The Impact of Net Migrant Remittance on Economic Growth: Evidence from Nigeria

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Abstract

The growing impact of remittance in the economic well-being of the in Sub-Sahara Africa, most especially Nigerians cannot be ignored. This can better be appreciated in term of large number of Nigerians living and working abroad and with the resultant incomes that are being sent back home. This development has necessitated the need to examine the impact of net remittance on economic growth, having taken into consideration the cost of transferring the remittances. The study employs the use of seemingly unrelated regression (SUR) analysis and Error Correction Model. The result does establish a significant relationship between net remittance and economic growth, but at individual level, it provides immediate income for different households. But the impact of Remittance can only be more meaningful and contribute to economic growth of Nigeria, only if financial institutions are well organized and be made more competitive to provide remittance services at reduced cost, so that funds can be remitted through official channels.

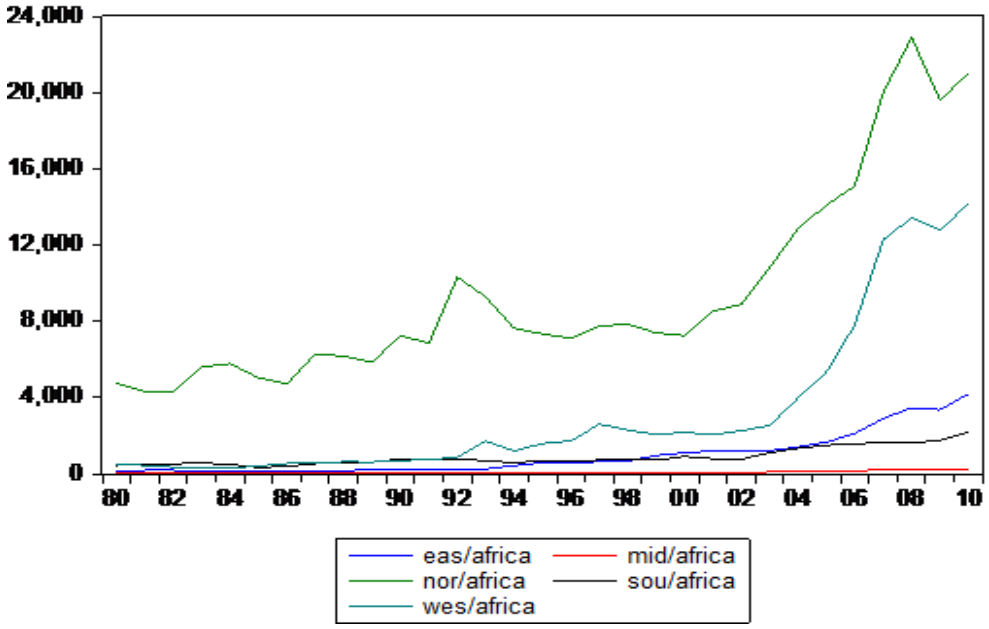
Keywords: Gross Domestic Product (GDP), Average Net Remittance (NETREM), Cointegration, Error Correction Model and Granger Causality Test.

1:1 Introduction

At the end of colonization in Sub-Sahara African countries, come the issue of economic development and coupled with this, is the problem of finance to initiate meaningful economic growth and development. It has become paramount that low savings in the continent have created serious resource gap and hence, necessitate the need for foreign finance to compliment the domestic savings. In view of this therefore, the organizations like World-bank , International monetary fund (IMF), the United Nation(UN), international development association(IDA), and other Development Economists etc, have seen large scale foreign aids as not been enough in solving the problem of under–development in sub-Sahara Africa countries and more so, the fact that Foreign Direct Investment (FDI) and Official Development Assistance (ODA) are not reliable in term of their flows and also for the fact that the conditions normally attached to these funds made it unattractive to kick start any meaningful development process. It has even been argued in literature that most of these foreign finances especially foreign aids represented by Official Development Assistance(ODA) were returned back to donor countries in term of using the funds to pay for foreign consultancies, since that would be part of the conditions for the aids in the first instance. This assertion therefore, have necessitated the need for paradigm shift, as more development economists have look in direction of Migrant Remittance as a veritable avenue for the mobilization of foreign capital as a means of kick- starting any meaningful development process.

Furthermore, over the years, Africa as a continent have experienced an upsurge in Migrant Remittance in spite of economic downturn in the continent (as shown graph 1 below) thereby making it less volite than other sources of foreign capital and hence, it become inevitable as an area that need to be studied.

