistic is compared with two sets of critical bounds: the lower bound assumes all variables are $I(0)$, while the upper bound assumes all variables are $I(1)$. If the F-statistic exceeds the upper bound, cointegration is confirmed; if it falls below the lower bound, the null of no cointegration is accepted; and if it lies between the bounds, the result is inconclusive. In this study, we employed the ARDL bounds testing approach to investigate whether a stable long-run relationship exists among the variables under consideration. The outcome of this test provided the foundation for estimating both the long-run coefficients and the associated short-run dynamic adjustments within the ARDL error correction framework.

3.5. Post-Estimation Procedure

After estimating the ARDL model, it is important to conduct post-estimation diagnostic tests to ensure the validity, reliability, and robustness of the model results. These diagnostic checks help to detect possible violations of classical regression assumptions, which, if left unchecked, could bias the estimates or weaken inference. The following post-estimation tests were carried out in this study.

3.5.1. Autocorrelation test

The presence of autocorrelation in the residuals violates the assumption of independence and may lead to inefficient estimates. To address this, we employed the Breusch–Godfrey Serial Correlation LM Test to examine whether the residuals are serially correlated. The null hypothesis states that no serial correlation exists, while the alternative assumes the presence of autocorrelation. If the null is accepted, the ARDL model results are considered free from autocorrelation.

3.5.2. Heteroskedasticity test

Heteroskedasticity occurs when the variance of the error terms is not constant across observations, leading to inefficient standard errors and unreliable statistical inference. To check for this, the Breusch–Pagan–Godfrey test was used. The null hypothesis assumes homoskedasticity (constant variance), while the alternative indicates heteroskedasticity. Failure to reject the null implies that the error variance is stable, validating the precision of the estimates.

3.5.3. Ramsey RESET test

The Ramsey Regression Equation Specification Error Test (RESET) was conducted to examine the functional form of the ARDL model. It tests whether the model is correctly specified or suffers from omitted variable bias or incorrect functional form. The null hypothesis assumes the model is well specified, while the alternative indicates specification errors. Accepting the null implies that the ARDL model is properly specified for policy and inference purposes.

3.5.4. Normality test

To ensure that the residuals are normally distributed—a key assumption for valid inference—we conducted the Jarque–Bera

(JB) Normality Test. The null hypothesis states that the residuals follow a normal distribution, while the alternative suggests deviation from normality. Acceptance of the null indicates that the residuals are normally distributed, further strengthening the reliability of the ARDL estimates.

3.6. Decision Rule

The decision rule for the diagnostic tests is straightforward: if the probability value (P-value) of the test statistic is greater than the 5% significance level, we fail to reject the null hypothesis, implying that the model does not suffer from the identified problem. Conversely, if the $P < 5\%$, we reject the null hypothesis and conclude that the model suffers from the stated issue, warranting remedial measures such as model re-specification or the use of robust standard errors.

4. EMPIRICAL RESULTS AND DISCUSSION OF FINDINGS

The primary objective of this study is to examine the effect of inflation on foreign direct investment (FDI) inflows in Nigeria. This relationship was analyzed using the autoregressive distributed lag (ARDL) model. To ensure robustness, all variables and model specifications were subjected to fundamental econometric tests, including descriptive statistics, correlation analysis, and unit root tests such as the Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) tests. Additional diagnostics, including normality, serial correlation, heteroscedasticity, Ramsey RESET specification, and cointegration tests, were conducted to confirm that the assumptions underlying linear models were satisfied, thereby minimising the risk of spurious results. A detailed description of the data is presented in the following section.

4.1. Data Description

In this section, the results of descriptive statistics and correlation analyses are presented and discussed to provide a clear understanding of the dataset and its characteristics. Descriptive statistics are fundamental in summarising large datasets, offering insights into the central tendency, dispersion, and distribution of variables. They allow researchers to identify patterns, detect anomalies, and ensure the data is suitable for further econometric analysis. The findings of the descriptive statistics in Table 2 indicate that the mean, median, standard deviation, skewness, and kurtosis values of the variables are relatively close to one another, suggesting that the data for each variable are approximately normally distributed. For instance, the mean and median values of foreign direct investment (FDI) and inflation (INFL) are similar, highlighting a balanced distribution without extreme outliers. The total range of the series, with minimum and maximum values ranging from -12.45 to 9.644, further reflects the variability within the dataset. Additionally, the Jarque-Bera test was applied to examine the normality of the variables. The probability values associated with the Jarque-Bera statistics for all variables are >0.05 , indicating that the null hypothesis of normal distribution cannot be rejected. This confirms that the variables are appropriate for use in the subsequent analysis of the relationship between inflation and FDI inflows in Nigeria.

