## Journal of Economics & Management Research



### **Review Article**

Open d Access

# Supply Side Liberalization and Foreign Exchange Management in Nigeria

#### Silva Opuala-Charles and Jonah O Orji\*

Garden City Premier Business School, Plot 13 Herbert Macaulay Street, Old G.R.A, Port Harcourt, Rivers State, Nigeria

#### ABSTRACT

The daunting challenge of foreign exchange control in Nigeria has remained a burdensome economic issue to deal with economic management. Virtually in every socio-political debate, the exchange rate management is yet to be a resolved paradigm. This study empirically examined the supply side liberalization as proxy of personal diaspora remittance and exchange rate management in Nigeria. Technique of Vector Autoregression (VAR) was employed to examine the direction of shocks arising from the exchange movement with respect to diaspora remittances (REMIT), and foreign direct investment (FDI). The findings showed that, growth of remittance results in exchange rate appreciation when pass through official channel, and vice versa. While, controlling for FDI, exchange rate movement improves with growth of FDI in the short run, and decreases due to improper capital control mechanism. Policy recommendation has it that: The Nigerian Monetary Authority should harmonize the dual exchange rate aimed at maximizing the gains of capital control and achieve domestic monetary policy success; Government should implement friendly tax policies, zero charges and lowered administrative bottlenecks to clearing personal diaspora remittance inflow aimed at minimizing diversion of foreign capital into unofficial route.

#### \*Corresponding author

Jonah O Orji, Garden City Premier Business School, Plot 13 Herbert Macaulay Street, Old G.R.A, Port Harcourt, Rivers State, Nigeria; Tel: 0806 374 5995.

Received: January 31, 2023; Accepted: February 07, 2023; Published: February 14, 2023

**Keywords:** Exchange Rate Management, Diaspora Remittances, Supply Side Imperative, FDI

#### Introduction

In order to ease external commerce, preserve the foreign currency market, and enable cross-border payments as part of their monetary policy role, Central Banks can formalize foreign exchange rate regulation. This would help to restore the balance of payments to its normal state [1]. Foreign exchange management is a procedure used in policy planning to reduce how much a home economy is exposed to the whims of foreign currency [2]. Aiming to maximize the benefits of exchange rate depreciation while limiting the shocks associated with appreciation, effective policy trust is used to regulate exchange rates in order to, among other things, ensure relative economic stability [3]. Sterilization or capital control measures are fundamentally employed to preserve exchange rates [4]. The monetary authorities "may utilize capital controls as a technique of simultaneously stabilizing the exchange rate and the volume of money," he continued. Therefore, the implementation of capital control can be successful in addressing longer-term weaknesses or strengths in the current account by attempting to influence the restrictions against outflows in the case of a weak currency (as in the United Kingdom until 1979) or against inflows in the case of a strong currency (as in Germany).

As a generally stable kind of financial capital, remittances variable is employed to examine the flow-channel of diaspora remittances and exchange rate management through capital control. Other unstable financial capital factors are also considered in the guise of foreign direct investment and official development assistance. Remittances are money sent home by citizens who reside abroad, per definition. Remittances are the means via which the global effects of immigration are most readily seen. The wages, benefits, and entitlements that migrant workers receive as a result of their employment abroad are considered unrequited1 payments. Migrant workers send money from their earnings to their relatives back home, particularly in industrialized economies (less developed economies). Unquestionably, remittances have been defined as a lifeline for the financial development of immigrant families back home [5]. They also stimulate household consumer spending in nations with populist policies, such as higher subsidies and taxfriendly remittance regulations.

From a macro perspective, the remittance flow has an impact on the economy. Accordingly, the macroeconomic influence of remittances is clear in how they affect households, businesses, and eventually, government spending. Remittances are therefore generally regarded as being advantageous to the economy.