Graph 1



From the above graph, it clearly show that Remittances as an emerging field of development economics have experience growth both in volume and in potential and exact real influence on the economic growth. In the work of Guptal et al, (2007), they reported that "In 2005, the total amount as remittance which doubles the amount received as official assistances by the developing countries". Remittances are being viewed as a relatively attractive source of external finance for developing countries that can be used to promote economic development and resolve any crisis situation. In addition to this, Migrant Remittances have become even more important than foreign direct investment (FDI) as a source of capital inflow for needy nations and greatly exceeded both FDI and ODA for the first time in 2006, where remittance topped with US300billion dollars and FDI with US 167 billion dollars. Additionally, Remittances are nearly thrice the size of ODA, which in 2006 only equaled US107 dollars (World Bank: Global Economic Prospect, 2006).

The Market for remittance can be identified in the rich developed countries, where most Africans worked in order to earn a living but good numbers of them entered the market illegally and hence their earnings could not be documented. In spite of this, sizeable numbers of Migrants have their stay documented and contributed to poverty reduction in their respective countries. The World Bank conducted a survey in 1990s and suggested that international remittance receipts helped to lower poverty (measured by the proportion of the population below the poverty line) by nearly 11 percent points in Uganda, 6 percent points in Bangladesh and 5 percent points in Ghana. In some Household in Africa countries, Remittances are been used to finance the purchase of basic consumption need, education, health and even acquisition of landed properties. In some case, they can be used to finance import and settlement of debts.

The sources of Remittances are not far-fetched. United States of America is the major source of Remittance with US 39 Dollars billion in outward flows. Saudi-Arabia followed as a second largest, followed by Switzerland and German. The other countries like Spain, France, and United Kingdom etc also have their contributions to Migrant Remittances. Until recently, it was believed that most of the receipts realized from Remittances were basically used for consumption and not productive investment, but migrant remittances have not been considered as a panacea in solving the problem of economic growth and development. In recent years, there have been remarkable rises in international emigration into developed countries, especially Europe and America, following economic downturn with the introduction of policy liberalization measures and emergency of repressive military dictatorship (Adetokun 2003).

Thousands of professional especially scientists, academics, and even unskilled Africans with little education have gone abroad to work. In southern Nigeria espcially for example, between 50 and 80 percentage of households have at least one migrant member (Bah et al 2003). Migration is considered critical in achieving success and people that does not give it a serious consideration often regarded as a lazy person.

1:2 Remittance and Transaction Costs: Issues at stake

Instructively, most of the past studies on remittances only emphasizes on the gross remittances without given much reference to the cost of transferring such remittances to the recipient countries. It has become imperative therefore to distinguish between gross and net flows of remittances. It becomes worrisome and confusing, when the gross figures are used as often done in many literatures to analyses the importance of remittances especially in relation to other sources of external finances like FDI and ODA. In assessing the impact of remittances in terms of transferring of resources to the developing countries, we need to adjust for the cost of transferring the proceeds to the recipient countries. It has equally be noted that the cost of transferring the remittances varies from one channel to another and depending on the channel, the cost may increased or reduced and this have some implications on the volume of the remittances . World bank (2009) have acknowledged in her publication, the fact that remittance accruing to developing countries reached all time rise to $328 Billion dollars more than double of ODA and over 50 percent of FDI flows. To her, this figure is capable of exacting positive and significant effect in solving problems associated with poverty, financial development, entrepreneur, education and infant mortality. But average costs of remittance are often prohibitive, averaging 10 percent on global level (World Bank 2008). In addition to this, was the fact that high disparity in the cost of remittance across the remittance markets or remittance corridors, varying from 2% to 26% depending on the amount sent. More so, previous studies on cost of remittance equally identified that remittance flows are highly correlated to costs and are likely to rise tremendously as cost of remittance goes down (Gibson, McKenzie and Rohorua, 2006). But in the recognition of the need to reduce the cost of remittance, the leaders of G8 countries met at the L'Aquila, in 2009, promise to cut the cost of transferring remittance by 50 percent (i.e 10% to 5%) in five years (G8, 2009). Since the beginning of the documentation of the cost of remittance in most of developed countries where most of these remittances emanated from, the table below shows the total average cost of remittance G8 countries, which serves as remittance corridors for most of the migrants.