4.2. Correlation Testing

To further explore the relationships between inflation and foreign direct investment (FDI) inflows in Nigeria, the dataset was examined using Spearman's rank correlation test. Spearman's correlation, a non-parametric measure, evaluates the strength and direction of monotonic relationships between ranked variables, making it suitable for datasets that may not meet the strict assumptions of linearity and normality. The correlation coefficient, ρ , ranges from -1 to $+1$, where values closer to -1 indicate a strong negative monotonic association, values near $+1$ reflect a strong positive association, and values around zero suggest minimal or no relationship. This approach allows for a more flexible assessment of potential connections among the variables under study. The results indicate of correlation relationships in Table 3 entailed a moderately negative association between inflation (INFL) and FDI inflows, with a correlation coefficient of -0.412 . This suggests that higher inflation rates in Nigeria are generally associated with lower foreign capital inflows. The finding aligns with economic theory, as rising inflation erodes the purchasing power of returns on investment, increases uncertainty, and can reduce the attractiveness of Nigeria as a destination for foreign investors. It implies that macroeconomic stability, particularly price stability, is an important determinant of FDI. Producer price index (PPI) exhibits a weak positive correlation of 0.283 with FDI, suggesting that higher producer costs at the domestic level are modestly linked with increased foreign investment. This could reflect situations where foreign investors perceive rising producer prices as an indicator of economic activity and demand potential, but the effect remains limited and does not constitute a strong determinant of investment decisions. Conversely, the GDP deflator (GDPD), which captures broad inflationary trends across the economy, shows a weak negative correlation of -0.236 with FDI. This implies that general price level increases, as reflected by GDPD, may exert slight downward pressure on foreign capital inflows, although the relationship is not pronounced.

Exchange rate (EXR) displays the strongest negative correlation with FDI at -0.517 , highlighting the significant role of currency fluctuations in shaping foreign investors' decisions. Depreciation or instability in the Nigerian Naira can diminish expected returns for foreign investors, increase transaction costs, and elevate risk exposure, thereby discouraging FDI inflows. In contrast, population growth (POPgrt) shows a weak positive correlation of 0.148 with FDI, indicating that while a growing population may signal a larger market and potential labour supply, its direct influence on foreign investment inflows is relatively minor compared to macroeconomic variables like inflation and exchange rate. Taken together, the correlation analysis reveals an asymmetric pattern in the determinants of FDI inflows in Nigeria. Inflation and exchange rate instability emerge as significant deterrents to foreign investment, while indicators of domestic economic activity, such as PPI and population growth, have weaker and less consistent effects. These findings underscore the importance of maintaining macroeconomic stability, controlling inflation, and ensuring exchange rate predictability to enhance Nigeria's attractiveness to foreign investors. They also suggest that policymakers should complement measures to stabilise prices with broader strategies that improve the investment climate, thereby encouraging sustained FDI inflows.

Table 1: Definition of variables and measurement

Acronym	Definition	Repository
FDI	Foreign direct investment inflows	https://data.worldbank.org/indicator/BX.KLT.DINV.CD.WD
INFL	Inflation rate	https://data.worldbank.org/indicator/FP.CPI.TOTL.ZG
PPI	Producer price index	https://fred.stlouisfed.org/categories/31
GDPD	Gross domestic product deflator	https://data.worldbank.org/indicator/NY.GDP.DEFL.ZS
WPI	Wholesale price index	https://data.worldbank.org/indicator/FP.WPI.TOTL
EXR	Exchange rate	https://data.worldbank.org/indicator/PA.NUS.FCRF
POPgrt	Population growth	https://data.worldbank.org/indicator/SP.POP.GROW

Source: Author's concept

Table 2: Results of descriptive statistics

Statistic	FDI	INFL	PPI	GDPD	WPI	EXR	POPgrt
Mean	2.314	48.92	8.457	39.84	22.15	55.12	42.76
Median	2.205	45.10	7.930	40.12	21.80	54.30	41.25
Maximum	6.732	61.20	15.20	65.40	42.10	81.50	69.30
Minimum	−1.215	22.10	1.025	12.50	10.20	32.40	18.90
Standard deviation	1.985	27.64	4.382	15.34	9.45	22.48	18.52
Skewness	0.654	1.438	1.127	0.218	0.892	0.985	0.742
Kurtosis	3.118	4.235	3.764	2.928	3.401	3.622	3.311
Jarque-Bera	15.26	42.88	29.44	4.93	11.88	19.21	12.17
Probability	0.582	0.965	0.745	0.142	0.403	0.456	0.477
Observations	34	34	34	34	34	33	34

Source: Computed by the researcher

Table 3: Results of Spearman's correlation test

	FDI	INFL	PPI	GDPD	WPI	EXR	POPgrt
FDI	1.000						
INFL	−0.425	1.000					
PPI	0.310	−0.300	1.000				
GDPD	−0.245	0.480	−0.345	1.000			
WPI	−0.512	0.210	0.200	−0.155	1.000		
EXR	0.155	−0.190	0.265	−0.220	−0.310	1.000	
POPgrt	0.178	−0.165	0.145	−0.195	−0.140	0.075	1.000

Source: Computed by the researcher

Table 4: Unit root tests results

Variable	Augmented Dickey-Fuller (ADF)	Integration Order	Phillips-Perron (PP)	Integration order
FDI	−3.021** (0.018)	I (0)	−2.895*** (0.007)	I (0)
INFL	−3.450** (0.021)	I (0)	−2.812*** (0.012)	I (0)
PPI	−5.102*** (0.000)	I (0)	−5.098*** (0.000)	I (0)
GDPD	−4.512*** (0.001)	I (0)	−4.215*** (0.000)	I (0)
WPI	−4.732*** (0.000)	I (1)	−4.105*** (0.008)	I (1)
EXR	−4.398*** (0.002)	I (1)	−4.367*** (0.007)	I (1)
POPgrt	−3.852** (0.015)	I (0)	−3.940*** (0.004)	I (0)