This suggest that remittances may rise when the recipient economy suffers a downturn in activity or macroeconomic shocks due to financial crisis, natural disaster, or political conflict, because migrants may send more funds during hard times to help their families and friends. Therefore, the supply imperative of diaspora remittances may thus smoothen consumption expenditure and contribute to the stability of recipient economies by compensating for foreign exchange losses due to macroeconomic [6]. The significant role of remittances could be highlighted within the range of poverty alleviation and availability of foreign exchange shortages in poorer countries and offsetting balance of payments deficits without incurring interest liabilities or necessitating an

increase in foreign goods and services imports. Remittances may move countercyclical relative to the economic cycle of the recipient country.

Furthermore, given the dynamics of foreign currency supply that come with diaspora remittance, there is a tendency for a causal relationship to exist between remittances and exchange rate management. Remittances are essentially a substantial source of global financial flow. Other than unpredictable financial capital flows like official development aid (ODA), foreign portfolio investment (FPI), and foreign direct investment (FDI).

Even in countries that heavily rely on remittances, financial capital flows in the directions with the highest rates of return because variable financial capital flow is sensitive to variations in rates of return [7]. While the ability of households to employ money to maintain their small businesses and other investments as well as to enhance their consumption of food and other basics might be positively associated with the effect of a growth in remittances during a recession in the receiving country. By serving as an economic amplifier, such spending and investment encourage further investment and consumer spending. In summary, a proportionate change in remittance receipts compared to the size of an economy functions as a stabilizer automatically and has effects analogous to countercyclical monetary policy. For developing countries, at least in terms of the economy as a whole, financial remittances from migrant families living abroad act as a kind of exogenous shock insurance.

1 Remittances are regarded as unrequited if they don't give rise to claims against property, debt service obligations, or other legal duties.

#### Domestic Legal Rules on Diaspora Remittance

However, the global policy supports that enable increase in remittance has a critical aspect of tax freedom. Unlike, economy where tax chargeable on outflow of remittances cause remittance to flow to unofficial direction. For instance, countries such as, Saudi Arabia taxes 6 % on outflow of remittance in the 1st year , and 2 per cent after 5 years period. In United States, particularly States of Oklahoma and Georgia taxes remittances at the rate of \$5 for the first \$500 and 2% thereafter Ratther et al in World [8]. In Nigeria, inflow of remittance through online wire into domiciliary account may be tax exempted. At global level, the cost of U.S. dollar transfer to middle income countries stood at 6.58 %; exceeding 3% target of Sustainable Development Goal.

Consequently, stringent tax policies on outward remittances in advanced nations, has caused migrant workers resorts to converting their remittance fund to non-monetary items (For instance, food, apparel, electronics, or automobiles), which comes in as gift items to the family but with intention of disposal. Furthermore, Inflow of financial capital in the form of remittances may not have attracted taxes directly but could have implicitly be charged in the form of financial service charges on the non- monetary items. Many nations that accept remittances give migrants who send items home or who bring commodities with them preferential treatment. For instance, Tunisians have the right to tax-free importation of goods and/or services up to a customs value of TND1, 000 once a year, as well as tax-free reimportation of personal vehicles, household furnishings, and other items. Guatemala allows the remittance of any commodity worth up to \$500 once a year tax-free. Such import privileges are also provided by numerous other nations, including Pakistan, Turkey, and Vietnam. Given the current

currency rate policy in the domestic economy, these rights are used most efficiently.

#### **Exchange rate Policy and Diaspora Remittances**

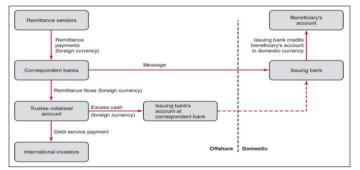
One of the most effective ways to bring remittances into formal channels and increase remittance services in many countries has been to relax capital controls and exchange rate policies, which entails unifying exchange rates and allowing more banks and financial institutions to conduct foreign exchange transactions. According to the most policy-sensitive study, permitting citizens to maintain foreign currency accounts using remittances from abroad is thought to have significantly increased formal remittances in many South Asian and African nations [9].

In the Philippines, an empirical study indicated that the country's formal inward remittances doubled in the same year that currency controls were removed [10].