Table 1: Total Averages Cost in G8 Countries

Country	2008	1Q 2009	Q3 2009	Q1 2010	Q3 2010
Canada	14.00%	13.28%	11.07%	10.18%	10.90%
France	10.92%	11.50%	11.15%	11.01%	8.95%
Germany	14.07%	13.53%	12.71%	11.85%	12.67%
Italy	10.03%	07.36%	8.21%	8.11%	7.87%
Japan	15.33%	18.24%	19.06%	17.34%	16.16%
Russia	3.22%	2.42%	2.99%	2.54%	2.52%
U.K	10.26%	10.27%	9.05%	8.29%	8.07%
U.S.A	6.90%	7.21%	7.06%	7.57%	7.14%
G8	10.26%	10.32%	8.80%	8.37%	8.40
GLOBAL	9.81%	9.67%	9.40%	8.72%	8.89%

Source: remittanceprices.worldbank.org

However, it should be noted that Africa' remittance market is still at infancy and faces series of problems typical of emerging markets. The problems include uncertainty about the amount of remittance, absence or little competition in the remittance market, huge cost of remitting funds and limited technological innovations but with exception of countries already have mobile banking like Kenya and South- Africa.

Generally speaking, Money Transfer Operators (M.T.O) still played a commanding role in transferring money from U.S.A and European migrant's workers. In the whole of Africa remittance markets, we only have not more than 100 M.T.O operators and 90 percent of them is remittance service provider (RSP).

This lack of competitiveness in the market prevent the expansion of financial access and thereby prevent the market players from engaging in innovations and enlarging their services to the underserved areas.

Since competition encourages technological innovations and bring down the cost of remittance, presence of this will be beneficial to African's migrants. Most of the regulations in the Africa countries only allow banks to engage in remittance services and in some countries they charge up to 30 percent in providing such services. The activities of these banks were carried out in conjunction with Money grams and Western union transfer.

In Africa as a continent, post offices are not playing an important role in transferring remittance with exception of Algeria, where postal services is used in collaboration with French postal system, and Algeria's migrants in France have adopted the use of post-office as a means remitting money home. Although, post offices were strategically located in different regions of African societies, but lack necessary capacity to pay remittance. And this lack of capacity could be attributed to inadequate trained staff, poor communication infrastructure and more importantly, problem of enough cash flow to pay remittances.

But over the years, the average cost of transferring the remittance to the developing countries have reduced considerably with the increased in the volume of remittance and this was even acknowledged by the World Bank in their report "any reduction in the cost of sending remittances would result in more money for migrants and their families, if the cost of sending remittances could be reduced by 5 percent points relative to the value sent, remittances in recipients countries would increased up to US 16 dollars more in each year than they do now".

1:3 Remittance, Brain Drain and Brain Gain

Migration has been established to be a problem to development in less developed countries (LDCs) because it denied LDCs of their vital human resources. The acceptability of the brain drain hypothesis has been re-examined, once again provides much opportunities for a clearer picture about the concept. Apart, from the view that brain drain are much more pronounced in the LDCs (Adam 2003), it also been regarded as the reason for the obstacle to development in the LDCs. For example, migration of health professionals especially is widely cited as extremely dangerous for sending countries. However, current studies have submitted that migration is mere a sign, rather than a reason for deteriorating health care system in the affected countries including Nigeria. In fact, more importantly, health professionals would not have functioned effectively in the health sector, if they have remained in the country due to poor basic health infrastructure in those countries (DRC 2006).

Moreover, absence of health professionals may brings about long-term gain impact in form of continued remittances, trade relations, new knowledge, innovations, attitude and information's in medium to long term. Finally, brain drain can be followed more importantly by "brain gains" (Lowell and Findlay 2002; stark et al 1997). There are many reasons that further confirmed the classical brain drain hypothesis, emphasized that migration and remittance might leads to "brain gains" due to the gains achieved through migration abroad (brain drain) and encourage to stay-behind to be educated (stark et al 1997; Fan and Stark 2007). If the avenue to move abroad improves, the gains on education, serves as an incentives for the citizens of the host country to invest in educational infrastructure (world Bank 2005). This inducement effect is added to the significant of remittance in providing needed finance for prospective family to send their family abroad to be educated. Previous studies have pointed to the fact that there is an expansion in education expenditures been incurred in the recipients households (Yang 2004; Adam 2006), reducing the expectation of the children of the emigrants leaving the school (Cox Edward and Ureta 2003) and improving the number of children of the emigrants completed their education (Hanson and Woodruff 2002, identified in the work of Rapoport and Docquier 2005).