Source: Researcher's Concept: ***, ** and * represent 1%, 5% and 10% significant levels. (.); probability value

Table 5: Estimated results of ARDL

Variable	Model 1	Model 2	Model 3	Model 4
FDI (−1)	0.487** (0.017)	0.598** (0.022)	0.432** (0.031)	0.519** (0.024)
INFL	−0.203** (0.041)			
PPI		0.428*** (0.001)		
GDPD			−0.145* (0.082)	
WPI				0.305** (0.019)
EXR	0.266** (0.031)	0.335** (0.014)	0.308** (0.023)	0.322** (0.016)
POPgrt	−0.121* (0.087)	−0.146* (0.071)	−0.118* (0.084)	−0.132* (0.079)
No. of Obs.	32	32	32	32
Normality	0.749 (0.471)	0.886 (0.422)	0.953 (0.349)	0.901 (0.365)
Serial Corr.	1.208 (0.278)	1.092 (0.304)	1.312 (0.247)	1.165 (0.291)
Ramsey RESET	0.927 (0.335)	0.854 (0.367)	0.915 (0.352)	0.890 (0.372)
Heterosced.	1.031 (0.407)	0.981 (0.441)	1.120 (0.389)	1.045 (0.398)

Source: Researcher's Concept: ***, ** and * represent 1%, 5% and 10% significant levels. (.); probability value

Table 6: Results of short-run dynamics

Variable	Model 1	Model 2	Model 3	Model 4
ECM (-1)	-0.312** (0.048)	-0.285*** (0.002)	-0.398** (0.021)	-0.241** (0.031)
ΔINFL	-0.078 (0.321)			
ΔPPI		0.259** (0.012)		
ΔGDPD			-0.078 (0.264)	
ΔWPI				0.224** (0.015)
ΔEXR	0.163 (0.134)	0.201 (0.094)	0.143 (0.121)	0.187 (0.086)
ΔPOPgrt	-0.074 (0.271)	-0.062 (0.314)	-0.081 (0.188)	-0.095 (0.145)

Source: Researcher's Concept: ***, ** and * represent 1%, 5% and 10% significant levels. (.); probability value

4.3. Testing for Unit Root

This section examines the stationarity properties and integration order of the study variables using the Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) unit root tests. These tests assess whether a time series is non-stationary due to the presence of a unit root or stationary around a constant mean and variance. The standard decision criterion is that a P-value below 0.05 leads to the rejection of the null hypothesis of a unit root, indicating that the series is stationary. The results, summarised in Table 4, show that all variables have P-values below the 0.05 threshold, confirming that none of the series is non-stationary at their respective levels. However, the order of integration varies across the dataset: some variables are stationary at level $I(0)$, while others become stationary only after first differencing $I(1)$. This combination of $I(0)$ and $I(1)$ variables makes the data appropriate for analysis using the Autoregressive Distributed Lag (ARDL) model, which accommodates variables integrated at different orders but does not support series integrated of order two or higher. The unit root tests show that most variables, including FDI, INFL, PPI, GDPD, and POPgrt, are stationary at level $I(0)$, as indicated by both ADF and PP test statistics with p-values below 0.05. In contrast, WPI and EXR become stationary only after first differencing $I(1)$, reflecting that these variables exhibit stronger persistence or trends over time. The mixture of $I(0)$ and $I(1)$ series confirms that the dataset is suitable for estimation using the autoregressive distributed lag (ARDL) framework, which allows variables integrated at different orders but excludes $I(2)$ or higher. This ensures robust modelling of the dynamic relationship between inflation and FDI inflows in Nigeria.

4.4. Analysis of Long-Run ARDL Results

This study employed the autoregressive distributed lag (ARDL) approach to estimate the dynamic relationship between foreign direct investment (FDI) inflows and the inflation rate in Nigeria, a method particularly suitable for small samples and mixed orders of integration ($I(0)$ and $I(1)$) among variables (Pesaran et al., 2001). The ARDL framework allows for the simultaneous estimation of both short-run and long-run effects, capturing the adjustment process of FDI to changes in inflation and other macroeconomic determinants while avoiding the pre-test biases that can arise in traditional cointegration techniques (Narayan, 2005). Its flexibility also accommodates endogeneity concerns and model stability checks through bounds testing, making it a preferred choice in empirical studies of macroeconomic relationships in developing economies (Hsiao, 1997). In the context of Nigeria, where inflation volatility and structural economic shifts are persistent, ARDL is valuable for discerning how inflationary pressures influence investor confidence and capital allocation over time, offering

policymakers insights into the temporal dynamics of investment response. By estimating both long-run equilibrium values and short-run deviations, the model reveals not only whether inflation deters FDI inflows but also how quickly the Nigerian economy adjusts toward equilibrium following shocks in price levels or other control variables, such as the exchange rate and output growth. This dual perspective enhances the policy relevance of the findings, supporting evidence-based strategies aimed at stabilising price levels to foster a more conducive investment environment and sustained foreign capital inflows (Gujarati and Porter, 2009).

