Monetary Tightening and Its Impact on Development Finance Flows: Evidence from Nigeria

Simeon Oamen Obode and Gini Kiyentei Benneth

Department of Economics, University of Port Harcourt, Rivers State, Nigeria

DOI: https://dx.doi.org/10.47772/IJRISS.2025.91100338

Received: 01 December 2025; Accepted: 06 December 2025; Published: 10 December 2025

ABSTRACT

This study adopted two long run regression models to assess the effect of monetary tightening on development finance flows in Nigeria from 1990 to 2023, using the fully modified ordinary least squares (FMOLS) technique. The study specifically assessed the long run effects of money supply, exchange rate, monetary policy rate, the U.S. Federal Reserve rate and inflation rate on official development assistance and foreign direct investment, which serve as measures of development finance flows. The regression estimates for the ODA model indicate that the exchange rate has a positive significant effect on ODA, while the monetary policy rate has a negative significant effect, signifying that domestic monetary tightening reduces official development assistance inflows. For the FDI model, the findings show that increases in the U.S. Federal Reserve rate considerably reduce FDI in Nigeria as investors redirect funds toward safe and high yielding assets in advanced economies. On the other hand, the domestic monetary policy rate (MPR) has a positive significant effect on FDI, indicating that increases in MPR can attract foreign investors seeking high returns especially portfolio and short run investments. Based on these findings, the study recommends that government adopt a fair approach to monetary management and avoid undue tightening that may discourage donor support. Additionally, policies should be implemented to stabilize the exchange rate and diversify external finance sources that are critical for sustaining development finance flows.

INTRODUCTION

Monetary policy plays an important role in maintaining macroeconomic stability, investment flows and credit conditions in developing countries. As a result of the impact of covid-19 pandemic and rising inflation, most central banks in the world have adopted monetary tightening to stabilize exchange rate volatility and maintain low inflation. However, such monetary tightening policies have some negative impacts on development finance flows such as foreign direct investment (FDI), official development assistance (ODA), concessional loans and other forms of donor funding that support infrastructure, poverty reduction and social services. Mishkin F.S. (2007) and Olayemi, A. (2020) describe monetary tightening as a contractionary monetary policy measure of increasing interest rate or reducing the growth of money supply in order to lower inflation rate. While these monetary policy measures are targeted at macroeconomic stability, they can also create constraints on the availability and affordability of development finance. For example, tight monetary policy in developed countries like the US and Euro zone can lead to capital flight from less developed nations, while domestic tightening can increase the cost of borrowing and reduce investor confidence (Calvo G.A.et al 1993). Development finance involves mobilization of capital for development purposes. Development finance flows consist of official development assistance **(**ODA), concessional finance, commercial loans, foreign direct investment and diverse finance instruments (World Bank 2017). According to the united nations conference on trade and development (UNCTAD, 2014), development finance flows include net resource transfers to developing countries such as official flows (ODA and other government backed transfers), private flows (FDI and portfolio equity and remittances) and nontraditional flows (climate finance and philanthropic funding).

Given that most development finance to Nigeria comes from multilateral institutions, bilateral donors and foreign investors, foreign monetary tightening measures by the U.S. Federal reserve and the European central banks have direct impact on these inflows. The volume and timing of development finance are sensitive to international interest rate adjustment. When central banks in advanced economies adjust interest rates to control inflation,

Nigeria and other Africa nations usually face several adverse effects. First, there is an increase in the cost of external loan especially for sovereign Eurobonds and commercial loans. A nation like Nigeria and other emerging economies that rely on foreign loan to finance budgetary deficit and development projects usually face increase cost of funds or reduced market access. For instance, Nigeria's 2.2 billion dollar Eurobond comprising $700 million at 9.625% and $1.5 billion at 10.375% was issued at an average borrowing cost of about10% compared to previous issuances at 8.35%. The yields on the bond further rose to 11.7% signifying increased investor risk aversion towards Nigeria and effect of global monetary tightening measures, (IMF, 2023). Second, foreign monetary tightening contributes to exchange rate volatility in the local economies. The associated capital outflows and increased demand for the U.S. dollar often lead to currency depreciation, which not only increases the cost of external debt servicing but also reduces resources allocated for developmental purpose (Panizza,U. 2022). Also, foreign aid and investment may be delayed or reduced due to exchange rate volatility. Global monetary tightening usually leads to reduction in donor funding and private philanthropic flows as developed countries like the US and Euro zone shift budget priorities. This reduction in foreign assistance can reduce development in critical sectors such as healthcare, education and climate resilience initiatives that rely heavily on foreign grants.

