

Impact of Exchange Rate to Financial Remittances Econometric Evidence from Nigeria, (1990-2016). OLS Regression Approach

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Article History

Received: 03.09.2018

Accepted: 15.09.2018

Published: 30.10.2018



Abstract: The study measured the impact of exchange rate to financial remittance in Nigeria for the period 1990 to 2016 using the traditional ordinary least square method for estimation. Also, empirical and theoretical evidence from Nigeria, Africa and the continent was compared. The analyses of the OLS regression showed evidence that real effective exchange rate positively and significantly impacted on financial remittance in Nigeria. Similarly, estimates from the ordinary least square model provide evidence to show that exchange rate also positively significantly impacted on other macroeconomic variables such as money supply but negatively to economic growth under the period of the study. The result points to the fact that the macroeconomic variables and financial remittance in Nigeria if well managed can engineer the Nigerian economy to greater growth.

Keywords: Exchange rate; Broad Money Supply, GDP, Financial remittance.

INTRODUCTION

Remittances are important financial inflows for many developing countries. In recent years the remitted amount to developing countries, including Nigeria, have increased sharply and exceeded inflows of official development assistance and other types of capital inflows.

Hence it is not surprising that remittances have become increasingly interesting to many researchers and economists. Most of their researches focus on the positive impacts of remittance on growth, reducing poverty, balances of payment or education and health care. In this research, however, we are concerned with the impact of foreign exchange market to remittances. Yang [1] stated that huge remittances can lead to the overshooting of a country's exchange rate. The overvalued exchange rate makes the country's exports relatively expensive, imports cheaper, and thus puts pressure on the country's current account. The additional demand arising from remittances raises prices in the non-tradable sector while the prices cannot move much in the tradable sector in a small open economy. Over the past decade, remittances to developing countries from their nationals living abroad have grown steadily, reaching an estimated US\$404 billion in 2013 and out-performing official development assistance [2]. This figure excludes the money transferred through informal channels which cannot be captured and hence is not recorded. Migrants' remittances currently rank as the second largest source

of external inflows to developing countries [2]. Though there are discrepancies in data estimates across various sources, still the growth of remittances globally is astounding [3]. Global remittance flows to both low-income and high-income countries, are estimated at \$583 billion in 2014, and rose to \$586 billion in 2015 and could rise to \$636 billion in 2017 [4]. The volume of remittance flows enthused policy makers, stakeholders and researchers.

Wahba [5] opines that Remittances are playing an increasingly large role in the economies of many countries. They contribute to economic growth and to the livelihoods of those countries. According to World Bank estimates, remittances total US\$585.1 billion in 2016, of which US\$442 billion went to developing countries that involved 250 million migrant workers. For some individual recipient countries, remittances can be as high as a third of their GDP. Shafin [6] advocated that the World Bank has projected that up to \$22 billion will flow into Nigeria in 2017 through Diaspora remittances, noting that global remittance flow is set to recover in 2017 after two consecutive years of decline.

Remittances to Sub-Saharan Africa (SSA) are estimated to have increased by 2.2 percent (to \$32.9 billion) in 2014, after a sluggish 0.9 percent growth in 2013. Nigeria alone accounts for around two-thirds of total remittance inflows to the region, but its remittances are estimated to have remained flat, at roughly \$21 billion in 2014. The regional growth in remittances in 2014 largely reflected strong growth in Kenya (10.7 percent), South Africa (7 percent) and Uganda (6.7 percent). The growth of remittance flows to the region was slow to 0.9 percent in 2015, and then recovers to 3.4 in 2016 and is projected to 3.8 percent in 2017 (World Bank, 2016). In light of the current internalization and globalization of markets, Nigeria now operates an environment considered as free trade, as well as free movement of goods and capital. Since the 2008 global financial crisis, the volume of external financial flows to Nigeria is seen to have decreased. The inflow of foreign aid into Nigeria grew from USD 67.6 million in 1987 to about USD 11.4 billion in 2006, where it peaked, but gradually declined to USD 2.5 billion in 2013. However, imports rose above all sources of external finance in 2011 to USD 88.4 billion but also declined to USD 71.6 billion in 2014. The inflow of remittances on the other hand has consistently increased from USD 2.3 billion in 2004 to USD 19.0 billion in 2015 [7].