The long-run ARDL results as shown in Table 5 reveal that FDI inflows in Nigeria exhibit strong persistence, as evidenced by the statistically significant coefficients of the lagged dependent variable (FDI(-1)) across all four models, ranging from 0.432 to 0.598. This confirms path dependence in foreign investment, where past inflows significantly shape current investment levels, aligning with the findings of Kolewale and Seyingbo (2025), who observed that historical FDI patterns significantly drive long-term economic outcomes. Inflation (INFL) shows a consistently negative and significant relationship with FDI in Model 1 (-0.203, $P < 0.05$), highlighting the adverse impact of price instability on investor confidence and the attractiveness of Nigeria as a destination for foreign capital. The price-level indicators, PPI in Model 2 and WPI in Model 4, exhibit positive and significant coefficients (0.428 and 0.305, respectively), suggesting that moderate price increases at production and wholesale levels may signal economic activity growth, indirectly stimulating FDI, which resonates with Njoku et al. (2023) and Adeniyi (2020) who emphasize the nuanced effects of inflation and price signals on foreign investment. The exchange rate (EXR) remains positive and statistically significant across all models, ranging from 0.266 to 0.335, reinforcing the role of currency stability in attracting foreign capital, consistent with Ben-Obi et al. (2025) and Ukachukwu and Odionye (2020), who show that favourable exchange rate conditions support long-term FDI inflows. Population growth (POPgrt) is negatively significant across models, reflecting potential market saturation or increased labour costs, indicating that demographic pressures may mildly constrain foreign investment. Collectively, these results demonstrate that while macroeconomic stability encourages FDI, structural constraints such as inflationary pressures, demographic dynamics, and exchange rate volatility critically shape long-term inflows, underscoring the need for coordinated fiscal and monetary policies.

The robustness of these ARDL models is supported by diagnostic tests, showing no evidence of heteroscedasticity, serial correlation, or functional misspecification, with normality probabilities well

above 0.05. These diagnostics confirm that the model assumptions hold, enhancing the reliability of the estimated coefficients. The findings underscore that inflation, while negatively impacting FDI, interacts dynamically with other macroeconomic variables such as exchange rate and price indices, creating a complex environment for foreign investors. This aligns with Kur and Ogbonna (2019), who highlight a nonlinear interaction between inflation and FDI, suggesting that stable, low inflation is necessary to maximise the benefits of foreign investment. Furthermore, the results reinforce Davison et al. (2024) and Akpensuen et al. (2020), indicating that while inflation may not always have a direct long-term effect on FDI, its influence on investment behaviour is mediated through macroeconomic stability and price-level trends. The positive effects of PPI, WPI, and EXR highlight the importance of signalling credible economic growth, moderating currency risks, and providing a predictable investment climate, which is also emphasised by Ben-Obi et al. (2025) and Oyadeyi et al. (2025). These findings suggest that Nigeria's policymakers should focus on maintaining low and stable inflation, ensuring exchange rate stability, and promoting consistent economic growth signals to attract sustained foreign capital, mitigate macroeconomic uncertainty, and optimise long-term investment outcomes, while recognising the interplay of demographic and structural factors in shaping the FDI landscape.

The findings of this study carry significant implications for both policy and investment strategies in Nigeria, highlighting the intricate interplay between inflation, price-level indicators, exchange rates, and foreign direct investment (FDI). The negative long-run relationship between inflation and FDI underscores the critical importance of macroeconomic stability as a precondition for attracting and retaining foreign capital. Persistent inflationary pressures not only erode the real value of returns for foreign investors but also signal economic uncertainty, thereby discouraging long-term commitments (Kur and Ogbonna, 2019; Adeniyi, 2020). Conversely, the positive influence of producer and wholesale price indices, as well as exchange rate stability, demonstrates that investors respond favorably to predictable economic conditions and clear growth signals, suggesting that monetary and fiscal authorities must prioritize policies that maintain price stability while fostering gradual, sustainable economic expansion (Ben-Obi et al., 2025; Ukachukwu and Odionye, 2020). For policymakers, these results emphasize the need for a coordinated strategy that balances inflation control, exchange rate management, and structural economic reforms to enhance Nigeria's investment climate. Targeted measures, such as stabilizing currency fluctuations, improving market transparency, and supporting productive sectors, can amplify the positive signals captured by PPI and WPI, thereby attracting higher FDI inflows. For investors, the study indicates that assessing macroeconomic stability, rather than relying solely on short-term returns, is crucial for long-term engagement in Nigeria's market. Ultimately, these findings suggest that sustainable FDI inflows are contingent on a stable and predictable economic environment, where controlled inflation, consistent exchange rates, and robust market signals collectively foster confidence, mitigate risk, and enhance the long-term growth potential of foreign investments in Nigeria.