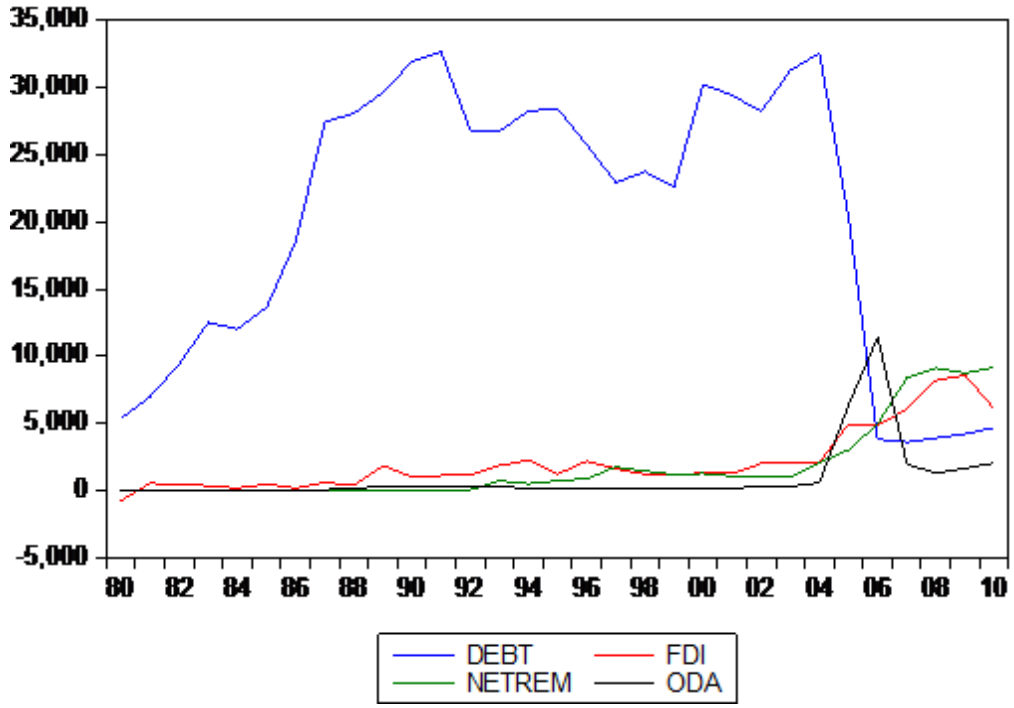
But different views identified in literatures pointed to the fact that, there are abundant reasons that seems to be suggesting that migration and remittance may contribute negatively to the education of their host countries. The case where categories of migrations were predominantly consisting of low and unskilled labour (such as in the case situation of Mexico-U.S migration) often discovered, where few positive externalities may exist, if at all it exist, but there is high degree of negative externalities that exist, if such environment is dominated by low and unskilled labour, since migrants with much more higher education earns a little more than migrants with primary school education. So incentives for higher education may not be there for the migrants to pursue.

1:4 Remittance and other forms of external finance

Unlike other forms of external finance, it has been argued that much attention has not been given to the flows of remittance in term of adequate statistics to actually buttress its relevance in the national development.

The LDC for which remittance are very vital for, in improving socio-economic conditions of their people but unfortunately, the figures representing the remittances are largely reported with significant errors. The official figures reported are quite at variance with the actual remittances being enjoyed by these poor countries. Nevertheless, the significant contribution of remittances to a country can only be attributed to the relative volume of such remittance to the receiving country. We can equally acknowledge the fact that remittance contribute to the marginal income of both the recipients and to their local economies and also added to the consumption and investment income of the receiving countries. The relationship between remittances flows and other external sources of finances includes external debts, net foreign direct investment (FDI), and official development assistances (ODA), can be shown in graph below

Graph 2 Remittance flows and External Finances



Source: Unctad Hand book of Statistics

The graph in table 3 above, shows that remittance figure is more stable and progressively increasing over the years and this is contrary to other external source finances, which are unstable and unreliable sources of finance. The remittance is resilient and continues to show an upward trend in its movement.

This study intends to examine the relative impact of net migrant remittance on Nigeria's economic growth. This study is a clear departure from the past studies, where emphasis is placed on gross remittances and ignores the cost of transferring the remittance to the recipient countries. The study will take into account cost of transferring the remittance using global average cost as determined by the World Bank. The rest of the paper is organized into four sections. Section two provides the review of relevant literature and theoretical background to study following the introduction. The methodology of the study is presented in section 3, while section 4, provide data analysis and discussion of the result. Section 5, summary and conclusion.

2:1 Literature Reviews

There are emerging schools of thought in providing explanation on the impact of remittances on economic growth in developing countries. The two prominent schools on remittances include Neo-liberal-functionalist and Historical-structuralism perspectives. The Neo-liberal functionalist viewed that remittances play a positive role in enhancing the status of an individual household, community and country as a whole,(Skeldon 2002, Ratha 2003). They believed that remittance play a crucial role in raising the capital market activities and help in providing productive infrastructure, as well as raising the effective demand for goods and service.