However, a recent analysis revealed that Zimbabwe's foreign exchange reserves had increased as a result of the implementation of a new money transfer system (Home link), which the government had put up to facilitate official payments to the country's diaspora. Despite this, recipient banks' financial effectiveness contributes to the local economy's appeal as a source of remittance inflow. According to additional research, the Groupe Banques Populaires collected 66% of all remittances to Morocco by providing low fees, straightforward procedures, and other non-financial services to Moroccans living overseas (Amin and Freund 2005). Remittance inflows in some nations, like El Salvador, Haiti, Honduras, and Jordan, topped 15% of GDP [11].

Below is the schematic view of the remittance flow through official channel.

#### **Remittance – Exchange rate Channel**



**Figure 1:** Source: World Bank (2022).Accessed from: https://openknowledge.worldbank.org/bitstream/handle/10986/7 306/343200GEP02006.pdf

#### **Overview of Nigerian Foreign Capital Flow**

The stacked graph consist more of net official development assistance (ODA), Foreign Direct Investment and personal remittances (in current USD). From Figure 2, the foreign direct investment growth fluctuates during the review period. As it rise and falls significantly during the period of 1980 to 2014. While, official development assistance began to gain momentum from 2002, and moderates through the period of 2009 to 2016, and fluctuates positively. Trend of personal remittances remained relatively stable over the period of time, with a positive slope. Though, a personal remittances received is stacked to be the least foreign capital inflow sources in Nigeria.

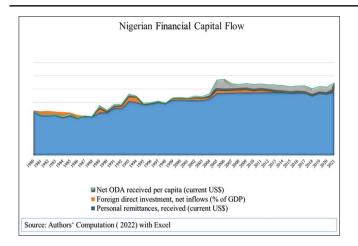


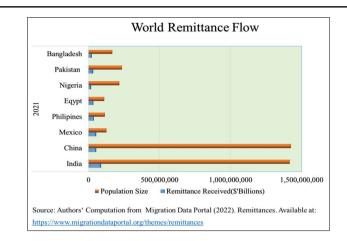
Figure 2: Snapshot of Nigerian Financial Capital Flow

**Domestic Policy Action on Diaspora Remittances in Nigeria** In Nigeria, diaspora remittances received in 2021 nearly reached the World Bank's forecast of \$14.2 billion in the nine months ending in September 2021; this represents an increase of about 1.3 billion from the 12.9 billion recorded in 2020. Negative shock from Covid-19 caused diaspora remittance receipts to fall to \$16.94 billion. The CBN adopted policies in December 2020 to encourage Nigerians living abroad to remit money through the banking system as a cushioning mechanism. Diaspora remittances received through International Money Transfer Operators (IMTOs)\* are not to be converted into local currency, as per a directive from the Central Bank of Nigeria to payment switching and processing firms. E-wallets that were used for cross-border transactions in Naira were disabled as a result of this regulatory decision. The CBN also implemented the "Naira4Dollar" program in February 2021 as another policy measure to reduce the dollar shortage. Under this program, recipients of remittances receive N5 for every \$1 of remittance sent through banks.

#### **Global Perspective of Remittance**

Around \$689 billion in remittances were sent abroad in 2018, \$529 billion of which went to low- and middle-income nations. Particularly, India received almost \$79 billion, Mexico \$36 billion, and the Philippines \$34 billion. China and India have higher populations in comparison to their remittance flows than do other countries. Remittances to nations like the Philippines and Mexico are inversely correlated with population size. But the populations of Bangladesh and Nigeria are quite small in comparison to the amount of remittances they get. See Figure 3.

IMTOs\* are companies with a focus on financial technology that accept cash to send to people in Nigeria or other countries. Additionally, they offer cross-border transfer services for personal requirements including transfers for international tourists visiting Nigeria and transfers for family maintenance.





#### Theoretical Foundations The Mundell-Fleming Model

According to the theory's widely accepted three-pronged implications, nations must decide which of the following three policy objectives they would forego: exchange rate stability, complete capital mobility, or domestic monetary policy autonomy [12]. In the highly integrated financial markets of today, when there is a difference between domestic and international interest rates, capital tends to move in the direction of the higher return. If the exchange rate is permitted to fluctuate, it will adapt in line with capital inflows and outflows, rising and falling respectively. The difference in interest rates, however, is soon arbitraged away by capital flows if the exchange rate is fixed. As a result, monetary policy becomes ineffectual as a tool for making decisions due to the combination of mobile capital and a fixed exchange rate.