Empirical evidence shows that, in 2023 when there was upward adjustment in the U.S. interest rate, emerging economies witnessed capital outflows, currency depreciation and tighter foreign financing conditions. In Nigeria, these measures by the US monetary authorities exerted pressure on external reserves, increased debt servicing costs and reduced foreign investment for infrastructure and energy. Camara S.and Ramirez V.S. (2022) examined the transmission of US monetary policy shocks concludes that higher yields in developed markets are responsible for diversion of global capital from less developed economies, thereby reducing the pool of private investment available for critical developmental sectors like infrastructure, manufacturing and education. In response to these international dynamics, the domestic monetary authorities including central bank of Nigeria have adopted similar monetary tightening measures of upward adjustment of the monetary policy rate (MPR) to control inflation and maintain exchange rate stability. The CBN adjusted the MPR from 16.77% in 2021 to 18.75% in 2023 and further to 27.5 % in 2025 (CBN statistical bulletin 2025). While this may attract short term capital inflows from foreign portfolio investors, it will also increase cost of funds within the local economy. Development finance flows that require counterpart funding are highly sensitive to such conditions. Increased borrowing costs can delay project implementation or reduce the scale of domestic contributions, weaken the nation's ability to absorb and utilize external finance effectively (Mishkin F.S.2007). Moreover, monetary tightening usually has negative impacts on domestic private sectors which are critical partners in the delivery of development finance especially in infrastructure, agriculture and energy sectors. High interest rates reduce access to credit, reduce domestic investment and weaken the ability of local firms to participate in public-private partnerships thereby undermining the institutional and financial base needed to leverage external funding (Ezeabasili,V.N. et al 2012). Finally, although a tighter monetary policy measure may offer short term exchange rate stability, sustained monetary tightening can undermine investor confidence and increases exchange rate volatility. Since most development finance flows such as concessional loans and FDI are denominated in foreign currencies, exchange rate instability increases currency risk and discourages long term investment. Donors and development finance institutions usually consider such risks when making decisions about disbursement schedules and portfolio allocations (Reinhart C. M. and Rogoff K. S. (2009). The combine impact of external and domestic monetary tightening on development finance remains a challenge to the global economy. For instance, an increase in international interest rate has negative effect on development finance by making capital more expensive and redirecting it to safer assets in developed markets. At the same time, domestic tightening reduces demand by increasing cost of funds and reducing local investment capacity. Among the monetary measures adopted by the CBN to address the impact of the local and global monetary tightening on development flows in Nigeria is the reformation of the foreign exchange (FX) market by allowing market forces to determine exchange rates and the continual adjustment of the monetary policy rate and cash reserve ratio to reduce liquidity in the financial system. To achieve price stability the central bank of Nigeria increased the monetary policy rate from 16.8% in 2021 to 27.5% in 2025, and cash reserve ratio from 32.5% to 45.0% (CBN monetary policy reports 2023–2025). Since development finance flows are sensitive to both local and international monetary policies, recognizing their interdependence are important in formulating strategies that safeguard a country's developmental objectives. Therefore, this study examines the impact of monetary tightening on development finance flows in Nigeria from 1990 to 2023.

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume IX Issue XI November 2025

Statement of problem

Monetary tightening is a contractionary policy measures that involve increase in interest rates and reduction in money supply aimed at controlling inflation and stabilizing exchange volatility. In less developed countries like Nigeria which depends on foreign finance to fund budget deficits, poverty reduction and critical infrastructures, such policy measures can have negative effects on development finance flows. These flows include foreign direct investment, official development assistance and concessional loans. Tighter monetary conditions, both local and global have contributed to increase in borrowing costs and reduce capital inflows. Recent studies stress these concerns. For example, IMF (2024) noted that Nigerian monetary tightening policies intended to control inflation and stabilize the exchange rate have negative significant effect on development finance flows. Similarly, Egbetunde T. and Abayomi M. A. (2024) found that monetary tightening has negative significant effect on foreign direct investment as a result of high cost of borrowed fund. In spite of the CBN policy interventions, the degree to which monetary tightening affects Nigeria's access to development finance remains doubtful, thereby creating a gap that this study seeks to address.

Conceptual Framework

The conceptual framework of this study portrays how domestic and external monetary tightening affect interest rates, exchange rates and capital flows, which in turn affect development finance flows such as FDI and ODA.

Official development assistance

Official development assistance (ODA) refers to financial flows from official agencies such as bilateral and multilateral institutions designed to promote economic development and welfare mainly for less developed countries like Nigeria, (OECD, 2023). These flows frequently include grants, low interest loans, technical assistance and support for capacity building and poverty reduction. ODA has played a significant role in Nigeria by bridging financial gap across major sectors of the economy including education, healthcare, infrastructure and agriculture. Ugwuoke J. C. (2024), in a study on the relationship b*etween foreign aid and economic development in Nigeria* concludes that foreign aid plays a significant role in the nation's development. Nigeria's net ODA attains a record high of 11.9 billion USD in 2006; mainly due to debt relief and international financial support. Between 2010 and 2019, ODA inflows ranged from 2.1 billion USD to USD3.57 billion. Total ODA inflows fell to a record low of USD 0.4 billion in 2022, representing a 0.87% decrease in real terms compared to 2021, (CBN, statistical bulletin, 2024). The decrease was as a result of external monetary tightening in 2022 which limit donor budget and alongside a shift in aid priorities toward domestic needs and responses to the Russia/Ukraine war crisis.

Foreign direct investment

Foreign direct investment is a major source of foreign finance for Nigeria. It provides capital inflows, technology transfer and technical know-how that are fundamental for economic growth and diversification. Some of the major determinants of FDI in Nigeria include macroeconomic stability, institutional and regulatory environment as well as infrastructure and security. Dogara E. J et al (2025) investigated the link between monetary policy and FDI in Nigeria and conclude that monetary tightening has negative impacts on FDI. This finding supports the view that tight monetary policies often discourage capital inflows in less developed economies. The nation's net FDI attains a record high of 8.84 billion USD in 2011 as a result of increase in investment in the energy sector. FDI inflows range between 5.0.1 billion USD to USD 7.07 billion from 2012 to 2017, (CBN, statistical bulletin, 2022). Total FDI inflows fell to a record low of USD 0.7 billion in 2018 due to weak infrastructure and external crises.