While the historical-structuralism viewed remittances as been responsible for creating dependant relation between the sending and the recipient countries (Portes and Borocz,1989). Remittances are been regarded as factor that created serious inequality in household and macro-economic distortions especially in countries with low Gross domestic product (GDP).

The role of Africans in Diasporas in promoting macro-economic development through remittances cannot be over emphasized. According to Maimo and Ratha (2005, p332), they submitted that "the total volume of remittances to developing countries in 2001 was US 72.3 billion dollars nearly one-and-half times net official development assistance (ODA) in that year, which totaled US 57.5 Billion". This clearly explained the growing importance of remittances as a veritable source of finance for the developing countries, since the figure clearly exceed the ODA. A number of empirical studies on the impact of remittances in countries of origin suggested that it is an important source of income for the household and with the increased income; consumption can be sustained (Azan and Gubert, 2002). It also serves as a good source of saving and assets accumulation and provides collateral security for loans and can be liquidated in time of crises (Kannan and Hari, 2002). It also provides access to better education and reduces child labour (Edward and Ureta, 2001).

There has been indeed, an argument that remittances are only expended only on consumption rather than investment purposes, which are required for meaningful economic growth and development. But in the work of Giuliano and Marta Ruiz-Arranz (2005), they submitted that there is no basis for such argument, indeed, they argued that the lack of financial inflow in most of developing countries for investment purposes make remittances imperative. With this clear submission, remittances as a form of investment finance are not only noticeable in the household sector, but spread to other sectors of the economy.

Mamboand Ratha (2005), while explaining the flows of remittances to the recipient countries, he argued that it only account for 10 percent of the total flows. But the fact that it is very difficult to track remittances because some migrants are not working legally in host countries and hence, lack necessary work permit. It has even being argued that some remittances are so common among the developing countries, Nigeria inclusive, which are remitted through an informal ways, such as remitting cash to individual household in the recipient countries, by passing it through person travelling home so as to delivered it to the beneficiaries. Sometimes, remittances are in kind, for example sending cars, electronics, etc. This method is very common and popular among migrants. The growing importance of informal way can be attributed to distrust of formal institutions, cost of remittances, poor transportation and communication infrastructure outside urban areas and inefficient payment system in which over 90 percent of transactions are in cash (Raul Hernandez-coss and chinyere Egwuagu-Burn 2006).

Remittances have been identified to be critical as a form of external finance to propel development and the factors influencing its flow cannot be discounted. The work of Russel (1986), identify the determinants and impact of remittances on economic growth and concluded that in the choice of methods in transferring the remittances includes, individual socio-economic features of individual household members, differential interest rate, and exchange rates in both the recipient countries and sending countries and the extend and type of economic activities in the both countries i.e recipient and sending and relative efficiency of the banking system in both countries were the mode of transfers to recipients countries. These factors greatly influence most of the choice or the mode of transferring the remittance. Some may even consider it appropriate to use informal method of transfer, if those methods like Bank, MTO, Post-office, etc are found not to be favourable to them. But this may lead to under-estimation of the volume of remittances accrued to the recipient countries.

Remittances has some characteristic that make it more remarkable and that its resilience. The remittances flow when compared to other inflows like foreign direct investment (FDI), official development assistances (ODA), portfolio equity etc, is resilient stable flow. The other flows fluctuate but remittances continue to rise (Ratha, Mohapatra and Silwal, 2010). Also Ghosh (2006), noted that "at the aggregate level, remittances have proved to be more stable than most of other resource inflows to developing countries in recent years". The resilience is an avenue of income which could be relied on.

But contrary to the above, remittances has often been regarded as an unreliable source of the external finance on the ground that it would decline after migrants settle and integrate at their new location (Merkle and Zimmermann 1992,Gosh 2006).

But this remittance decay hypothesis has been challenged by many scholars including (Brown,1997), which argued that from empirical evidence that such argument put up by remittance decay hypothesis could not be sustained because over time remittances remain a relatively stable flow of capital. Some have even criticized the remittances on the moral ground as chami et al, 2003, as they put it "since remittances take place under asymmetric information and economic uncertainty, then there exist a significant moral hazard problem". They present results which indicate there is a negative relationship between the remittances and economic group and that remittance present more hazard problem than any other forms of financial flows. Even, more devastating impact of remittances was even presented by Aggarwal et al (2005, P4), where it was pointed out that remittances have more serious set-back on demand for credit and development of credit institutions, most especially, if such finances are directed to the government and which may not impact on private sector, and private sector have being admitted in literature to be an engine of growth. This argument is valid where such remittances are used to purchase government securities.