#### The Neoclassical Approach

Given the premise of full employment, this theory predicts a linear relationship between income differences and migration. According to a study by, salary differences between regions lead workers to move from low wage economies to high wage economies [13]. The flow will be greater the larger the divergence. According to Borjas, there may be an international "immigration market" [14]. Through their immigration laws, potential host countries find suitable economic migrants. By looking for the nation that will maximize their well-being, migrants make the decision to maximize their self-utility within the limits of a constrained budget. The neoclassical approach has come under fire for failing to account for elements that are taken into account as distortions and additional migration costs, such as the effects of sending and receiving countries, market failures, misallocation, economic inequality, and the implications of policies and procedures.

#### **Empirical Literature**

Singer (2015) conducted research on key factors influencing exchange rate regimes in developing nations. The structural auto regression (SAR) method was used to quantify the remittance influence on currency rate regime shift in emerging economies using recently made public World Bank data on yearly remittances from 1982 to 2006 for up to 74 developing nations. It proved that nations with a sizable share of GDP coming from remittances are more inclined to use fixed exchange rates. Given the recent ideological trend towards fixed rates, this conclusion is very important. It seems that remittances motivate policymakers to swim against the current. The results hold up well under many model settings, including de facto and de jure currency rate for

the years 1975 to 2010, conducted research on the causes of remittances, financial development, and economic growth in Lesotho [15]. The per capita remittances, real per capita wide money supply (M2), and real per capita gross domestic product variables were used in the empirical investigation as proxies for remittances and financial development, respectively. Johansen technique was used to assess the cointegration of the variables, and a vector error correction model was used to test for Granger causality (VECM). The findings support the presence of at least one cointegrating link and show that remittances drive the economy without providing any feedback.

#### Methodology

The research design is anchored on expo factor approach, using data sources collected from World Bank development indicator to estimate the model parameters. Technique of Vector Autoregressive auto regression (VAR) model is used to analyze the data series. The justification for adopting VAR was to capture the recursive traits in remittance flow as well as exchange rate activity. The structure of VAR models enables one to explain the values of endogenous variables from their past observed values. The theoretical underpinning of vector auto-regression, which underlined our study, followed the prescription of Sims [16]. Dynamic relationships are examined between variables to aid macroeconomic policy advisers for accurate forecast. Moreover, framework for modelling endogenous variables in a multivariate setting can be expressed as: An n -variable vector autoregression of order p, VAR (p), is a system of n linear equations, with each equation describing the dynamics of one variable as a linear function of the previous p lags of every variable in the system, including its own p lags. Each variable is explained by the past history of every variable-Y t is a function of its own past and the past of the other variables in the system {Y  $_{t-1}$ , Y  $_{t-2}$  ... Y  $_{t-p}$ , X  $_{t-2}$ ... Y  $_{t-p}$ , X  $_{t-2}$ ... Y  $_{t-2}$  ... Y  $_{t-p}$ , X  $_{t-2}$ ... Y  $_{t-2}$  ... Y  $_{t-2}$  ... Y  $_{t-2}$ ... Y  $_$ 

#### **Analytical Framework**

The baseline model specification derived its validity from Mundell-Fleming Framework. Classical theorizing captures the effects of exchange rate system as a result of trio interplay of fiscal policy, monetary policy and trade policy respectively. The equilibrating forces of money demand and money supply is a proxy for demand side flexibility and supply side liberalization respectively Wherein,  $M_t^{d} = M_t^s$ ; eqn 3.1 a transformation of IS=LM in a closed economy setting. Factoring the external trade component through (X-M) a compact eqn emerged: IS-LM-BoP in eqn 3.2 framework.  $m_{extate} = fp_{tax on remitt} * tp_{fdi}$  Typified in eqn 3.3.  $\therefore \Delta i = \Delta fp_{tax on remitt} * \Delta tp_{fdi}$ eqn 3.4;  $\partial exr/\partial tax$  on remitt =  $\partial exr / \partial fdi$  in eqn 3.5. Given,

