

## Foreign Remittance Inflows and Financial Sector Development in Nigeria

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### Abstract

This study investigated the impact of foreign remittance inflows on financial development in Nigeria. The research is motivated by the assumption that remittance inflows are deemed to create avenues for most unbanked households to avail themselves of some of the products offered by financial service providers and by extension influence the level of financial development in Nigeria. The study made use of Secondary data covering the period 1981 to 2015. A least square regression analysis was carried out on a time series data, and to avert the emergence of spurious results, unit root tests were conducted. Other econometric advances of co-integration, Vector Auto Regression technique as well as granger causality tests were deployed to ascertain the order of co integration and the level of relationships existing between the dependent and independent variables. The paper established that foreign remittance inflows are significant contributors to broad money supply, credit to the private sector and financial savings at both the short and long runs. Foreign remittance inflows also have a significant positive relationship with exchange rate in the short run but this fizzled out in the long run. On the other hand, it had a negative relationship with interest rates at both the short and long runs. These results are in tandem with our apriori expectations. To make remittance inflows more effective in Nigeria, the study recommends that savings should be made more attractive. This will unarguably raise the proportion of banked remittances. One way of doing this is to arrange a particular interest rate for remittance receivers, by promising them relatively higher returns if they will convert their hard currency to domestic currency and deposit a large proportion of it in banks. Remittance receivers who have not opened accounts can be convinced to open and operate one. Another way of improving financial development through remittance inflows is to allow for more financial transfer agents as is done in the western world. The existing number of agents appear oligopolistic as they help to make the cost of transfer relatively costly for the remitter while they reap the benefits associated with such transfers. There is also the need to reduce the gap between the official and unofficial exchange rates, to allow banks retain more of the remittance inflows. Lastly, some deposit incentives and promotions can be embarked upon by deposit money banks. Such incentives can be enforced by the Central Bank of Nigeria

**Keywords:** Foreign Remittance inflow, Broad money, Credit to the private sector, Exchange rate, Interest rate

### 1.0 INTRODUCTION

Foreign remittance inflows could be defined as the share of migrant's income repatriated to the relatives back home. This economic scenario appears to be attracting some attention in the research and policy circle. The reason for this may be partly explained by the rising volumes in the last two decades, improved ways of remitting and perhaps because of its impact on the receiving economies (Olubuyi, 2009).

Remittances to developing countries rose from US\$2.9 billion in 1975 to US\$90 billion in 2003. By 2005, the amount has risen to about US\$188 billion and by 2008 it has increased by more than 60% of 2005 value (World Bank 2009).

In a similar release by the World Bank Group in 2013, the value of remittance inflows to developing countries were projected to grow by 5.0 per cent to reach \$435 billion in 2014 accelerating from the 3.4 per cent expansion of 2013, and further rise by 4.4 per cent to \$454 billion in 2015.

Coming closer home, foreign migrant's remittances to Nigeria rose from US\$10 million in 1990 to US\$804 million in 1995. By 2000, the amount has risen to US\$1,391.8 billion and by 2005; it has increased by more than 239% of the 2000 value. In 2010 the amount stood at about US\$10,045 billion and by 2015, the amount has risen to about US\$20,658 showing an increase of more than 205% of the value as at 2010 (World Bank, 2012). Laudable as that may sound, there have been lots of controversies in recent times over the desirability or otherwise of foreign remittance inflows and how these have affected the pace of financial development in Nigeria.

According to Olubuyi (2009), different schools of thought have defined the relationship between foreign remittance inflows and financial development. They are the complimentary and substitution hypothesis schools of thought. The complimentary hypothesis school of thought posit that, there is a positive interaction between remittances and financial development. It has been ascertained that high levels of financial development help

migrants to send more money home and in turn, a significant" inflow of remittances contributes to promoting "financial democracy". Amongst the proponents of foreign remittance inflows as a compliment for sound financial development are Terry and Wilson (2005), Mundaca (2005), and De Luna Martinez (2005). Others are Orozco and Fedewa(2006), and Demirguc–Kunt(2006)

The second school of thought is the substitution hypothesis school of thought. They are of the opinion that remittances partially offset the lack of financial development in emigration countries, by allowing poor people to invest in high-return project despite the difficulties they face in obtaining credit. Amongst the proponents of foreign remittance inflows as a substitute for sound financial development are Giuliano and Ruiz-Arranz (2005), Ambrosius (2006), Caideron, Fajnzylber and Lopez (2007) ..