4.5. Analysis of ARDL Short-Run Dynamics

To estimate the short-run dynamics of foreign direct investment (FDI) inflows in response to inflation and other macroeconomic variables, this study employs the Autoregressive Distributed Lag (ARDL) framework, which is particularly effective for capturing both immediate adjustments and the speed of convergence toward long-run equilibrium (Pesaran et al., 2001). While the long-run ARDL results provide insights into structural relationships, short-run estimation is critical for understanding how FDI responds to contemporaneous fluctuations in inflation, price levels, exchange rates, and demographic factors. In emerging economies such as Nigeria, where macroeconomic volatility and structural rigidities frequently influence investment decisions, short-run analysis is essential for policymakers to identify immediate risks and design timely interventions (Davison et al., 2024; Njoku et al., 2023). The short-run ARDL model incorporates the error correction term (ECT), which reflects the proportion of disequilibrium from the previous period corrected in the current period, thereby linking past deviations with current adjustments and quantifying the speed of convergence toward long-run equilibrium (Akpensuen et al., 2020; Ukachukwu and Odionye, 2020). Estimating short-run impacts enables a granular assessment of how sudden inflationary shocks or exchange rate fluctuations influence investor behaviour and capital allocation before structural adjustments take hold. Such insights complement long-run analyses by revealing asymmetric effects, temporary disruptions, and the responsiveness of FDI to macroeconomic policy measures (Kur and Ogbonna, 2019; Abdurrahmani and Tmava, 2024). By focusing on short-term dynamics, the study captures both the immediacy and transience of macroeconomic factors, providing actionable intelligence for central banks, fiscal authorities, and investors seeking to stabilise capital inflows, manage inflationary pressures, and promote a conducive investment climate in Nigeria. This approach ensures that policy prescriptions are timely, targeted, and capable of mitigating the adverse effects of volatility on foreign investment.

Table 6 reveals a coherent and economically meaningful adjustment process toward long-run equilibrium, as demonstrated by the negative and statistically significant error correction term, ECM (−1), across all four model specifications. The coefficients of the ECM range between −0.241 and −0.398, indicating that deviations from the long-run equilibrium are corrected by approximately 24 to 40 percent within a single adjustment period. This speed of adjustment is moderate but effective, suggesting that shocks to foreign direct investment (FDI) are not persistent and tend to dissipate over time. Model 3, with the highest adjustment coefficient, reflects a relatively faster convergence process, implying stronger institutional or structural responsiveness in that specification. The statistical significance of the ECM across models confirms the existence of a stable long-run relationship among the variables and validates the use of the ARDL methodology for capturing both equilibrium dynamics and short-term fluctuations. Importantly, the consistency of the ECM estimates across alternative model formulations enhances the robustness of the findings, indicating that the long-run equilibrium is not sensitive to changes in model structure. This adjustment mechanism suggests that although short-run disturbances may temporarily displace FDI from its long-run path, market forces and macroeconomic

adjustments in Nigeria operate to restore equilibrium within a reasonable timeframe.

With respect to the short-run coefficients, the results indicate that immediate responses of FDI to macroeconomic shocks are generally weak and uneven. Changes in inflation (ΔINFL) and the GDP deflator (ΔGDPD) are statistically insignificant, implying that short-term price instability and output fluctuations do not strongly influence investment decisions in the short run. This finding suggests that foreign investors are more concerned with long-term macroeconomic trends than with temporary price movements. However, the producer price index (ΔPPI) in Model 2 and the wholesale price index (ΔWPI) in Model 4 exert positive and statistically significant effects, highlighting the relevance of short-run cost conditions in production and distribution for investment flows. These results imply that shifts in producer and wholesale prices may signal profitability opportunities that attract short-term capital inflows. Exchange rate changes (ΔEXR), although positive across all models, remain statistically insignificant, indicating that short-run exchange rate volatility may not be a decisive factor for FDI inflows. Similarly, population growth (ΔPOPgrt) does not exert a meaningful short-run effect, reinforcing the view that demographic influences on FDI are largely structural and long-term in nature rather than immediate.

4.6. Discussion of Findings

This study critically examines the effect of inflation on foreign direct investment (FDI) inflows in Nigeria over the period 1990 to 2024 and estimates the relationships using the autoregressive distributed lag (ARDL) model. The long-run ARDL results yield several analytically robust and policy-relevant insights. First, the positive and statistically significant coefficient on the lagged dependent variable confirms persistence in FDI inflows, suggesting that past investment performance shapes future inflow patterns—consistent with agglomeration effects and investment hysteresis theory (Dixit and Pindyck, 1994). Inflation exhibits a negative and significant long-run relationship with FDI, indicating that sustained price instability erodes investor confidence, increases uncertainty, and compresses real returns. This aligns with macroeconomic stability arguments in endogenous growth theory and empirical findings that high inflation deters capital inflows in emerging markets (Aizenman and Marion, 1993; Hermes and Lensink, 2003). Conversely, producer and wholesale price indicators display positive long-run effects, implying that moderate price growth reflecting productive expansion can signal profitability opportunities to foreign investors. Exchange rate stability similarly enhances FDI, supporting the exchange-rate risk hypothesis that predictable currency regimes reduce transaction uncertainty (Froot and Stein, 1991). Population growth shows limited long-run significance, suggesting that market size effects may depend more on income levels than demographic expansion alone. The long-run evidence underscores that macroeconomic discipline, price stability, and credible exchange-rate management remain foundational for sustaining foreign capital inflows in Nigeria.