Globally, there has been a steady rise in the number of migrants. The number of migrants increased rapidly between 2000 and 2010. According to the International Migration Report [8], between 2000 and 2010 there were 4.6 million new migrants annually, compared with an average of 2 million per annum between 1990 and 2000 and 3.6 million per annum from 2010 to 2016. Migration has positive and negative impacts on 'home' and 'host' countries, but one generally positive benefit of migration is financial remittances. Major sources of foreign-exchange earnings for Nigeria are remittances sent home by Nigerians living abroad. In 2014, 17.5 million Nigerians lived in foreign countries, with the UK and the USA having more than 2 million Nigerians each. According to the International Organization for Migration, Nigeria witnessed a dramatic increase in remittances sent home from overseas Nigerians, going from USD 2.3 billion in 2004 to 19.0 billion in 2016, representing 6.7% of GDP. In 2016, remittances reached a new record of \$35 billion. The United States accounts for the largest portion of official remittances, followed by the United Kingdom, Italy, Canada, Spain and France. On the African continent, Egypt, Equatorial Guinea, Chad, Libya and South Africa are important source countries of remittance flows to Nigeria, while China is the biggest remittance-sending country in Asia. In 2016 Nigerian Central Bank (CBN) decision to suspend the operations of all MTOs in the country, except those of Western Union, Money Gram and Rio, was met with a strong backlash. It was argued that the decision was not appropriately justified, while also standing in contrast to the CBN previous move to ban all exclusivity

agreements with Western Union. The decision was considered to disproportionately strengthen the dominant position of Western Union, Money Gram and Rio. Under pressure, however, the Central Bank reversed the decision and granted new licenses to a number of competing Open market operators. The absence of how exchange rate influences financial remittances and other macro economic variables weakens the efforts of the policymakers in optimizing the use of remittances. Against this backdrop, it becomes relevant to investigate the impact of exchange rate on financial remittances in Nigeria. The remainder of this paper is arranged as follows: next section reviews relevant related literature. Next section presents data and specifies model used in the study, then, next section presents and discusses results while the last section concludes the paper.

REVIEW OF RELEVANT LITERATURE

Conceptual Review

Concept of Financial Remittances

Nwosa [9] discovered that workers' remittances have exceeded both FDI and foreign aid. Two further studies have also noted that workers remittance is not only more stable compared to other capital inflows but that it also increases when the recipient country is undergoing economic downturn due to financial upheavals, ecological problems or political uprising which compel migrants to send more funds home to assist their loved ones [10]. The assertion was evidenced in Nigeria during the global financial crisis of 2007/2008 when FDI and foreign aids plummeted but remittances were on the increase [9]. The most commonly cited definition of remittances is that provided by the IMF in the fifth edition of its *Balance of Payments Manual* (BPM5) and the accompanying *Balance of Payments Textbook* and *Balance of Payments Compilation Guide* [11]. In these sources, workers remittance has been captured to consist of goods or financial instruments transferred by migrants living and working in new economies to residents of the economies in which the migrants formerly resided. Remittances are transfers made by migrants who are employed by entities of economies in which the workers are considered residents; transfers of self-employed migrants are not classified as workers' remittances but as current transfer. In balance of payment account, the components with regards to remittance are: workers' remittances (current transfers), compensation to employees (income), and migrants' transfers (capital transfers). The first two are part of the current account, while the latter is part of the capital account. Remittances, in balance of payment, are often measured by the estimate of private transfers. The three categories are identified in the International Monetary Fund Balance of Payment Manual: Migrant Transfers: The flow of goods and the changes in financial items which arises from migration of individuals from one country to another is recorded here. These include all household and personal effects, together with any

movable capital goods which are actually transferred from the economy which the migrant is leaving to the one he is going. Enterprises in which the migrant retains ownership after their departure and claims on other residents in the former economy are also included. **Workers' Remittances:** This component covers unrequited transfers by migrants employed in their new economy for a period exceeding one year. It does not include persons who work in the new economy for less than one year. **Other Private Remittances:** This component covers transfers in cash or kind between individuals, between non-official organizations, and between an individual and a non-official organization. Such transfers include gifts, inheritances, alimony and other support remittances, non-contractual pensions from non-governmental organizations, compensation for damages; etc.