Money Supply (M2)

Money supply plays a vital role in maintaining price stability and investment flows in Nigeria. Broad money (M2) is generally used as a measure of liquidity in the economy, reflecting the availability of cash and demand deposits as well as quasi-money in the economy. Monetary tightening involves critical action by the CBN to reduce the growth of money supply in order to control inflation and maintain stable exchange rate. Such measures

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume IX Issue XI November 2025

by the CBN usuallyhave negative effects on development finance flows such as foreign direct investment and official development assistance. Mohammed I. D et al (2024) concludes in their study that money supply (M2) and monetary policy rate (MPR) have a long run relationship with investment in Nigeria. Money supply (M2) in Nigeria attains a record high of N20.91 trillion in 2016 due to increase in oil revenue. It ranges between N10 trillion to N15 trillion from 2008 to 2015, (CBN, statistical bulletin, 2022). It attained a record low of N1.04 trillion in 2000 as a result of tight monetary policy adopted by the CBN.

Exchange rate

The stability of the exchange rate is critical to Nigeria's economic growth and development, given the country's reliance on oil exports and imports of essential goods. Fluctuations in the exchange rate have direct impact on price stability and foreign direct investment flows as well as economic growth. Exchange rate management has been a continual policy challenge in Nigeria, largely because external shocks such as fluctuations in international crude oil prices and capital outflows frequently weaken the local currency (naira). The core objective of CBN monetary tightening polices is to stabilize exchange rate volatility and control inflation. Adenigbagbe, I. A. et al (2024) explored the impact of monetary policy on exchange rate stability in Nigeria concludes that high interest rates and tight money supply have direct impact on exchange rate stabilization.

As a result of the global financial crisis of 2008 and the oil price shock of 2015, the naira witnessed significant depreciation. It depreciated from N117/USD in 2008 to N149/USD in 2009 and from N155/USD in 2014 to N305/USD in 2016 respectively. In response, the CBN adopted a tight monetary policy of increasing monetary policy rate to 14% in 2016 to curtain inflation and maintain price stability, (CBN statistical bulletin 2020). While this measure produce minimal inflation in the short run, it had negative effect on potential investment and development finance inflows such as foreign direct investment and official development assistance.

Monetary policy rate (MPR)

The Monetary Policy Rate (MPR) constitutes one of the monetary policy instruments through which the CBN implements monetary policy measures. It serves as the benchmark interest rate and it is an important instrument for controlling inflation, liquidity and stabilizing the exchange rate. Most monetary tightening policies of the CBN such as increase in MPR are majorly designed to increase the cost of borrowing, reduce the growth of money supply and control inflation. Paschal, U. O et al (2022) asserted that interest rate has an inverse relationship with inflation in Nigeria, underscoring the importance of using rising MPR to control inflation. Since the introduction of MPR in 2006, it has played a critical role in maintain price stability and inflation control. For instance, in response to worldwide inflation pressure emanating from the Covid-19 pandemic and Russia-Ukraine war, the CBN implemented series of monetary tightening measure by adjusting the MPR from 12.0% in 2020 to 18.75% in 2023 to curb inflation and stabilize the exchange rate,(CBN, statistical bulletin, 2024). MPR has been the basis of CBN monetary policy tightening effort. While, it has been successful in maintain minimal inflation but its continual upward adjustment often constrain domestic investment and weaken finance flow like FDI and concessional loans that are sensitive to interest rate.

Inflation rate

Monetary policies are majorly designed to control inflation and ensure price stability. Inflation has remained a persistent challenge in Nigeria. The nation's inflation is mainly driven by structural factors such as supply side bottlenecks and fiscal imbalance. CBN has often adopted monetary tightening as a policy measure to address these inflationary pressures. This involves upward adjustment of the monetary policy rate and restricting the growth of money supply to reduce demand, curb excess liquidity and stabilize prices. However, the effectiveness of monetary tightening in Nigeria has faced significant challenges. While, higher interest rate has been able to control demand pull inflation, the persistent of cost push factors and structural rigidity such as rising energy prices, poor infrastructure, exchange rate depreciation and supply chain disruptions have continued to limit the full impact of these measures. Empirical studies, including Sakanko, M. A.et al (2025) and Adenigbagbe, I. A. et al (2024) conclude that inflation in Nigeria is highly sensitive to structural rigidities which frequently weaken the effectiveness of tight monetary policy transmission.

Federal Reserve rate

The U.S. Federal Reserve rate (Fed rate) plays a critical role in regulating international capital flows, exchange rates and financial stability. Changes in the Fed rate affect international liquidity and the volume of foreign capital that flows into less developed countries including Nigeria. An increase in fed rate often draws funds away from emerging markets towards advanced economies offering high returns and low risk. For Nigeria and many African countries, this usually results to reduced foreign direct investment, portfolio outflows and pressures on the local currency such as the naira. To lessen these effects, the CBN often adopts monetary tightening actions such as upward review of MPR and reduction in money supply to stabilize the exchange rate and control inflation. For instance, during the fed tightening series of 2015 to 2018 and 2022 to 2023, Nigeria witnessed high exchange rate fluctuations and capital outflows. In response, the CBN adjusted the MPR upward to stabilize the exchange rate and curtail inflation, though this resulted to increase in cost of fund and reduction in concessional finance and private investment critical for economic growth. Lastauskas, P and Nguyen A. (2024), investigated the spillover effects of US monetary policy tightening on emerging markets amidst uncertainty concludes that U.S. interest rate hikes significantly reduce economic output in emerging economies.

THEORETICAL LITERATURE

This section examines the monetary transmission mechanism theory and the capital flow and interest rate differentials theory.