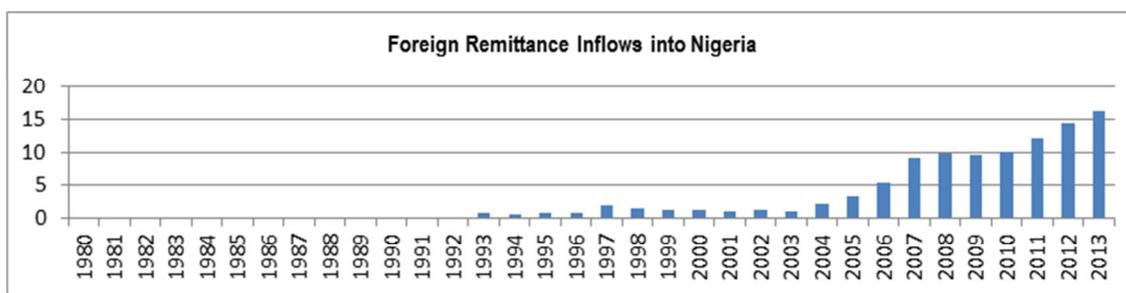
In a different perspective, but in line with the substitutability hypothesis, Aggarwal Demirguc-Kunt and Peria (2006) as cited by olobuyi(2008) suggests that if recipients' marginal propensity to consume is high or if people distrust financial institutions and prefer informal ways to save their money, an increase in remittances might not necessarily be synonymous with a rise in the demand for credit. Furthermore, as far as remittance inflows contribute to relaxing recipients' financial constraint, there is the risk that demands for credit decreases, thus, bridling financial development. Nevertheless, the few empirical studies related to the impact of remittances on financial development do not seem to confirm such hypothesis, but rather reveal the positive effect of migrants" transfers on the financial sector development.

## 1.2 STATEMENT OF PROBLEM

Migration phenomenon in Nigeria has begun long before independence, but the pattern in the 1960s appeared to be different from what it is today. In the 1960s, the essence of migration, particularly to the developed countries was practically on human development grounds, and not for the purpose of remitting back home. In that period, there was acute supply of manpower for development and people were sent to countries like the United Kingdom, United States and Canada to acquire necessary skills, which will be useful for the country's development. Meanwhile, almost 50 percent of those that migrated then actually returned, while the rest 50 percent decided to stay back. Recognizing vast economic advantage in the country of resident, those who stayed back continued to arrange for how their relatives and friends will come and join them (Adebusoye. 2006).

The upward trend in migration rate of Nigerians is not unconnected with the fact that the domestic employment appears not to keep pace with labor force growth. For instance, the growth rate of unemployment is greater than the growth rate of labor force. With unemployment growing, while better employment opportunities abound abroad, it is natural to *expect* workers to move to where their productivity can be well rewarded, and since most Nigerians migrate on altruistic basis (Orozco, 2008). Consequently, the outflow of workers leads to inflow of remittances. The money sent back home certainly contribute to the state of welfare of the migrant families left back at home , allowing them to have access to credit to purchase goods and services and possibly to accumulate asset. It is expected that millions of Nigeria in Diaspora, who currently remit foreign currencies home, can create an avenue for most unbanked households to avail themselves of some of the products offered by the consolidated financial service providers in Nigeria.(Soludo,2006)

According to a World Bank report (2013), Nigeria was projected to receive an inflow of \$21 billion in 2014 as remittances from Nigerians living and working abroad. This figure will place Nigeria as the top recipient of foreign remittance in Africa. Nigeria will be followed by Egypt with a projected remittance of \$18 billion. Figure 1 below shows a periodic trend of actual remittance inflows into Nigeria for the period 1981 to 2013.



Source: World development indicators (World Bank)

From figure 1 above, it is encouraging to note that an eight fold increase has occurred in total foreign remittance inflows into Nigeria especially since 2004. This was a sharp departure from the previous decades (World Bank, 2014).However, it is yet to be ascertained if this important foreign exchange inflows substitute for, complements or is even detrimental to the rate of financial development in Nigeria. Table 1 below presents a snap-shot of the relationship between foreign remittance inflows and some financial development indicators in Nigeria.

**Table 1: Relationship between foreign remittance inflows and some financial sector indicators in Nigeria.**

Year	Foreign Remittance Inflows (\$ Billions)	Credit to the private sector (N' Billions)	Broad Money (N' Billions)	Financial Savings (N' Billions)
1990	0.01	33.55	68.7	29.65
1995	0.80	180.0	318.8	108.49
2009	9.59	9147.42	10,780.6	5,763.51
2010	10.04	10,157.02	11,525.53	5,954.26
2011	12.02	10,660.07	13,303.5	6,531.91
2012	14.56	14,649.28	15,483.8	8,062.90
2013	16.20	15,751.84	18,927.8	8,656.12

Source: World development indicators (World bank) and CBN statistical Bulletin 2014

Going by the above trend review, it looks like remittance inflows are growing in the same direction as financial development indicators. It is necessary we throw in a word of caution here that; this relationship cannot be determined a priori. It is therefore, important to explore further in order to establish the exact relationship between remittance inflows, the magnitude and direction of the effects of the former on the later. It is against this background that this study will seek to analyze how much of foreign remittance inflows were actually attracted to the country, the direction and significance of the inflows on banking sector development in Nigeria.