THEORETICAL FRAMEWORK

The theory of remittance was propounded by Karagoz in 1928 called theory of Repatriation. Remittances are used as fall back option in this motive remitting back at home. It is a form of risk diversification as migrant supports their family members in terms of need, mostly those who financed their movement across the domestic borders. . However, in principle, such types of contracts were implicit because these were within the family members, based upon faith within the family members. However, the researcher adopted this is because the migrant worker took decision about the type of assets to be bought and the country in which the wealth to be accumulated. The home country is considered best and secured in terms of investments. Though investments in the host country might earn higher profit or interest, the higher risk involved favors investment in home country. This motive is also considered as family of the migrant worker could manage and administer the accumulated assets of the worker during the emigration period.

EMPIRICAL REVIEW OF THE LITERATURE

Tansel and Yasar [12] investigate the impact of remittances on key macro variables such as consumption, investment, imports and income on output growth in Turkey, using the Two Stage Least Square method of estimation result reveals that remittances impacted positively on the selected Macroeconomic variables under study.

Makhlouf and Naamane [13] examined the contribution of workers' remittances to economic growth in morocco from 1981-2010. They applied a Vector Auto-Regressive model (VAR), the impulse response functions and variance decomposition which show that the workers remittance had a positive impact on the GDP per capita and economic growth through financial development. While working on the effect of remittance on economic growth inTunisia between 1976 and 2006,

Barguelli and Zaiem [14] examined the existence of a long run relationship workers' remittances to economic growth in libya from 1981-2012 by employing both co-integration and ordinary least squared method of analysis. The co-integration estimate revealed the existence of a long run relationship among the variables while the ordinary least squared estimate showed that remittances had a negative effect on economic growth however the inclusion of education in the regression estimate changed the impact of remittance on economic growth to positive. This suggests that the impact of remittance could be better felt on economic growth through human capital development.

Jayaraman, Choong and Kumar [15], on similar vein, investigated of nexus between remittances and economic growth in Tonga during the past 28-year period (1981-2008) with a different methodology. They used bounds testing approach under the autoregressive distributed lag (ARDL) procedure developed by Pesaran *et al.*, [16]. In modeling the equations, the components of Gross Domestic Product in the Balance of Payment account were expressed as a percentage of GDP. In other words, GDP was expressed as a function of remittance as percentage of GDP, private credit as percentage of GDP, exports of goods and services as percentage of GDP etc. They found a long-run relationship between real output, remittances, private credit, exports and the interaction term between remittances and private credit at 1% significance level. They also conducted the Granger causality test in the parsimonious vector error correction model (PVECM) framework to investigate the short-run causality relationship between real output, remittances, private credit and exports, and all were found to be statistically significant.

Diaz [17] analyzed the effect of remittances on economic growth using relationship analysis. He used data from Giuliano and Ruiz-Arranz [18] and considered 73 countries over the years 1975-2002. This study was aimed at analyzing the causal relation between remittances, investment and growth by employing path analysis to explain the direct and indirect channel of this relationship. He found out that remittances only influence growth indirectly through investment. This influence, according to the study, is of low magnitude, although statistically significant. The result of this study is relatively different from the major reviewed works on this research area; there are more findings in support of direct relationship between remittance and economic growth than indirect relationship through investment.

Mohamed and Sidiropoulos [19] investigated if workers' remittances affect growth using seven MENA labor exporting countries (Algeria, Egypt, Jordan, Morocco, Syria, Tunisia, Sudan) during the period 1975-2006. The study was based on fixed-effect and

random effects model, giving insights on two important channels through which remittances affect growth i.e. institutions and financial development. Their findings showed that remittances have a positive impact on growth both directly and indirectly through their interactions with financial and institutional channels.

Fayissa and Nsiah [20] examined remittances and economic growth in Africa, Asia, and Latin American-Caribbean Countries, using a panel unit root and panel co integration analysis. They used annual panel data from 1985- 2007 for 64 countries consisting of 29 from Africa, 14 from Asia, and 21 from Latin America and the Caribbean region, respectively. They concluded in their study that remittances do, indeed, have a statistically significant long-run impact on economic growth in all three regions as a group and much more pronounced for the Asian region than the African or Latin/Caribbean regions, partly owing to the regional differences in the transaction costs and the use of remittances. In an era when there was strong opposition to the disbursement of the traditional sources of development financing in the form of foreign aid, foreign direct investment (FDI), and private transfers, they opined that remittances served as a life line for development projects.