 $\chi_{t} = \alpha + \sum_{i=1}^{\eta} \delta_{i} \chi_{t-1}$ Hence, the  $\chi' \chi = \begin{bmatrix} \sum \chi^{11} & \sum \chi^{12} \\ \sum \chi^{21} & \sum \chi^{22} \\ \sum \chi^{31} & \sum \chi^{33} \end{bmatrix} * \begin{bmatrix} \gamma^{1} \\ \gamma^{2} \\ \gamma^{3} \end{bmatrix}$  Yielding 4x 3 vector matrix.

By theoretical implication, an interest rate ( $\Delta i$ ) is a common thread that runs throughIS-LM-BoP. Such that, product-money- external trade markets equilibrium is attained (see eqn 3.5). Wherein, mp<sub>exrate</sub> = Linkage of monetary policy and exchange rate; fp<sub>tax on remitt</sub> = linkage of fiscal policy and tax on remittances; tp<sub>fdi</sub> = linkage of external trade and FDI.

$$Y_{t} = f(\chi_{I}, \chi_{2}, \dots, \chi_{k}) 3.5$$

$$Y_{t} = f(PREMIT_{t}, FDI_{t}) 3.6$$

$$\chi_{t} = \alpha + \sum_{i=1}^{\eta} \delta_{i} \chi_{t-1} + \varepsilon_{t} 3.7$$

$$OEXR_{t} = \alpha_{0} + \sum_{i=1}^{\eta} \delta_{t-1} \beta_{1} PREMIT_{t} + \beta_{2} FDI_{t} + \varepsilon_{i} 3.8$$

**Keys:** OEXR = official exchange rate; PREMIT = personal remittances; FDI = foreign direct investment;  $\alpha 0$  = Intercept;  $\beta_1$ ,  $\beta_2$ = Model parameter;  $\epsilon_i$  = Error term;  $\sum_{i=1}^{\eta} \square$ =

summation of lag values of dependent variables in M\*N order.

#### Variables and Discussion Table 1

Variables	Sources of Data	Measurements	Theoretical Expectation		
Official exchange rate (OEXR)	World Bank Development Indicator	local currency units relative to the U.S. dollar.	(+)		
Personal remittances (PREMIT)	IMF's Balance of Payments Manual	Data are in current U.S. dollars	(+)		
Foreign Direct Investment (FDI)	World Bank Development Indicator	Percentage of GDP	(+)		

Source: Authors' Compilation (2023).

#### **Official Exchange Rate (OEXR)**

This is the exchange rate set by national authorities or in comparison to the rate established on the market for legally permitted exchanges. Based on monthly averages, an annual average is calculated (local currency units relative to the U.S. dollar). A positive relationship is expected between Official

exchange rate and its one period lag.  $\frac{\partial Y}{\chi_{-1}} > 0$ .

#### **Personal Remittances (PREMIT)**

Employee remuneration and personal transfers are involved. All recent financial or in-kind transfers made or received by resident households to or from nonresident households are referred to as personal transfers. Thus, any recent transactions between residents and non-residents are considered personal transfers. The income of border, seasonal, and other short-term workers who labor in an economy where they are not residents, as well as of residents employed by nonresident businesses, is referred to as compensation of employees. Two items listed in the sixth edition of the IMF's Balance of Payments Manual are added together to form data: Personal transfers and employee compensation. A positive relationship is expected between Official exchange rate

and personal remittances.  $\partial Y/_{PREMIT} > 0$ .

#### Foreign Direct Investment, Net Inflows (% of GDP)

According to the balance of payments, it is the total of equity capital, reinvestment of earnings, other long-term capital, and short-term capital. This data, which is broken down by GDP, displays net inflows (new investment less outflows) of foreign capital into the reporting economy. A positive relationship is expected between Official exchange rate and foreign direct

investment. 
$$\frac{\partial Y}{FDI} > 0$$
.

#### **Empirical Results and Discussion**

The use of histogram to describe the distribution of individual variables used in our analysis is critical to ascertaining the variables that provides the best fit in the model specification.