It has equally been admitted in literature that remittances have serious problems in course of remitting to the home countries by the migrants. The problems so identified in literature are the problem of taxation, through regulation on one hand, and imposition of restrictions on the other hand in course of remitting the funds from the sending countries. It has even been argued that most of the sending countries especially in Asia countries impose stiff restrictions for funds to be remitted and regard such as a drain on their scarce resources. Secondly, the remittances are being regarded as large portion of their GDP, which they cannot be allowed to be taken out of their economics. Such funds are being regarded as part of their tax-revenue and hence, heavy taxes are being imposed on such income. It should be noted that such barrier would greatly reduce the funds available for remittances and consequently, there will be negative effect on both recipient and receiving individual households (Goldberg, M.A and M.D levi 2008).

Furthermore, the fact that remittances accounts for relative income stability and socio-economic well-being in the less developed countries and this, does not necessarily associated with poverty reduction in those countries because of the cost and risks inherited to migration and which becomes apparent that migration activities are not only limited to the poorest segment of the people in the society alone, while the middle income segment also engage in migration even more. As since migration affect middle income people more, the immediate gains goes to this group of people, while the poorest member of the society does not actually benefit from the remittance (CDR 2002; Schiff 1994), and consequently does not flow to the poorest countries. In fact, the main group that gain from South-North remittances are lower middle-income countries, which receive almost 50 percent of total remittances globally (kapur and McHale 2003).

3:1 Model Specifications

This study is based on the assumption that the inflow of the net remittances affects economic growth in Nigeria (GDP). And that financial deepening (FD) proxy by money supply/GDP in percentage, saving ratio (SR) defined as total savings as ratio of GDP at current basic prices, inflationary rate (INFR), nominal exchange rate (NOMEXCH), affect the inflow of net remittance.

GDP=f(netremittances(Netrem))……(1)NETREM= f(FD,SR,INFR,NOMEXCH)……(2)

Considering the fact that GDP of an economy are not determined by net remittances alone, the inclusion of two more growth determine variables is made so as to get a more realistic model. Hence, equation (1) is extended thus:

GDP = f (NETREM,FDI,GE)……..(3)

Where,

FDI= Foreign direct investment

GE= Government expenditur

Equations (2) and (3) show that GDP is dependent on Netrem, FDI and GE
The statistical forms of the models using double log are

$LnGDP=\alpha+\alpha_1 LnNetRem+\alpha_2 LnFDI+\alpha_3 GE$……..(4)
$LnNETREM=\beta+\beta_1 LnFD+\beta_2 LnSR+\beta_3 LnINFR+\beta_4 LnNOMEXCH$---------- (5)

3:2 Research Methodology

Time series data generated from central bank of Nigeria (statistical bulletin), national bureau statistics and UN Conference on Trade and Development (Unctdstat 2011) and 1980-2010. An econometrics model will be developed to examine the relationship between Net Remittance and after taking into consideration the average cost of remitting funds using global average cost of transferring determined by the World Bank.

3:3 Estimation Procedures

The seemingly unrelated regression analysis will used to estimate the model using the second stage regression analysis with the interactions of the net remittance with financial Deeping (fd), nominal exchange rate (nomexch), inflationary rate (infr) and savingrate (sr) and since it is time series data and then we test unit root using both Augmented Dickey-fuller (ADF) and Phillip Perron (PP) and further established their long run relationship through conduct of Johansen full information maximum like hood. The steamily unrelated regression analysis using two-stage least square estimate, error correction model and Granger causality test.

3:3:1 Test for unit root using augumented dickey-fuller method (adf) and phillip perron (PP)

Literature has established that most of the time series data are not stationary; therefore using non-stationary variables in the model might lead to spurious regression and which cannot be used for precise prediction (Gujarati, 2003). Now we will establish the stationary of the variables by conducting unit root test using Augmented Dickey-fuller test (ADF) and Phillip Perron (PP).