Motelle [21] studied the role of remittances in financial development in Lesotho vis-à-vis other alternative measures of financial development. The method of Error Correction Model was used. He found out that remittances tend to have a long run effect on financial development; however, they do not cause financial development. The Granger causality test revealed that financial development causes more remittances.

Kumar [22] explored the short-run and long-run effects of remittances, exports and financial development on per worker income using the annual data for the period 1980-2009 in Pakistan. The ARDL Bounds approach under the Solow specification was used to establish the existence of long-run relationship between capital and labor stock, exports of goods and services, remittances and credit to private sector with respect to per worker income. The results indicated that remittances are pertinent contributor to economic growth of Pakistan's economy in the long run. Although he did not find remittances as effective contributor in the short-run, he attributed it to the World Bank argument that "this may be due to remittances flowing through informal channels resulting in remittance income being accumulated at home which is later invested in economic activities".

Yadav, Sharma & Gaudel [23] did analytical and descriptive study on the role of remittance income in economic development of Nepal as compared to other inflows like foreign direct investment and grants. A trend analysis of Workers' remittance, Grants and Pensions was done with regards to their share of the

Gross domestic Product (GDP) over a period of 1991 to 2005. Included in their analysis was also statistical relationship of these variables. The study concluded that "remittances and grants are claimed as important sources of increasing foreign exchange earnings in Nepal. Moreover, remittances may be a dependable source of national income for economic development if there is job guarantee for the workers with the wage level equivalent to the residence of the foreign country". This study was not in any way based on a robust statistical and econometric analysis in several ways; the conclusion was largely driven by some of the reviewed literature. The model of GDP as a function of Remittance, Grants and Pension was not tied to any theory, and the findings were drawn from this relationship. The variables used in this model was not in any where subjected to any unit root and other econometric tests even at the usage of Time Series data

Oke, Uadiale and Okpala [24] investigated the impact of workers' remittances on financial development in Nigeria from 1977 to 2009 using ordinary least square estimation (OLSE) technique as well as the Generalized Method of Moments (GMM) estimator. With the indicators of the ratio of money supply to GDP (M2/GDP) and the ratio of private credit to GDP (CPS/GDP), they found that remittances positively and significantly influence financial development in Nigeria.

Kalim and Shahbaz [25] examined the various factors affecting poverty with particular emphasis on the relationship between poverty and foreign remittances. It was hypothesized that remittances, trade openness, GDP growth, inflation, urbanization and tax rates are the possible variables affecting poverty. Time series data ranging for the period of 1973-2006 was utilized. DF-GLS test was applied for the existence of a unit root in the level and first difference of each of the variable. Stationarity was found at the level 1(1). They discovered that there is a positive and significant association between macroeconomic shocks and poverty; remittances help in reducing poverty. It was found that poverty has positive association with FDI, inflation, tax and initial trade openness while it has negative relationship with remittances, GDP per capita, and Urbanization.

Vargas-Silva and Huang [26] tried to examine macroeconomic determinants of workers' remittance both in host (foreign) country and home (domestic) country. In other words, they tried looked at the responses of remittance to macroeconomic conditions of domestic and foreign countries. This study was tested on data from Brazil, Colombia, the Dominican Republic, El Salvador, Mexico and the U.S; variance decompositions, impulse response functions and Granger causality tests derived from a vector error correction model were used to drive home their findings. "The results indicate that remittances respond

more to changes in the macroeconomic conditions of the host country, than to changes in the macroeconomic conditions of the home country.

Baldé [27] researched on migrants' remittances and economic growth in Sub-Saharan Africa (SSA), using Two Stage Least Stage (TSLS) instrumental variable method to estimate the growth equation. In his study, he investigated the relationship between remittances and growth in SSA. From a sample of 29 SSA countries for the 1980-2004, he found that remittances do not have any direct impact on economic growth of Sub-Saharan African countries. However, he presumed that it is possible that remittances promote growth through indirect channels such as saving, investment, financial development, education, but no precise estimation was done to show this indirect link.