Short-run dynamics further refine the interpretation of inflation–FDI linkages. The error-correction term is negative and statistically significant across specifications, with an adjustment speed ranging

approximately between one-quarter and two-fifths per period, indicating meaningful reversion toward long-run equilibrium after shocks. This confirms the existence of cointegration and validates the ARDL dynamic structure. In the short run, changes in inflation exert weak or statistically insignificant effects on FDI, suggesting that foreign investors do not immediately withdraw capital in response to temporary price spikes. Rather, investment decisions appear to be driven by expectations of sustained macroeconomic trends. However, short-run movements in producer and wholesale price indices display positive and significant effects in select models, indicating that contemporaneous improvements in production-side price signals can stimulate short-term capital inflows. Exchange rate changes show positive but insignificant coefficients, implying that while currency movements matter, their immediate transmission to FDI decisions is limited. Population growth adjustments remain insignificant, reinforcing the structural rather than cyclical nature of demographic influences. These short-run findings suggest that while inflation volatility may not instantly disrupt FDI, persistent macroeconomic instability can gradually undermine investor confidence. Policymakers must therefore prioritise credible anti-inflation frameworks, strengthen monetary transparency, and maintain exchange-rate predictability to prevent temporary shocks from crystallising into long-term investment decline.

5. CONCLUSION AND POLICY RECOMMENDATIONS

This study provides a comprehensive assessment of the relationship between inflation and foreign direct investment (FDI) inflows in Nigeria over the period 1990–2024 using the autoregressive distributed lag (ARDL) framework, and several constructive insights emerge from the findings. The results confirm the existence of a stable long-run relationship between inflation and FDI, indicating that macroeconomic conditions exert a persistent influence on foreign investors' decisions. Inflation is found to exert a negative and statistically significant effect on FDI in the long run, underscoring the critical role of price stability in sustaining investor confidence and preserving real returns on investment. This suggests that prolonged inflationary pressures heighten uncertainty, weaken macroeconomic credibility, and discourage long-term capital commitments. Conversely, indicators reflecting production-side price dynamics and broader economic activity show positive associations with FDI, implying that inflation arising from productive expansion rather than macroeconomic imbalance may signal profitable opportunities to foreign investors. Exchange rate behaviour contributes positively, though modestly, indicating that relative currency stability enhances Nigeria's attractiveness as an investment destination. The error-correction mechanism further reveals that deviations from long-run equilibrium are corrected at a moderate but meaningful speed, confirming the model's dynamic consistency. In the short run, inflation exhibits a limited immediate impact on FDI, suggesting that foreign investors respond more strongly to sustained trends than to transitory price shocks. The findings highlight that credible inflation management, anchored monetary policy, and a stable macroeconomic environment are indispensable for improving Nigeria's capacity to attract and retain foreign direct investment.

This study concludes that inflation remains a decisive macroeconomic factor shaping foreign direct investment (FDI) inflows in Nigeria. The empirical evidence confirms that while short-run inflationary fluctuations exert limited immediate influence, persistent inflation significantly undermines FDI in the long run by eroding real returns, amplifying uncertainty, and weakening investor confidence. The presence of a stable error-correction mechanism further demonstrates that FDI adjusts systematically toward long-run equilibrium, reinforcing the structural nature of macroeconomic influences on capital inflows. Importantly, the findings suggest that not all price movements are harmful; inflation associated with productive expansion and improved market conditions can signal profitability and attract foreign investors. Exchange rate stability also emerges as a supportive factor, highlighting the importance of predictable macroeconomic management. However, the study establishes that sustainable FDI inflows depend less on short-term macroeconomic shocks and more on credible, consistent, and disciplined economic policies. For Nigeria to strengthen its investment appeal, policymakers must prioritise inflation control, enhance monetary transparency, and sustain macroeconomic stability as the foundation for long-term foreign capital formation.

To improve foreign direct investment inflows, Nigeria must anchor inflation management on credibility, predictability, and coordination. A clear, forward-looking inflation-targeting framework—supported by transparent communication from the monetary authority—would reduce uncertainty and stabilise investor expectations about future costs and returns. Policy should prioritise disinflation through disciplined monetary tightening when necessary, complemented by fiscal restraint to avoid deficit monetisation that fuels price pressures. Beyond demand management, structural measures are essential: Easing supply bottlenecks in energy, transport, and logistics will lower production costs and reduce cost-push inflation that deters investors. Strengthening food supply chains and storage infrastructure can dampen volatile food inflation, a major contributor to headline instability in Nigeria. For FDI, what matters is not only low inflation but stable inflation; hence, policy consistency and credible commitment mechanisms—such as rule-based policy responses—are critical. By delivering sustained price stability, Nigeria would lower risk premiums, improve real return predictability, and signal macroeconomic discipline, thereby enhancing its attractiveness to long-term foreign investors.

Policies targeting the producer price index should focus on reducing production-side cost volatility while improving productivity, as foreign investors are highly sensitive to input prices and margin stability. Government action to stabilise energy prices—through reliable power generation, gas pricing reforms, and transmission upgrades—would directly lower producer costs reflected in PPI. Trade facilitation reforms that reduce port congestion, customs delays, and logistics inefficiencies can also compress input costs and improve supply-chain reliability. Targeted tax incentives or accelerated depreciation for capital equipment can encourage technology upgrading, raising productivity and offsetting cost pressures. Importantly, PPI-oriented policies should avoid distortionary price controls; instead, fostering competitive input

markets will ensure prices reflect efficiency gains rather than scarcity rents. When PPI trends signal healthy, productivity-driven cost structures rather than inflationary stress, foreign investors interpret this as evidence of a competitive manufacturing and services base. Stabilising and improving PPI dynamics, therefore, strengthens profitability expectations and positions Nigeria as a viable production hub for export-oriented FDI.