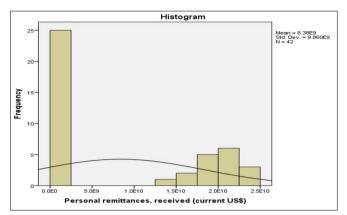
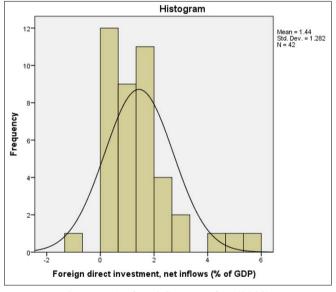


Figure 4: Univariate Descriptive Statistic

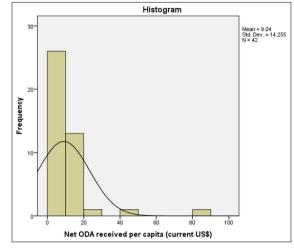
#### Source: Authors' Computation (2023)

The value of personal remittance received within the review period showed a normal distribution with the mean value of 8.38, and standard deviation of 9.66. By implication, for the 42 years under study, below 5 percent of Nigerian residents received; on average, about US\$8 thousand, thirty eight cent. While, there exists variant of significant proportion of domestic residents who may have not received personal remittances from family and friends.



Source: Authors' Computation (2023)

The univariate descriptive survey of FDI showed that, the distribution across critical sectors of Nigerian economy is rapid, with average value of 1.44 per cent, and the frequency of FDI flow is over 8per cent during the review period.



Source: Authors' Computation (2023)

The net actual official development assistance received in Nigeria tends to be skewed to specific sector where it is most needed for infrastructural development. Though the mean value of ODA is 9.04 percent but its impact does not significantly impact exchange rate. Therefore, it does not follow a normal distribution.

#### **Empirical Results and Interpretation**

The interaction of exchange rate and its one period and second period lags are positive with a coefficient of 69 per cent and 12 percent respectively. That is to say, changes in exchange rate in the previous periods has significant influences on the prevailing rate to be applied in Nigeria. The findings conformed to a priori expectation. Findings in Table 2 showed that, personal remittances received in Nigeria reduce exchange rate value by about 2.04 per cent, on average. The results do not conform to theory due to unofficial channel through which foreign remittances passes through to reach their destinations. Rather than positively impacting on our currency value, it worsens through currency depreciation. It is unarguably true that, most diaspora remittances received from families and friend's resident abroad comes in the form of clothing, gift items, auto mobile and other non-monetary forms, further deepening the exchange rate illiquidity. Similarly, the 2nd period lags of exchange rate and personal remittances conformed to a priori expectation due to the fraction of remittance flow that passes through official channel, and positively influences exchange rate movement in Nigeria. Hence, the duality of exchange rate movement is occasioned by the official and unofficial conduit through which personal diaspora remittances are received in Nigeria.

More so, the foreign direct investment is applied as control variable for measuring volatile financial capital components to exchange rate movement. Table 2 showed that, changes in FDI brought about 22 percent increase, on average, in exchange rate movement in Nigeria. An increase in FDI flow positively impact exchange rate movement in the short run. But, a decrease of about 34 per cent in exchange rate will result from ineffective capital control measures to biasing against capital outflow in the face of currency depreciation and current account shortfalls.

However, the explanatory power of the model provides about 93 percent of total variation by the joint efforts of PREMITT and FDI. And the fraction of 7 percent accounts for factors not captured in the model specification.