Monetary transmission mechanism

The monetary transmission mechanism theory popularized by Keynes J. M. (1936) and further advanced by Friedman M. and Schwartz, A. J. (1963) explains how changes in monetary policy instruments such as the monetary policy rate or reserve requirements are transmitted through the financial system to regulate output, inflation and employment. Under monetary tightening, an upward review of the MPR increases the cost of loan, reduces credit creation by financial institutions and ultimately lowers aggregate demand. In Nigeria, CBN often relies on this channel to control inflation, though its effectiveness is sometimes undermined by structural bottlenecks such as weak financial intermediation and supply-side constraints. Obafemi, F. and Ifere, E. (2015), analyzed the monetary transmission mechanism in Nigeria and found that the interest rate and credit channels are the strongest channels for transmitting monetary policy .

Capital flow and interest rate differentials theory

The capital flow and interest rate differentials theory propounded by Keynes J. M. (1923) explains the relationship between domestic interest rates, international capital flows and exchange rate stability. The relationship between interest rates and capital flows is a vital concept in macroeconomics, especially in the area of international finance and investment. When a central banks increase domestic interest rates, it usually offers higher returns on investments denominated in local currency, thereby attracting foreign capital from investors seeking higher yields. But, when the U.S. Federal Reserve or other advanced economies review their interest rate upward, funds often flow out of emerging markets like Nigeria toward advanced economies offering high yield and low risk. This usually exerts pressure on the local currency such as the naira and often compels the CBN to adopt monetary tightening measures to stabilize the currency and attract capital inflows. Emefiele, G. O. and Udo O. (2021), explored the effect of interest rate differentials on capital flows and found that increase in U.S. Fed rate tend to lead to capital outflows from Nigeria thereby weakening the local currency (naira).

Empirical Review

Monetary tightening and its impact on development finance flows have been widely studied, but the empirical results remain at variance. For instance, using ARDL and NARDL techniques, Dogara E. et al (2025), explored the link between monetary policy and foreign direct investment in Nigeria and found that increases in monetary policy rate by the CBN negatively affect foreign direct investment inflows. Similarly, Adenigbagbe et al. (2024) investigated the impact of monetary policy on exchange rate stability in Nigeria. The finding indicates that though higher MPR controls inflation, it also reduces FDI inflows. likewise, Olonila, A.et al (2023) analyzed the

impact of monetary policy on credit and investment in Nigeria and concludes that short run monetary tightening reduces private sector credit and investment, Okonkwo, J. and Eze, O. (2023) further argue that continual tightening in Nigeria has negative effect on concessional finance and reduce access to low cost funding for infrastructure projects thereby weakening development outcomes. In contrast, Aizenman, J et al (2022), affirmed that higher domestic interest rates in emerging economies can attract short-term portfolio inflows as investors are attracted by higher returns. Alongside this, Camara S. and Ramirez S. (2022) examined the transmission of the US monetary policy shock to emerging markets and conclude that tightening rates in the U.S. significantly reduce aggregate investment in emerging economies especially among highly indebted countries. Finally, Oyadeyi (2022) assessed monetary policy shocks in Nigeria and concluded that structural rigidities such as weak financial intermediation and exchange rate volatility distort the monetary transmission mechanism, herby limiting the effectiveness of monetary policy tightening.

RESEARCH METHODOLOGY

The Economic Models and Estimation Technique

This study adopted two different multivariate cointegrating regression equations, with official development assistance (ODA) and foreign direct investment (FDI) serving as the dependent variables. Monetary variables such as exchange rate, inflation rate, monetary policy rate, US Federal Reserve rate and money supply were utilized as independent variables. The official development assistance equation is based on the study by Oketah F.O et al (2025) who assessed the impact of official development assistance on Government capital expenditure in Nigeria. While the FDI equation is designed using the empirical approach of Amade M. and Oyigebe P. (2024), who analyzed the impact of foreign direct investment on the Nigeria economy.

The functional forms of the ODA and FDI models are specified as:

$$ODA = f(MS, EXR, FER, MPR, IFR) \quad (3.1)$$

$$FDI = f(MS, EXR, FER, MPR, IFR) \quad (3.2)$$

The linear econometric configuration of the functional relationship between the underlying economic time series is expressed as follows:

$$ODA_t = a_0 + a_1 MS_t + a_2 EXR_t + a_3 FER_t + a_4 MPR_t + a_5 IFR_t + e_{1t} \quad (3.3)$$

$$FDI_t = b_0 + b_1 MS_t + b_2 EXR_t + b_3 FER_t + b_4 MPR_t + b_5 IFR_t + e_{2t} \quad (3.4)$$

Where: ODA is official development assistance; FDI is foreign direct investment; MS is money supply; EXR is exchange rate; FER is fed rate; MPR is monetary policy rate; a_0 and b_0 are constant terms; a_1-a_5 and b_1-b_5 are the coefficients of the explanatory variables: e_{1t} and e_{2t} refer to random error terms.

Estimation Technique

The study employed the fully modified least squares (FM-OLS) technique proposed by Phillips and Hansen (1990) to estimate the cointegrating regression models. This technique is suitable for this study since FMOLS primarily assists to address the core limitation of the ordinary least squares as it accounts for serial correlation effects in the regression.