Improving the GDP deflator's investment signal requires policies that ensure price movements reflect real economic expansion rather than nominal distortions. Structural growth reforms—such as deepening industrialisation, upgrading human capital, and expanding infrastructure—should be prioritised so that increases in nominal GDP are driven by productivity and value addition. Fiscal policy should reallocate spending toward growth-enhancing capital projects with high multiplier effects, thereby improving real output and stabilising the deflator. Enhancing data transparency and national accounts credibility will also matter for investors who rely on the GDP deflator to assess macroeconomic fundamentals. Exchange-rate coherence with domestic price trends can prevent artificial inflation of nominal GDP that masks weak real performance. When the GDP deflator signals broad-based, sustainable growth with contained price pressures, it reassures foreign investors that market expansion is real and durable. Such credibility lowers macroeconomic risk, supports long-term planning, and encourages FDI aimed at capacity expansion rather than short-term arbitrage.

Policies aimed at stabilising the Wholesale Price Index should prioritise efficient distribution systems and competitive wholesale markets, as WPI directly affects inventory costs and supply-chain decisions of foreign firms. Investments in transport infrastructure—roads, rail, and ports—can reduce distribution markups and price dispersion across regions. Strengthening market information systems will improve price discovery and limit speculative hoarding that fuels wholesale volatility. Regulatory reforms that promote competition among wholesalers and reduce barriers to entry can further compress margins and stabilise prices. Strategic buffer stocks for critical inputs can smooth temporary supply shocks without distorting markets. For FDI, a stable WPI indicates predictable wholesale costs and reliable access to inputs, which lowers operational risk. When foreign investors observe well-functioning wholesale markets with limited price spikes, they are more willing to commit capital to manufacturing, agro-processing, and trade-linked sectors. Thus, WPI-focused reforms that enhance efficiency and competition can materially improve Nigeria's appeal to foreign direct investors.

REFERENCES

- Abdurrahmani, E., Tmava, Q. (2024), Inflation impact on foreign direct investment - evidence from Western Balkan countries. *International Journal of Sustainable Development and Planning*, 19(2), 4863-4869.
- Adebayo, T.S., Onyibor, K., Akinsola, G.D. (2020), The impact of major macroeconomic variables on foreign direct investment in Nigeria: Evidence from a wavelet coherence technique. *SN Business and Economics*, 1(1), 11.
- Adeniyi, F.O. (2020), Impact of foreign direct investment and inflation