The relationship between foreign remittance inflows and financial development in developed countries has attracted a plethora of studies at the global level.. Coming closer home, there have been similar studies by Olubiyi (2009), Abeng (2011) and Okanta(2011). While some of the studies concentrated on the impact of foreign remittance inflows on financial development in developing countries, others dwelt more on the trend of inflows. It is noteworthy we state here that, studies on this topic in the Nigerian context has been scanty. Thus, this research is set to evaluate the impact of foreign remittance inflows on financial development in Nigerian. It will also seek to identify the contributions or otherwise of foreign remittance inflows on broad money supply, total credits granted to the private sectors, financial savings, exchange and interest rates in Nigeria.

The aim of this study is to ascertain the relationship between financial accruals from foreign remittance inflows and financial sector development in Nigeria. The specific objectives are to determine the Influence of foreign remittance inflows on broad money supply / interest rates stability, credits to the private sector, financial savings (Deposits) and on exchange rates.

Having stated the above objectives, the following research questions are therefore considered relevant to the study.

- What is the nature of relationship between foreign remittance inflows and financial development in Nigeria?

To what extent has foreign remittance inflows affected the :

- Level of broad money supply and interest rates.
- Quantum of credits granted to the private sector.
- level of financial savings.
- Prevailing level of exchange rates in Nigeria?

The present study will seek to provide answers to the above questions.

The under listed hypotheses will be tested in this study:

**Ho<sub>1</sub>:** There is no significant long run relationship between foreign remittance inflows and the level of financial development in Nigeria.

**Ho<sub>2</sub>:** Financial development indicators individually do not have any significant long run relationship with the level of foreign remittance inflows in Nigeria.

**Ho<sub>3</sub>:** There is no causality relationship between foreign remittance inflows and financial development in Nigeria.

This study is quite significant as it will examine in detail, the relationship between foreign remittance inflows and financial development in Nigeria. It will attempt to identify the trend of inflows and the impact it has on financial development in Nigeria. The study will inform policy decisions that could assist policy makers to ascertain if an enabling environment has been created to attract foreign remittance inflows and to appraise the effectiveness or otherwise of the policy on financial development in Nigeria. The study will also invoke interests and debates on the need for and against foreign remittance inflows into the country. Hence the study will also serve as reference materials for future and further works in this area. It will also provide basis for further comparative studies, on both the developed and less developed economies. Finally, this study will add to the existing stock of knowledge on the subject matter, foreign remittance inflows and financial sector development in Nigeria. It will also help to educate the general public, private sectors, economists and students alike.

The scope of this study is limited only to the Nigerian context. Secondly the period of investigation is

delineated, from 1981- 2015; a period of 35 (thirty five) years

## 2.0. LITERATURE REVIEW.

Simply put foreign migrants remittance is a transfer of money by a foreign worker or migrant to his or her home country. Money sent home by migrants constitutes the second largest financial inflow to many developing countries. Remittances contribute to economic growth and to the livelihoods of people worldwide. Moreover, remittance transfers can also promote access to financial services for the sender and recipient, thereby increasing financial and social inclusion. Remittances also foster, in the receiving countries, a further economic dependence on the global economy instead of building sustainable, local economies (Englama, 2009).

International migration, which is part of the globalization process, has received increased attention based on the assumption of its link to development. Thus, international migrants include people who have moved either voluntarily or involuntarily for a short or long-term period or permanent, basis. These migrants include unskilled laborers or highly skilled professional, technical and kindred workers. Thus, researchers have often debated on what causes international migration. The economic perspective is reinforced by Russell (2002), who examines the issue of remittances and their macro-economic effects on receiving countries. She highlights the fact that with declining foreign aid and foreign direct investment, the importance of remittances as main sources of foreign exchange becomes visible.

Another issue that has been under considerable discussion is brain drain. This is the emigration of qualified professionals from developing countries, and the subsequent loss of skills more rapidly than it can be replaced. In the contemporary literature, especially in the African developmental context, two issues have become increasingly relevant: that of remittances to relatives staying behind, and that of the long-term impacts of the drain of Africa's human resources, which are so critical for developing the continent. For instance, according to the UNDP (1993), there were more than 21,000 Nigerian doctors in the United States alone, while Nigeria's health system suffers from an acute lack of medical personnel (Nwajiuba 2005).

Some 60 percent of all Ghanaian doctors trained locally in the 1980s had left the country, while in Sudan, 17 percent of doctors, 20 percent of university lecturers and 30 percent of engineers in 1978 alone had gone to work abroad (Nwajiuba, 2005).