RESULTS AND DISCUSSION

Unit Root Test

The study adopted the Augmented Dickey-Fuller unit root technique developed by Dickey and Fuller in 1981 to examine the stationarity of the economic time series. The results are presented in Table 4.1

Table 4.1: Summary of ADF unit root test results

ADF Unit root test results					
Variable	Levels test results		First Difference test results		
	t-stat.	5% critical value	t-stat.	5% critical value	Order of integration
EX.RATE	-3.301	-3.553	-3.621	-3.553	I(1)
FED RATE	-3.232	-3.553	-4.746	-3.553	I(1)
INF. RATE	-2.061	-3.553	-8.048	-3.553	I(1)
MS	-3.375	-3.553	-3.723	-3.553	I(1)
MPR	-3.914	-3.553	NC	NC	I(0)
FDI	-1.715	-3.553	-4.273	-3.553	I(1)
ODA	-3.292	-3.553	-4.697	-3.553	I(1)

Source: Author's computation from E-views 12

NB: NC denotes not computed

Table 4.1 shown the results of the ADFunit root test both at level and first difference. The results indicate that the variables are mixed integrated .

Cointegration Test

The study adopted the Johansen and Juselius (1990) cointegration test approach.

Table 4.2: Cointegration test results for the ODA model

Series: ODA EXE RATE FED RATE INF RATE MS MPR					
MAX -EIGEN & TRACE TEST RESULT FOR ODA MODEL					
Null Hypothesis	**Trace Statistic**	**0.05 Critical Value**	**Null Hypothesis**	**Max-Eigen Statistic**	**0.05 Critical Value**
r = 0*	165.07	95.75	r = 0*	72.08	40.08
r ≤ 1*	92.99	69.82	r ≤ 1	48.68	33.88
r ≤ 2*	44.32	47.86	r ≤ 2	22.68	27.58
r ≤ 3	21.64	29.80	r ≤ 3	11.48	21.13
r ≤ 4	10.16	15.49	r ≤ 4	6.05	14.26
r ≤ 5	4.11	3.84	r ≤ 5	4.11	3.84

Source: Author's computation from E-views 12

Table 4.3: Cointegration test results for the FDI model

Series: FDI EXE RATE FED RATE INF RATE MS MPR					
MAX -EIGEN & TRACE TEST RESULT FOR FDI MODEL					
Null Hypothesis	**Trace Statistic**	**0.05 Critical Value**	**Null Hypothesis**	**Max-Eigen Statistic**	**0.05 Critical Value**
r = 0*	164.21	95.75	r = 0*	77.24	40.08
r ≤ 1*	86.96	69.82	r ≤ 1*	40.48	33.88
r ≤ 2	46.49	47.86	r ≤ 2*	29.12	27.58
r ≤ 3	17.37	29.80	r ≤ 3	10.00	21.13
r ≤ 4	7.36	15.49	r ≤ 4	5.90	14.26
r ≤ 5	1.46	3.84	r ≤ 5	1.46	3.84

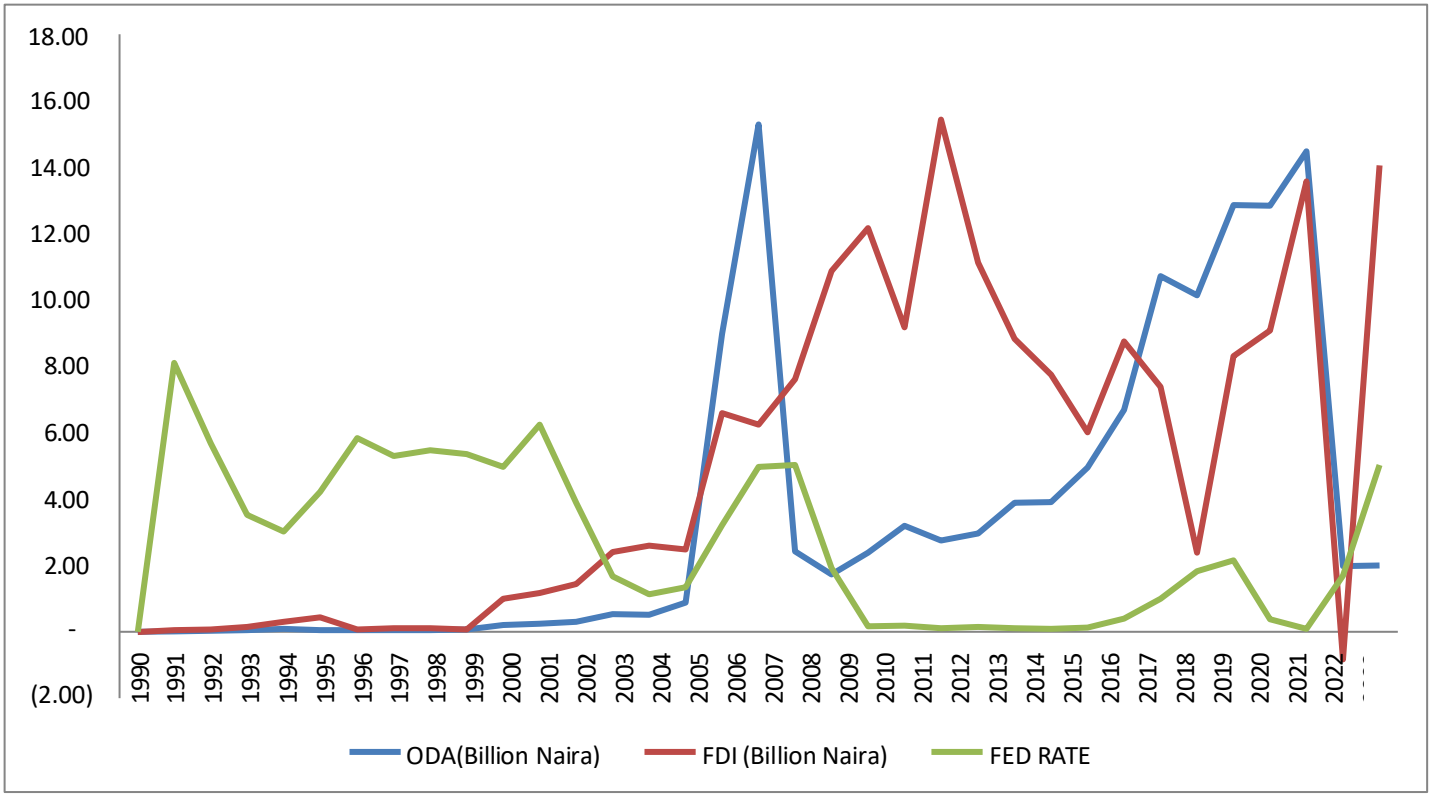
Source: Author's computation from E-views 12