Table 2: Var Estimates					
Vector Autoregression Estimates Sample (adjusted): 1992 2021					
	LOEXR	LPREMIT	LFDI		
LOEXR(-1)	0.690541	-2.044720	0.229308		
	(0.20130)	(0.71185)	(0.45934)		
	[ 3.43038]	[-2.87240]	[ 0.49921]		
LOEXR(-2)	0.125548	2.468186	-0.342934		
	(0.18636)	(0.65900)	(0.42524)		
	[ 0.67370]	[ 3.74534]	[-0.80646]		
LPREMIT(-1)	0.059620	0.885730	-0.036455		
	(0.04388)	(0.15519)	(0.10014)		
	[ 1.35857]	[ 5.70756]	[-0.36405]		
LPREMIT(-2)	-0.043782	-0.202546	0.038687		
	(0.04322)	(0.15283)	(0.09862)		
	[-1.01302]	[-1.32527]	[ 0.39228]		
LFDI(-1)	-0.094477	0.092473	0.541693		
	(0.09436)	(0.33367)	(0.21531)		
	[-1.00128]	[ 0.27714]	[ 2.51592]		
LFDI(-2)	-0.096219	-0.444874	0.060912		
	(0.10126)	(0.35810)	(0.23107)		
	[-0.95018]	[-1.24233]	[ 0.26361]		
C	0.752165	3.878586	0.528497		
	(0.43505)	(1.53846)	(0.99273)		
	[ 1.72890]	[ 2.52109]	[ 0.53237]		
R-squared	0.939069	0.851720	0.450452		
Adj. R-squared	0.923174	0.813038	0.307091		

Source: Authors' Computation (2022).

#### **Cholesky Impulse Response Analyses**

The quadrants below demonstrate the movement of exchange rate management shock to personal diaspora remittances and foreign direct investment for the review period.

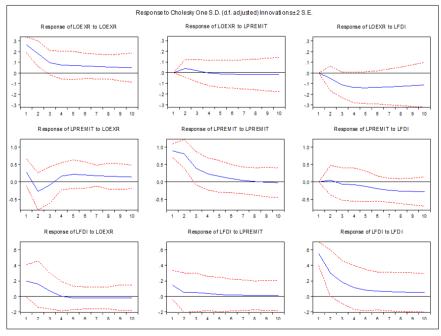


Figure 4: Sources: Authors Computation (2023)

The result of Fig 4 showed that, a one percent standard deviation in previously held exchange rate will results in a disproportionate change in the prevailing rate, all other things been equal. While, exchange rate movement due to personal remittances positively increases in the 1st period, peaked in the middle of the 2nd period; and declines gradually to zero in the fourth period, and became negative in the 5th period throughout. Whereas, the exchange rate shock adversely impact on FDI throughout the period.

#### **Conclusion, Recommendation and Policy Implication**

Since that larger proportion of personal remittance flow passes through unofficial channel, and remained unaccounted for in the capital account. And about 2.04 percent is only accounted for through financial institution transfers; thereby, increasing the value of foreign exchange in Nigeria. Also, controlling for FDI, there foreign exchange rate increased by about 22 percent, on average, during the review. A theoretical corollary exists between increase in FDI inflow and exchange rate upward movement. Hence, a significant flow of foreign direct investment impacts on the capital account and exchange rate control. But, the long run implication of mismanagement of exchange rate results in a disproportionate change of FDI inflow by about 34 per cent [17-24].

Based on the conclusion drawn from the empirical study, the following recommendations are suggested:

- The Nigerian Monetary authority should harmonize the dual exchange rate in order to maximized the gains of capital control and achieve domestic monetary policy autonomy
- Government should implement friendly tax policies, zero charges and lowered administrative bottlenecks to clearing personal diaspora remittance inflow. This is to minimize diversion of foreign capital into unofficial route.
- Regulatory and tax authority should charge ad valorem tax to gift items, auto mobile, and personal effects suspected to be sent from immigrant family member Abroad. This will reduce the degree of conversion of remittances into material gift items.
- The central; bank of Nigeria should work in synergy with Technology companies to develop a flexible cross border remittance transfer Application to facilitate inflow of diaspora remittance flow . This will provide foreign exchange liquidity , and buffer for any shortfall
- Government should encourage Special Purpose Vehicle with foreign investors on key sectors, including power, energy and solid minerals.
- Government should revamp policy on import substitution strategies to accelerate the influx of foreign investors with fiscal incentives.