Table 2A Analysis of stationary test

VARIABLES	ADF(TEST OF STATISTICS)	CRITICAL VALUES	LEVEL OF SIGN	ORDER OF INTEG
LGDP	-8.017468	-3.679322	1%	1 (1)
LFDI	-10.455444	-3.689194	1%	1(1)
LFD	-5.194496	-3.679322	1%	1 (1)
LGE	-5.596630	-3.679322	1%	1(1)
LINFRI	-4.415054	-3.724070	1%	1(0)
LSR	-4.355177	-3.679322	1%	1(1)
LNOMEXCH	-5.752985	-3.679322	1%	1(1)
LNERTREM	-3.728559	-2.967767	5%	1(1)

Source: Author' computation using E-view 7

Table 2b test for unit root using phillip perron method

VARIABLE	PP TEST	CRITICAL VALUES	LEVEL OF SIGN	ORDER OF INTEG
LGDP	-9.442768	-3.679322	1%	1(1)
LFDI	-10.261444	-3.689194	1%	1(1)
LFD	-5.194295	-3.679322	1%	1(1)
LGE	-5.594029	-3.679322	1%	1(1)
LINFR	-4.415054	-3.724070	1%	1(0)
LSR	-4.273443	-3.679322	1%	1(1)
LNOMEXCH	-5.773728	-3.679322	1%	1(1)
LNETREM	-6.119214	-3.679322	1%	1(1)

Source : Author' Computation using E-view 7

The above table shows the summary of the unit root test of the variables for empirical study under both ADF and PP were shown above. The test under ADF shows that LGDP,LGE,LFDI, LGE,LSR and LNOMEXCH were all stationary in first difference at 1 percent respectively. While LINFR is stationary in level were stationary at 1 percent,1 percent, and LNETREM is stationary in first difference at 5 percent.

In the same vein, PP test for root test also show that LGDP, LFDI, LFD, LGE, LSR, LNOMEXCH and LNETREM were all stationary in first difference at 1 percent and LNOMEXCH is stationary in level at 1percent. A variable is assumed to be stationary (has no unit root problem), if the critical value in absolute term is less than test statistics.

Having established the root properties of the above variables, we move ahead to show whether or not there is a long-run co-integration relationship among the variables under consideration by applying Johansen Full Information Maximum Likelihood method.

TABLE 3 Co-Integration test Date: 10/07/12 Time: 07:59					
Sample (adjusted): 1982 2010					
Included observations: 29 after adjustments					
Trend assumption: Linear deterministic trend					
Series: LGDP SR FD FDI GE INFR NOMEXCH NETREM					
Lags interval (in first differences): 1 to 1					
Unrestricted Cointegration Rank Test (Trace)					
Hypothesized		Trace	0.05		
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**	
None *	0.957759	284.6285	159.5297	0.0000	
At most 1 *	0.857241	192.8621	125.6154	0.0000	
At most 2 *	0.793027	136.4107	95.75366	0.0000	
At most 3 *	0.707225	90.73089	69.81889	0.0005	
At most 4 *	0.539153	55.10870	47.85613	0.0090	
At most 5 *	0.531761	32.64269	29.79707	0.0229	
Trace test indicates 6 cointegrating eqn(s) at the 0.05 level					
* denotes rejection of the hypothesis at the 0.05 level					
**MacKinnon-Haug-Michelis (1999) p-values					
Unrestricted Cointegration Rank Test (Maximum Eigenvalue)					
Hypothesized		Max-Eigen	0.05		
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**	
None *	0.957759	91.76643	52.36261	0.0000	
At most 1 *	0.857241	56.45137	46.23142	0.0030	
At most 2 *	0.793027	45.67979	40.07757	0.0106	
At most 3 *	0.707225	35.62219	33.87687	0.0307	
At most 4	0.539153	22.46602	27.58434	0.1974	
At most 5 *	0.531761	22.00451	21.13162	0.0376	
Max-eigenvalue test indicates 4 cointegrating eqn(s) at the 0.05 level					
* denotes rejection of the hypothesis at the 0.05 level					
**MacKinnon-Haug-Michelis (1999) p-values					

Source : Author computation using E-view 7

The above illustrate Johansen's co-integration test under both trace and maximal Eigenvalue. The trace test indicates five co integrating relationship between GDP and other variables at the percent level of significant.

While maximal eigenvalue test indicates four co integrating relationship at 5 percent level of significant. The conclusion that can be arrived at is that there exist a unique long run relationship between GDP and other variables under consideration.