The results of Trace and Max-Eigen statistics presented in Table 4.2 and 4.3 show the presence of at least a cointegrating equation, indicating that the variables have a long-run relationship.

Trend of the Variables

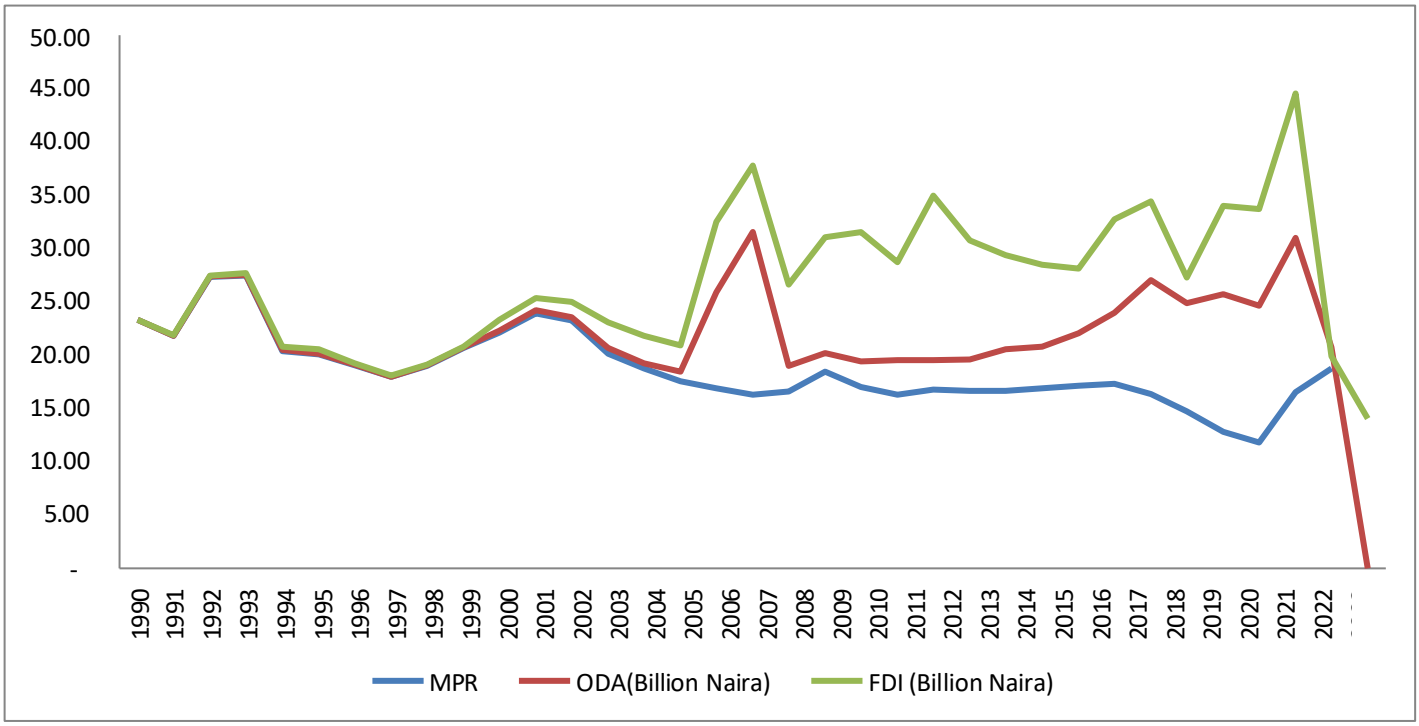
The trend of US fed rate, mpr, fdi and oda are depicted in fig 4.1 and 4.2.

Fig. 4.1: Residual graph of fed rate, ODA and FDI



Source: Author's computation from E-views 12

Fig. 4.2: Residual graph of MPR, ODA and FDI



Source: Author's computation from E-views 12

Fig 4.1 and 4.2 show the relationship between the US federal rate, the monetary policy rate, foreign direct investment and official development assistance. It shows how changes in US fed rate and MPR influence the volume of ODA and FDI inflows into the Nigerian economy within the reviewed period.

Estimation of the Cointegration Model

The cointegration models that show the long run effect of the variables are estimated using the fully modified ordinary least squares (FMOLS). The results are shown in table 4.4 and 4.5.