Paul and Das [28], between the period of 1979 and 2009, investigated the remittance-GDP relationship in the liberalized regime of Bangladesh, using a co integration and innovation accounting methodology. The Vector Error Correction (VEC) took care of the co integrating equation and the short-run dynamics of the variables in the system. Innovation accounting shows the impulse response and variance decomposition of remittance due to GDP. In their findings, they discovered that output greatly determines remittances in Bangladesh, but the reverse is not the case: "the share of the forecast error variance of remittances due to GDP is roughly 80 percent, whereas that of GDP due to remittances is 40 percent in 10 years; there is no evidence on remittance-led growth in the short run. Innovation accounting shows that the impact of output on remittances is remarkably stronger than that of remittances on output; remittance growth appears to be countercyclical, and it has no significant effect on output growth in the short run". However, the above countercyclical result was taken cognizance of as Biru and Anupam as they presumed and hypothesized as a researchable interest "the increase in GDP may have caused institutional improvement to bring remittance through normal channels than before".

In the light of the above mixed review, the two distinct schools of thoughts of workers' remittance can be said to have empirical backing. According to Optimistic Views, remittance is positive to the receiving households/countries, it could alleviate poverty and promote economic development and ease pressure on governments faced with large external deficits to engage in difficult structural reforms; while Pessimistic Views holds that remittances should not be encouraged as it is detrimental to the growth and development of the recipients/receiving countries, and responsible for "excessive" consumption, import dependency or "unproductive" investment in housing and land. It exacerbates the dependency of receiving communities. These two views were foundational for the development of theories on remittances.

Knowledge Gap

However, looking at a large volume of literature above, one can understand that most of the literature differs by location (country/geography), time/years of coverage and methodology. Certainly, different views of the world have been compared and empirical evidences can equally be seen to have some bearings on such comparism. Unfortunately, the resulting literature above is yet to develop acceptable and conclusive evidence on how to manage remittances issues in both developed, developing and underdeveloped countries. Worryingly, the current investigations and techniques of estimation on remittances issues and its instability are still a subject of debate due to disputes arising in remittances management. And exchange rate variability. Hence, existing studies both in American continent, Asian, Europe, Africa and Nigeria in particular centered their research mostly on remittances and economic growth. More adequately captured are some microeconomic indices relating to exchange rate such as trade openness, external reserve, and balance of payment, interest rate, and credit to the private sector, broad money supply and GDP.

This work attempted to deviate from remittances and GDP to capture financial remittance and exchange rate in Nigeria this is enlarged to contain some other Human development index that can be controlled by regressor over the regressand and that which has not been done in Nigeria before. Hence, this work attempt to deviate from the previous work by creating the gap "Financial remittance and exchange rate in Nigeria". The gap is reflected in currency of the research (1990-2016), methodology (OLS) and none of the above work used OLS by making it dynamic as a Methodology in Nigeria. This gap is a major contribution to knowledge both theoretically and empirical, across the country, sub-Sahara Africa, and other continent of the world.

METHODOLOGY

Research Design

This study adopted both *ex post facto* and analytical research method. Onwumere [29] expressed that Research Design provides a blue print that guides a researcher in carrying out the set investigation and analysis. In the research work, it contains the entire essential ingredient that would allow for a systematic appreciation of the scientific method in investigation and solving of the set research problems and objectives.

Nature and Data Sources

The data by nature of this work is secondary and was drawn from already existing source. The data for the definitions of the variables are obtained from the International Financial Statistics (IFS) of the International Monetary Fund, the World Development Indicators (WDI) of the World Bank and the central

bank of Nigeria statistical bulletin [30]. Data obtained are variables from Financial remittance as dependent variable while social economic development will be proxied by other independent variables like the GDP, and other human development index. The secondary data set covers from period of 1990 – 2016 using an annualized time series. Christ [31] defined time series observation as observation that is ordered in time or numerical values of variables occurring from time to time.

MODEL SPECIFICATION

Two ways least square regression model of analysis was adopted to show the impact of exchange rate to financial remittances in Nigerians. Given

equation therefore, remittances equation can be specified as follows:

$$EXR_T = b_0 + b_1 REM_T + b_2 GDP_T + b_3 M2_T + \mu_T$$

Where,

EXR= Exchange rate

REM=Remittance

GDP= Gross Domestic Products (a proxy variable for GDP growth rate)

M2= Broad Money supply

μ =stochastic error term

b_0, \dots, b_3 =regression coefficients of the parameter estimate.