Table 4 Regression Table

Dependent Variable: LGDP				
Method: Two-Stage Least Squares				
Date: 11/08/12 Time: 08:44				
Sample (adjusted): 1985 2010				
Included observations: 26 after adjustments				
Instrument specification: LNETREM*LNOMEXCH LNETREM*LSR				
LNETREM*LINFR LNETREM*LFD LFD LFDI LGE LINFR LSR				
LNOMEXCH				
Constant added to instrument list				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LFD	0.385635	0.963087	0.400416	0.6945
LFDI	0.521499	0.269884	1.932310	0.0724
LGE	0.965238	0.305307	3.161538	0.0065
LINFR	-0.160611	0.197056	-0.815054	0.4278
LSR	0.424572	5.209712	0.081496	0.9361
LNOMEXCH	-0.385782	0.364036	-1.059736	0.3060
LNETREM	0.579268	0.843847	0.686462	0.5029
LNETREM*LFD	-0.431394	0.256376	-1.682661	0.1131
LNETREM*LINFR	0.068140	0.037466	1.818738	0.0890
LNETREM*LSR	0.166619	0.839437	0.198489	0.8453
LNETREM*LNOMEXCH	0.155138	0.064583	2.402146	0.0297
R-squared	0.975590	Mean dependent var		14.60078
Adjusted R-squared	0.959317	S.D. dependent var		2.111604
S.E. of regression	0.425911	Sum squared resid		2.721004
Durbin-Watson stat	2.142450	Second-Stage SSR		2.841314
J-statistic	0.000000	Instrument rank		11

From the regression result, adj R^2 value of 0.975590 shows that at 97.56%, of the explanatory variables explain changes in the dependant variables, while remaining 3% are be accounted for by variables outside the model. The fitness of every regression result is based on its R-square adjusted. The implication of this is that the model has goodness of fit. Thus, there is no doubt that there exist a significant linear relationship between the regress and and regressors. The result confirms net remittances to be positive and this is in line with our expectation of be positive. The result further confirms the earlier studies carried out by skeldon 2002, Ratha 2003, Azaan and Gubert 2002, and Taylor 1989.

The NETREM have a positive interaction with financial deepening (FD), this is line with a priori expectation that fall in exchange rate positively influence the flow of remittance. The financial development has negative impact on remittance flow. But, Beck , 2008, furthermore, emphasizes that development of more sophisticated financial system that offer good services but charges may be higher for what migrants can afford.

While also with improvement in the number of remittance service provider, it will brings about competition, therefore forcing the cost of remittance downward. Furthermore, the interaction of NETREM with NOMEXCH is positive, this shows that, a unit rise in exchange rate will raise remittance by 15% and this converges with the view of Aydas, Neyapti and Metin-Ozean (2002). The inflationary rate and saving ratio have positive sign and which is line with a-priori expectation. The domestic inflation in the country will encourage inflows of remittance.

TABLE 5 Causality test based on Error correction Model

ECTt-1	-0.370582	0.0155521
	(-3.06544)	(0.11129)
ΔLnetrem t-1	0.59590	0.793919
	(0.15482)	(0.17861)
ΔLgdp t-1	-0.166067	-0.497932
	(0.21162)	(0.22413)
C	0.101465	0.380032
	(0.21162)	(0.24413)

The error correction model was estimated in order to capture the short run adjustment to long-run equilibrium. The above error correction model shows an appropriate negative sign and hence, 37% of previous year shortfall is corrected in the present period. The Granger Causality test can conducted below:

TABLE 6 Granger Causality Test F-Value

Null Hypothesis	No of Lags			
	1	2	3	4
ΔLGDP does not granger cause ΔLNETREM	6,60	2.62	3.22	2.13
ΔLNETREM does not granger cause LGDP	1.37	0.21	0.11	0.11

The above standard Granger Causality conducted between GDP and Net remittance above show a unidirectional relationship moving from the Gross Domestic Product to Net Remittance and hence, GDP granger cause Net Remittance.

1:7 Summary and Conclusion

For remittance to be more effective and contribute to the economic growth of the country, there is need for a well-developed and organized financial development that are more competitive in nature and response to the needs of the migrants. The more competitive financial system will reduce cost of remittance and raise the volume of remittance available to various households. But the problem so identified from the study is poor and underdeveloped nature of financial system and which has hindered remittance flows into the country.

More so, various governments most especially those in G8, should ensure that appropriate monetary policies be put in place to ensure that cost of remittance in those countries as agreed in L'Aquila summit of 2009 are fully implemented and this will go a long way in reducing cost of transferring remittance from those countries and make it more attractive to migrants and thereby increasing volume of remittance available to the recipient country. In conclusion, it is appropriate to conclude that remittance has a negative impact on growth and that remittance is good only for private consumption and not for investment activities, Goupta et al (2006), Merkle and Zimmermann (1992) and Gosh (2006). But this conclusion must be interpreted with caution, since the fact that remittance increases consumption, raises individual income levels and reduces poverty, though they may directly affect growth. In addition to this, remittance should not be regarded as a substitute for official development assistance (ODA). Ideally, they are owned by private individuals and they are not funds meant for public projects, and more importantly, remittances are not been received by all the poor households in Nigeria and official funding are very essential to address the need of individual house hold.

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