Table 4.4: Cointegrating regression results for the ODA model

Dependent Variable: ODA				
Method: Fully Modified Ordinary Least Squares (FMOLS)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
MPR	3.81E+10	9.56E+09	3.981725	0.0004
MONEY_SUPPLY	0.011144	0.014545	0.766184	0.45
INF__RATE	-8.68E+09	5.03E+09	-1.72485	0.0956
FED__RATE	-8.30E+10	3.22E+10	-2.57544	0.0156
EXE__RATE	2.20E+08	1.72E+09	0.127856	0.8992
R-squared	0.391921	Mean dependent variance		5.36E+11
Adjusted R-squared	0.305053	S.D. dependent variance		4.91E+11

S.E. of regression	4.09E+11	Sum squared residual		4.69E+24
Long-run variance	1.19E+23			

Source: Author's computation from E-views 12

Table 4.5: Cointegrating regression results for the FDI model

Dependent Variable: FDI				
Method: Fully Modified Ordinary Least Squares (FMOLS)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
MPR	-6.83E+10	2.11E+10	-3.23684	0.0033
MONEY_SUPPLY	-0.016406	0.010949	-1.49845	0.1461
INF__RATE	4.35E+09	3.94E+09	1.104282	0.2796
FED__RATE	8.87E+09	2.65E+10	0.334858	0.7404
EXE__RATE	3.59E+09	1.31E+09	2.735843	0.0111
R-squared	0.589581	Mean dependent variance		3.91E+11
Adjusted R-squared	0.510655	S.D. dependent variance		4.84E+11
S.E. of regression	3.39E+11	Sum squared residual		2.98E+24
Long-run variance	6.17E+22			

Source: Author's computation from E-views 12

RESULT DISCUSSION, CONCLUSION AND RECOMMENDATIONS

Empirical Result Discussion

FMOLS regression results presented in Table 4.4 reveal that exchange rate has a positive significant effect on official development assistance (ODA). In other words, depreciation of the local currency (naira) is connected with increased aid inflows indicating that donors tend to increase support to ease external financing pressures during periods of currency weakness. This finding is consistent with Pallage, S. and Robe M. A. (2001), who argue that ODA often increases when economic conditions deteriorate, including during period of currency depreciation. In contrast, the monetary policy rate (MPR) has a negative significant effect on ODA, signifying that domestic monetary policy tightening reduces development assistance flows, which may reflect higher borrowing costs and reduced donor confidence in the economy's absorptive capacity.

The results depicted in table 4.5 show that the U.S. Federal Reserve rate has a negative and significant effect on foreign direct investment (FDI) in Nigeria. This finding shows that an increase in the U.S. interest rate often redirects investors' fund toward safe and high-yielding assets in advanced economies, thereby reducing the pool of capital available for emerging markets. For Nigeria, such capital reallocation limits inflow of FDI which is a vital component of development finance for infrastructure, energy and manufacturing projects. In contrast, the domestic monetary policy rate (MPR) has a positive and significant effect on FDI. This implies that upward review of MPR can attract foreign investors seeking high returns, especially portfolio and short run investments. However, while high interest rates are frequently targeted at achieving price stability and enhance capital

inflows, they often increase borrowing costs for local firms. This may limit the ability of domestic partners to complement foreign investments

Conclusion

The study finds that monetary tightening has significant implications for development finance flows in Nigeria through both domestic and global channels. Exchange rate depreciation tends to increase official development assistance, as depreciated currency makes it cheaper for donors to provide assistance to ease external financing pressures, while upward review of domestic monetary policy rates reduce such inflows due to increased borrowing costs and concerns about nation's absorptive capacity. In contrast, foreign direct investment reacted differently. Increase in the U.S. Federal Reserve rate redirect FDI inflows from Nigeria toward safe and high-yielding assets in advanced economies, while upward review of domestic monetary policy rates enhance FDI by offering more competitive returns. These findings highlight the dual challenges faced by Nigeria and other emerging economies in balancing external shocks with domestic policy measures to maintain stable inflows of development finance.

Recommendations

The following are recommended for policy actions:

1. The finding indicates that currency depreciation increases official development assistance, indicating the need for exchange rate stabilization policies that reduce excessive volatility while supportive external financing.

2. The negative effect of high monetary policy rates on ODA calls for a more balanced approach to monetary tightening, as persistent upward adjustments of the MPR may discourage donor flows and increase borrowing costs for local businesses.

3. While high monetary policy rates tends to attract FDI by offering greater returns, they also increase borrowing costs for local businesses, showing the need to complement monetary policy with reforms that lower non-interest costs of doing business, improve infrastructure and enhance absorptive capacity to retain and maximize FDI.

4. Given the negative impact of U.S. Federal Reserve rate hikes on FDI inflows, the government need to diversify sources of development finance, deepen regional investment partnerships and strengthen foreign reserves.

REFERENCES

1. Adenigbagbe I.,Gambo N. Abolarinwa L. and Bashir R. (2024). Impact of monetary policy on exchange rate stability in Nigeria.European Journal of Accounting Auditing and Finance Research 12(7):20-40
2. Aizenman, J., Chinn M. D.and Ito, H. (2022). The interest rate effect on capital flows: Global evidence from emerging markets. Journal of International Money and Finance, 120, 102523
3. Amade M. and Oyigebe P. (2024).Foreign direct investment and the Nigeria economy: An empirical analysis. International journal of economics behavior and organization. 12(2), 46-66
4. Calvo, G. A., Leiderman, L.and Reinhart, C. M. (1993). Capital inflows and real exchange rate appreciation in Latin America: The role of external factors. *IMF Staff Papers*, 40(1), 108–151.
5. Camara Santiago and Ramirez Venegas, S. (2022). The Transmission of US Monetary Policy Shocks: The Role of Investment & Financial Heterogeneity," Papers 2209.11150,
6. Central Bank of Nigeria monetary policy reports (2023–2025)
7. Central Bank of Nigeria statistical bulletin (2020, 2022 and 2024).
8. Dickey, D. A., & Fuller, W. A. (1981). Likelihood ratio statistics for autoregressive time series with a unit root. Econometrica: Journal of the Econometric Society, 1057-1072.
9. Dogara, E., Egbiku, J., Agu, O. C., Amodu, O. L., and Elegu, U. S. (2025). Monetary policy and foreign direct investment in Nigeria (1981–2022). Lafia Journal of Economics and Management Sciences, 9(2).
10. Egbetunde T. and Abayomi, M. A. (2024). Effect of Monetary Policy and Financial Development on Foreign Direct Investment Inflow in Nigeria. Acta Economica, 20(2), 109–122