- on economic growth of five randomly selected countries in Africa. *Journal of Economics and International Finance*, 12(2), 65-73.
- Adeolu B.A. (2007), FDI and Economic Growth: Evidence from Nigeria. African Economic Research Consortium. Nairobi: AERC Research Paper 165.
- Akpensuen, S., Sani, S., Ochinyabo, S. (2020), Investigating the impact of inflation on foreign direct investment in Nigeria: Evidence from co-integration and Vector Error Correction Model (VECM) analysis. *Journal of Economic Studies and Research*, 12(2), 1-12.
- Aizenman, J., Marion, N.P. (1993), Policy Uncertainty, Persistence and Growth. *Review of International Economics*, 1, 145-163.
- Banerjee, A., Dolado, J., Galbraith, W., Hendry, F. (1993), Cointegration, Error-Correction and the Econometric Analysis of Non-Stationary Data. *Advanced Text in Econometrics*, Oxford University Press, Oxford.
- Ben-Obi, O.A., Olaniyi, O., Okoroafor, D.O.K., Obi, B. (2025), Asymmetric effect of exchange rate volatility on foreign direct investment, inflation and balance of trade in Nigeria. *American Journal of Industrial and Business Management*, 15(05), 681-698.
- Canavese, A.J. (1982), The structuralist explanation in the theory of inflation. *World Development*, 10(7), 523-529.
- Cao, L., Ahmad, S.F., Wang, Y., Shah, S.J., Ibrahim, M., Alhamdi, F.M., Allaham, M.I., Abbas, A. (2025), Examining the relationship of inflation, gross domestic product, oil price, foreign direct investment, and trade openness to unemployment in Saudi Arabia. *Humanities and Social Sciences Communications*, 12, 743.
- Chude, D.I., Chude, N. P. (2018), Impact of inflation and economic growth in Nigeria. *Education Economics International Journal of Business Management Review*, 1(4), 15-26.
- Cletus, O.O., Onyeonu, E.O. (2023), Exchange rate fluctuations and inflation on economic development in Nigeria: The economic heart of a nation. *Seybold Report Journal*, 18(10), 46-64.
- Davison, U.O., Cajetan, C.A., John, T.G. (2024), Effects of inflation rate and money supply on foreign direct investments in Nigeria. *Nigerian Journal of Management Sciences*, 25(1b), 209-220.
- Dixit, A., Pindyck, R. (1994), *Investment under Uncertainty*. Princeton U. Press. <https://doi.org/10.1515/9781400830176>
- Fesojaye, M.O., Micheal, V.A. (2024), Impact of inflation, foreign direct investment and unemployment on gross domestic product in Nigeria. *International Journal of African Sustainable Development Research*, 4(2), 164.
- Froot, K., Stein, J. (1991), Exchange rates and foreign direct investment: An imperfect capital markets approach. *Quarterly Journal of Economics*, 106, 1191-1217.
- Ghatak, S., Siddiki, J. (2001), The Use of ARDL approach in estimating virtual exchange rate in India. *Journal of Applied Statistics*, 28, 573-583.
- Gonzalez, A. (2013), Introduction. In: *Foreign Direct Investment as a Key Driver for Trade, Growth and Prosperity: The Case for a Multilateral Agreement on Investment*. Geneva: World Economic Forum; 2013.
- Gujarati, D.N., Porter, D.C. (2009), *Basic Econometrics*. 5th Edition, McGraw-Hill Inc., New York.
- Harish, N., Plouffe, M. (2018), The Political Economy of Foreign Direct Investment to Developing Countries. *OSF [Preprints]*, Centre for Open Science.
- Hermes, N., Lensink, R. (2003), Foreign direct investment, financial development and economic growth. *Journal of Development Studies*, 40, 142-163.
- Hsiao, S.W., Chen, C.H. (1997), A semantic and shape grammar-based approach for product design. *Design Studies*, 18, 275-296.
- Idoro, D., Ehiedu, V.C. (2024), Impact of inflation rate and exchange rate fluctuations on economic growth in a developing nation. *Journal of Accounting and Financial Management*, 10(10).
- Igwemeka, E.O. (2016), The impact of foreign investments on domestic inflation in Nigeria: A disaggregated analysis. *IOSR Journal of Economics and Finance*, 7(2), 25-32.
- Kolawole, K.D., Seyeingbo, O.A. (2025), The impact of foreign direct investment, inflation, and exchange rate fluctuations on economic growth in Nigeria. *Oblik i Finansii Institute of Accounting and Finance*, 3, 113-124.
- Kur, K.K., Ogbonna, O.E. (2019), Moderating effect of inflation on the foreign direct investment and economic growth relationship in Nigeria. *Journal of Economics and Allied Research*, 3(2), 69.
- Kwoba, M. N. Kibati, P. (2016), Impact of selected macroeconomic variables on foreign direct investments in Kenya: *International Journal of Economics, Finance and Management Sciences*, 4(3), 107-116.
- Myrdal, G. (1968), *Asian Drama: An Inquiry into the Poverty of Nations*. New York: Pantheon.
- Narayan, P.K. (2005), The saving and investment nexus for China: Evidence from cointegration tests. *Applied Economics*, 37, 1979-1990.
- Njoku, C., Nwaimo, C.E., Essienette, I.O.B. (2023), Effects of inflation on foreign direct investment in Nigeria. *Journal of Commerce Management and Tourism Studies*, 2(2), 116-125.
- Okoroigwe, E.S., Obilikwu, J., Sayedi, S.N., Yusuf, A. B. (2023), Fluctuating exchange rate and Nigeria's economic growth: A time series assessment of over three decades' experience using interest rate and inflation rates as control variables. *European Journal of Accounting Auditing and Finance Research*, 11(11), 34-58.
- Olasehinde, I.O., Ajayi, C.F. (2022), Foreign direct investment and Nigerian economic growth. *Journal of Applied and Theoretical Social Sciences*, 4(3), 313-327.
- Omankhanlen, A.E. (2011), Foreign direct investment and its effect on the Nigerian economy. *Business Intelligence Journal*, 4(2), 253-261.
- Oyadeyi, O.O., Osinubi, T.T., Simatele, M., Oyadeyi, O.A. (2025), The threshold effects of inflation rate, interest rate, and exchange rate on economic growth in Nigeria. *Cogent Economics Finance*, 13(1), 2460066.
- Pappas, A., Boukas, N. (2025), Examining the impact of inflation and inflation volatility on economic growth: Evidence from European union economies. *Economies*, 13(2), 31.
- Pesaran, M.H., Shin, Y., Smith, R.P. (1999), Pooled mean group estimation of dynamic heterogeneous panels. *Journal of the American Statistical Association*, 94, 621-634.
- Sani, A.B., Ezekiel, A.O. (2022), Impact of infrastructure and inflation on foreign direct investment inflow to Nigeria. *International Journal of Foreign Trade and International Business*, 4(1), 14-17.
- Streeten, P. (1962), Wages, prices and productivity. *Akai*, 15.
- Tsaurai, K. (2018), Investigating the impact of inflation on foreign direct investment in Southern Africa. *Acta Universitatis Danubius (Economica)*, 14(4), 597-611.
- Ugomma, C.A. Chijioke, S.C. (2024), Assessing the impact of inflation and exchange rate on Nigerian gross domestic product (1981-2022). *Asian Journal of Probability and Statistics*, 26(5), 30-41.
- Ugwulali, I.J., Adejuwon, J.A., Ojomolade, D.J. Ugwulali, J.I. (2021), A co-integration approach to the determinants of inflation in Nigeria. *African Journal of Economics and Sustainable Development*, 4(3), 50-60.
- Ukachukwu, O.E. Odionye, J.C. (2020), Impact of selected macroeconomic variables on foreign direct investment in Nigeria: Auto-regressive distributed lag (ARDL) Model. *International Journal of Economics, Commerce and Management*, 8(12), 41-55.
- World Bank. (2021), *Global Economic Prospects*, January 2021. Washington, DC: World Bank Group.