DATA PRESENTATION AND ANALYSIS

YEAR	LNREER	LNFRM	LNGDP	LN M2
1990	2.81271	16.11809	6.158355	3.0175
1991	2.91084	18.00518	6.302017	3.1791
1992	3.02455	17.84088	6.774612	3.1458
1993	4.07106	20.49133	6.993639	3.3232
1994	4.25575	20.12542	7.244013	3.3404
1995	4.48702	20.50510	7.975000	2.7644
1996	4.48702	20.66880	8.302092	2.5825
1997	4.48009	21.37559	8.340276	2.6935
1998	4.48214	21.15764	8.291408	2.9265
1999	4.65523	20.98639	8.450899	3.0504
2000	4.74848	21.05389	8.811886	3.0893
2001	4.88162	20.87735	8.838580	3.2835
2002	4.91360	20.91299	8.9613352	3.0831
2003	4.94946	20.78417	9.2016547	2.8753
2004	4.96424	21.54423	9.3423392	2.9466
2005	4.96424	21.92584	9.5895217	3.3343
2006	4.98838	22.41612	9.8290112	3.6314
2007	4.99586	22.94474	9.9358250	3.7673
2008	5.04728	23.02384	10.0980805	3.0455
2009	5.07529	22.98343	10.1183666	3.0291
2010	5.04985	23.03034	10.9080137	3.0858
2011	5.10558	23.05638	11.0505788	3.06842
2012	4.72632	23.05686	11.1804404	3.00512
2013	4.89387	23.06938	11.2909382	2.98027
2014	5.07548	23.068910	11.3968816	3.01368
2015	5.29726	23.069549	11.4525910	3.15424
2016	5.75314	23.667704	11.1144497	3.27116

The Study used ex-post facto research design and time series data which are qualitative in nature. The population of this study is from 1990-2016 and the sample of the secondary data was drawn from Central Bank of Nigeria Statistical Bulletin and World Bank Development data 2016. Growth rate is used to express the performance the variables to Economic Growth of Nigeria. Growth rate is expressed in GDP as a proxies.

Data on Growth rate help to reduce the information to meaningful and manageable size for statistical presentation of results. Growth rate transformed data are used for easy interpretation of results, introduce Linearity and Elasticity and also address diagnostic problems.

DATA ANALYSIS

Stationary properties of the data set using Augmented Dickey Fuller test of unit root

Variables	ADFSTAT	CRD5%	P.V	Speci	Remark
LNREER	-7.5205	-3.6032	0.0000	1(1)	STATIONARY
LNF.REM	-4.4707	-3.6032	0.0001	I(1)	STATIONARY
LNGDP	-6.0830	-3.6032	0.0002	1(1)	STATIONARY
LM2	-2.2565	-1.9502	0.0259	1(1)	STATIONARY

Source: Own computation (2017) See Appendix 1, 2,3,4,5.

The data tested the stationary properties of the variables and confirmed that all are stationary at order one. The augmented dickey fuller test is used to test whether the variable has a unit root. Therefore, analyses from the review confirm that there is no unit root on the

variable at (1). Hence, when there is no unit root at order, one, it means that the variable are all stationary and ADF statistics is more negative and significant than critical value (a) 5%.

Descriptive Statistics Showing Normality Distribution

	LNREER	LNFRM	LNGDP	LM2
Mean	4.629601	21.39852	9.183437	3.099572
Median	4.893877	21.37559	9.201655	3.068423
Maximum	5.753144	23.66770	11.45259	3.767370
Minimum	2.815409	16.11810	6.158355	2.582544
Std. Dev.	0.696299	1.835806	1.616627	0.252969
Skewness	-1.413023	-1.162765	-0.246698	0.559772
Kurtosis	4.500365	4.103879	2.050882	3.954752
Jarque-Bera	11.51733	7.454972	1.287298	2.435545
Probability	0.003155	0.024053	0.525372	0.295889
Sum	124.9992	577.7600	247.9528	83.68844
Sum Sq. Dev.	12.60564	87.62482	67.95055	1.663831
Observations	27	27	27	27

Source: Researcher’s result extracted from E-view platform (2017)

Descriptive analysis of the variables and also represents the preliminary test for normality. The REER, FREM, GDP, and M2 showed some important traits in performing the normality test of using the jarque bera statistics is less than 5%. Showing normality. It showed that GDP is slightly skewed to -.2 and it has a peak kurtosis value of 4.andthe probability

of Jarque-Bera test for normality with the value of 0.0000> 0.05 reveals that the data is normally distributed. This result was confirmed by the P-value of the Jarque –Bera statistics which respectively are greater than 5percent critical value It is therefore certain from the above evidence that the data set are normally distributed.