11. Emefiele, G. O., and Udo, O. (2021). Interest rate differentials and capital flows in Nigeria: Evidence from international monetary shocks. CBN Economic and Financial Review, 59(3), 1–22.
12. Ezeabasili, V. N., Isu, H. O. and Mojekwu, J. N. (2012). Nigeria's External Reserve and Foreign Direct Investment: An Empirical Investigation. International Journal of Business and Management, 7(20), 136–142
13. Friedman, M., and Schwartz, A. J. (1963). A Monetary History of the United States, 1867–1960. Princeton: Princeton University Press.
14. International Monetary Fund. (2024). Annex III. Financial Conditions, Inflation, Exchange Rate. In Nigeria: Article IV Consultation Staff Report. IMF Staff Country Report No. 2024/102.
15. International Monetary Fund (2023). Global Financial Stability Report: Tightening Global Financial Conditions and Capital Flow Pressures in Emerging Markets. Washington, D.C.
16. Johansen, S and Juselius, K. (1990). Maximum likelihood estimation and inference on cointegration—with applications to the demand for money. Oxford Bulletin of Economics and Statistics, 52(2), 169–210.
17. Keynes, J. M. (1923). A Tract on Monetary Reform. London: Macmillan.
18. Keynes, J. M. (1936). The General Theory of Employment, Interest and Money. London: Macmillan.
19. Lastauskas, P. and Nguyen, A. D. M. (2024). Spillover effects of US monetary policy tightening on emerging markets amidst uncertainty. Preprint, SSRN/ArXiv.
20. Mishkin, F. S. (2007). Monetary Policy Strategy. MIT Press.
21. Mohammed, I. D., Sanusi, Y. M., and Mustapha, I. D. (2024). Assessment of impact of monetary and fiscal policy on investments in Nigeria. International Journal of Research and Innovation in Social Science.
22. Obafemi, F.and Ifere, E. (2015). Monetary policy transmission mechanism in Nigeria: A FAVAR approach. International Journal of Economics and Finance, *7*(8), 229–239.
23. OECD (2023). Official Development Assistance (ODA). Organisation for Economic Co-operation and Development. Retrieved from [https://www.oecd.org/dac/financing-sustainable-development/development-finance-
24. Oketah F.O., Ojeh A.I. and Oshim J.C. (2025) Official Development Assistance and Government Capital Expenditure in Nigeria, International Journal of Business and Management Review, Vol.13, No.3, pp.37-47
25. Okonkwo, J. C., and Eze, O. R. (2023). Monetary policy tightening and development finance in Nigeria: Evidence from concessional lending and infrastructure finance. Nigerian Journal of Economic and Social Studies, 65(2), 45–67.
26. Olayemi, A. (2020). The effectiveness of monetary policy tightening in Nigeria: Evidence from macroeconomic indicators. Nigerian Journal of Economic and Financial Research, 8(2), 45–60.
27. Olonila, A. A. Amassoma, D.,and Bayode, B. B. (2023). Impact of monetary policy on credit and investment in Nigeria (1981–2020). Financial markets, institutions and risks, 7(1), 136–144
28. Oyadeyi, O. O. (2022). A systematic and non-systematic approach to monetary policy shocks and monetary transmission process in Nigeria. Journal of Economics and International Finance, 14(2), 23–31.
29. Pallage, S., & Robe, M. A. (2001). Foreign aid and the business cycle. Review of International Economics, *9*(4), 641–672
30. Panizza, U. (2022). Original Sin Redux: A Model-Based Evaluation. Journal of International Economics, 136, 103605.
31. Paschal, U. O., Amadi, K. T., & Ibeaja, F. U. (2022). Nigerian monetary policy; money supply rate and inflation rate. Asian Journal of Economics, Business and Accounting, *22*(23), 402–416
32. Phillips, P.and Hansen,B.(1990). Statistical Inference in Instrumental Variables Regression with I(1) Processes, Review of Economic Studies 57, 99-125
33. Reinhart, C. M., and Rogoff, K. S. (2009). This Time Is Different: Eight Centuries of Financial Folly. Princeton University Press.
34. Sakanko, M. A., Adeniji, S. O., and Akume, M. (2025*).* Exploring the drivers of inflation in Nigeria: The roles of insecurity, oil, food, and crop production. African Journal of Economic and Management Studies.
35. Ugwuoke, J. C. (2024*).* The Impact Analysis of the Relationship between Foreign Aid and Economic Development in Nigeria. International Journal of Business and Economics Research, 13(4), 93–105.

36. UNCTAD. (2014). *World* Investment Report: Investing in the SDGs – An Action Plan. https://unctad.org/webflyer/world-investment-report-2014
37. World Bank. (2017). Maximizing Finance for Development (MFD): Leveraging the Private Sector for growth and sustainable development. https://www.worldbank.org/en/feature