#### References

- 1. Obi C (2017) The impact of foreign exchange volatility on foreign direct investment in Nigeria. Global Journal of Management and Business Research Finance 17: 24-30.
- 2. Mordi CNO (2003) Exchange Rate management: Concepts and Issues. Paper presented at a workshop on Foreign Exchange Management issues organized by the Trade and Exchange Department, CBN, at Gateway Hotel Abeokuta, Nigeria 25-28.
- 3. Olajide VC (2016) Real Sector Performance and Exchange Rate Dynamics in Nigeria.
- 4. Argy V (1982) Exchange rate management in Theory and Practice. Princeton Studies in International Finance https://ies.princeton.edu/pdf/S50.pdf.
- Ratha D (2022) What Are Remittances? Economics in Action. International Monetary Fund publication. Accessed 22ND Nov, 2022 from:https://imf.org/external/Pubs/FT/fandd/ basics/76-remittances.htm.
- 6. Obi KO, Oniore JO, Nnadi KU (2016) The impact of exchange

rate regimes on economic growth in Nigeria. Journal of Economics and Sustainable Development 7: 115-127.

- 7. Kitesea DT, Jewaria T (2018) Determinants of tax revenue in East African countries: An application of multivariate panel data integration analysis, Journal; of Economics and International Finance (n).
- 8. Ratther D, Supriyo D, Schuettler K (2017) Why taxing remittances is a bad idea .World Bank Blogs. https://blogs. worldbank.org/peoplemove/why-taxing-remittances-bad-idea.
- 9. Siddiqui T (2004) Efficiency of Migrant Workers' Remittances. Prepared for the Asian Development Bank.
- Buencamino L, Gorbunov S (2002) Informal Money Transfer Systems: Opportunities and Challenges for Development Finance. DESA Discussion Paper 26.https://www. migrationdataportal.org/themes/remittances
- 11. Singer DA (2010) Migrant Remittances and Exchange Rate Regimes in the Developing World. The American Political Science Review 104: 307-323.
- 12. Mundell R (2021) On the History of the Mundell-Fleming Model. International Monetary Fund 74.
- 13. Borjas G (2013) Immigration and the American Worker A Review of the Academic Literature. Washington. D.C: Centre for Immigration Studies. Available at: https://cis.org/sites/ default/files/borjas-economics.pdf.
- 14. Borjas GJ (1987) Self-Selection and the Earnings of Immigrants. The American Economic Review 77: 531-553.
- 15. Athenia BS (2014) Remittances, Financial Development and Economic Growth: Empirical Evidence from Lesotho. Journal of Governance and Regulation 3.
- 16. Sims CA (1972) Money, Income, and Causality. The American Economic Review 62: 540-552.
- 17. Migration Data Portal (2022) Remittances. Available at: https://www.migrationdataportal.org/themes/remittances
- OECD (2006) International Migrant Remittances and their Role in Development Organization of Economic cooperation and Development. Available at:https://www.oecd.org/els/ mig/38840502.pdf.
- 19. Okon EO (2022) Interactive effect of exchange rates with remittance on informal remittance channel: a dynamic analysis. Journal of Business Economics and Finance 11: 121-122.
- 20. Sotunde A (2022) Nigeria eases rules on diaspora remittances to boost FX liquidity. Reuters Publication https://www.reuters.com/article/ozabs-us-nigeria-currency-remittances-idAFKBN28B3Z9-OZABS.
- 21. UKEssays (2018) Theories for Remittances. Retrieved from https://www.ukessays.com/essays/economics/theories-remittances-5870.php?vref=1.
- 22. UNCDF (2021) The case for the collection and analysis of transaction-level, supply-side data on remittances- United Nations Capital Development Fund (UNCDF) https://migrantmoney.uncdf.org/wp-content/uploads/2021/12/UNCDF-RRAS remittances-supply-side-data.pdf.
- World Bank (2006) Economic Implication of Remittances and Migration. Washington D.C: Global Economic Prospects. Available at: https://openknowledge.worldbank.org/bitstream/ handle/10986/7306/343200GEP02006.pdf
- 24. Yang D, Choi H (2007) Are Remittances Insurance? Evidence from Rainfall Shocks in the Philippines. The World Bank Economic Review 21: 219-48.

**Copyright:** ©2023 Jonah O Orji. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.