Regression Result of the variables of interest

Dependent Variable: LNREER				
Method: Least Squares				
Date: 09/01/18 Time: 03:56				
Sample (adjusted): 1991 2016				
Included observations: 26 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.699109	0.915258	-1.856426	0.0775
LNFREM	0.174835	0.070710	2.472555	0.0220
LNGDP	-0.084610	0.067464	-1.254156	0.0257
LM2	0.103062	0.144733	0.712087	0.0278
LNREER(-1)	0.673482	0.110830	6.076732	0.0000
R-squared	0.925565	Mean dependent var	4.699377	
Adjusted R-squared	0.911387	S.D. dependent var	0.606226	
S.E. of regression	0.180461	Akaike info criterion	-0.415566	
Sum squared resid	0.683887	Schwarz criterion	-0.173624	
Log likelihood	10.40236	Hannan-Quinn criter.	-0.345896	
F-statistic	65.28167	Durbin-Watson stat	1.9676554	
Prob(F-statistic)	0.000000			

Source: Researcher’s result extracted from E-view platform

APPENDIX

YEAR	REER	F.REM	GDP	M2
1990	16.7	10000000	472.65	20.44169
1991	19.3	66000000	545.67	24.02745
1992	21.9	56000000	875.34	23.23999
1993	56.8	793000000	1089.68	27.74994
1994	71.7	550000000	1399.7	28.2315
1995	81.8	804000000	2907.36	15.87022
1996	81.8	947000000	4032.3	13.23075
1997	84.7	1.92E+09	4189.25	14.78455
1998	89	1.544E+09	3989.45	18.66342
1999	105	1.301E+09	4679.28	21.12571
2000	115.5	1.392E+09	6713.57	21.96325
2001	132.7	1.167E+09	6895.2	26.66987
2002	136	1.209E+09	7795.76	21.82599
2003	140.9	1.063E+09	9913.52	17.73216
2004	143.2	2.273E+09	11411.07	19.04188
2005	143.2	3.329E+09	14610.88	28.05878
2006	146.7	5.435E+09	18564.59	37.76613
2007	147.8	9.221E+09	20657.32	43.26613
2008	155.6	9.98E+09	24296.33	21.02095
2009	160.02	9.585E+09	24794.24	20.67862
2010	156	1.005E+10	54612.26	21.88592
2011	164.94	1.031E+10	62980.4	21.50795
2012	112.88	1.032E+10	71713.94	20.18878
2013	133.47	1.045E+10	80092.56	19.69315
2014	160.05	1.044E+10	89043.62	20.36221
2015	199.79	1.045E+10	94144.96	23.43543
2016	315.18	1.9E+10	67134.26	26.3421

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From the table 4.2.3(A), REER has a 17% increase to FREM and the rate of the increases is statistically significant. REER has a negative 8 % decrease to GDP and equally statistically significant. REER has a positive 10% increase to M2 and equally statistically significant. The R_2 is 93% while the R_2 adjusted is 91% the probability of F- statistics is significant and the Dublin Watson is good because it did not violate auto correlation assumptions

CONCLUSION

With reference to the empirical analysis carried out by this study to justify and clarify the mixed findings and contentious position of literature concerning remittance, it has become clearer that the direction of remittance is to the extent of economic challenges faced by any recipient country. These challenges differ from one country to the other ranging from Developed, Developing, and Less Developed to Landlocked Developed according to the World classification by United Nation (as amended on 20th September, 2011); the channels of remittance either to productive or unproductive use are greatly influenced by these divers' challenges. Whichever way one looks at it, this study concludes that exchange rate contributes its quota with a positive and significant impact to the

Economic growth in the Nigerian but services on financial remittance in Nigeria, but negative to the growth of Economic Growth.

CONTRIBUTION TO KNOWLEDGE

This study has contributed to the understanding of the impact of exchange rate on Financial remittances in Nigeria. Additionally the study broaden the contribution of exchange rate not only to Financial Remittances but also to Economic growth and money supply

So, there is a contribution to knowledge in term of currency (1990-2016) and literature because none of the work about remittances and social economic development was done in Nigeria.

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