While brain drain still exists, emphasis has changed from its negative impact to the recognition of the positive effects on development of the country of origin. Some scholars recognize that the patterns of international migration have changed from uni-directional and permanent to temporary, seasonal and circular (Nwajiuba 2005, Usher 2005). Moreover, new information and communication technologies facilitate contacts between migrants and those they have left behind. This has made it possible for migrants to maintain dual citizenship, that is, to maintain close affiliations to both countries of origin and residence. Consequently, migrants become involved in the economic development of their countries of origin (Nwajiuba, 2005). Migrants are now being increasingly considered as agents of development, who can strengthen co-operation between home and host societies. They can contribute to development not only through remittances, investment and entrepreneurial activities, but also through the transfer of newly developed skills and knowledge, or through fostering democratization and the protection of human rights in their countries of origin ((Nwajiuba 2005, Usher 2005).

The multiple causes of emigration were identified to include environmental change, resource scarcity, conflict and the notion by migrants that emigration provides well-paid employment. The current attention given to international migration and remittances is based on the developmental impact. In spite of the argument of mass exodus, emigration has provided relatively well-paid employment, especially for governments with large populations striving to keep pace with rapid labor force increases (for example, Egypt and India). However, emigration deprives nations of some of their best human resources. It represents a "transfer of educational investment from poor to rich countries and: leads to abuses or exploitation of their workers" (Russell 1986, 1992 and 1995). The International Monetary Fund (IMF) has classified remittances into three categories thus: workers' remittances gotten from migrants who have lived abroad for over one year; labor income plus wages including divers forms of compensation from migrants who have lived overseas for less than one year; labor income plus wages including other forms of compensation from migrants who have moved from country to country. Remittances can be further categorized into monetary and non-monetary transfers. The non -monetary transfers include consumer goods, capital goods, skills and technological knowledge. It could be personal or group remittance whereby individuals come together in migrant Home Town Associations (HTA's) to remit money back to their countries of origin in support of development projects

### 2.1.1) Conceptual Framework.

In recent years, there has been a growing awareness about emigrants' remittances as an important financial source for development. This issue was included in the G8 meeting agenda of 2004 and in the spring meeting of the IMF and World Bank in May 2005, emphasizing the growing significance of migration and the associated migrant's remittances. Since then, the issue of remittances has continued to be in the front burner. Remittances

are typically transfers from a well-meaning individual or family member from abroad (originating country) to another individual or household (destination country). They are targeted to meet specific needs of the recipients and thus, may tend to reduce poverty.

World Bank studies, based on household surveys conducted in the 1990s, suggest 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 poorer households, they may finance the purchase of basic consumption goods, housing, children's education, and healthcare. In richer households, they may provide capital for small businesses and entrepreneurial activities. They also help pay for imports and service external debt, and in some countries, banks have been able to improve overseas financing using future remittances as collateral. (Adenuga, 2009)

In fact remittances to developing countries have grown over the past few years, and constitute the second largest source of external financing in most developing economies. Moreover; remittances have proved remarkably resilient in the face of economic downturns and crises, as they are less volatile than most other sources of foreign exchange earnings for developing countries. As a result, interest in remittances and their impact is rapidly growing among policy decision makers. Remittances are increasingly viewed as a relatively attractive source of external finance for developing countries that can help foster development and smooth out crises.

The 2006 World Bank Annual Global Economic Prospects Report shows that developing countries received remittances estimated at \$126 billion in 2004, whereas international development assistance (IDA) in the same year amounted to \$79 billion. In 2005, remittances totalled \$167 billion which was almost twice the amount of IDA received by these countries during the period of review.

Rich countries are the main sources of remittances. The United States is by far the largest source, with \$39 billion in outward flows. Saudi Arabia (classified as a high-income country in 2005) is the second largest, followed by Switzerland and Germany. But when expressed as a share of GDP, outward remittances are the largest in the upper middle-income countries (Adenuga, 2009).

Although it is conventionally believed that migration flows are south-North and remittance flows North-South, South-South migration is estimated to be at least as large as South-North migration and South-South remittances are 30-45 percent of the remittances received by the South.

Until recently, governments, researchers and development agencies had basically ignored the impact of remittances on economic development; based on the premise that remittances were used for consumption and not productive investments. On the other hand, available literature and data have indicated that the purchase of consumer goods by recipients of the remittances have local multiplier effects, such as increased demand and decreased unemployment. At the macro-economic level, it was shown that remittances also provide a significant source of foreign currency, increases national income as well as finance imports. From twenty developing countries investigated by the World Bank, the top three recipients of remittances in 2004 were India, China, and Mexico. Nigeria could only attract \$2.9 billion dollars.

In addition, it was reported that official remittances alone were about 20 percent more than overseas development aid (ODA) to some developing countries like Nigeria from 1980-1999, and even more than Foreign Direct Investment (FDI) and ODA in other countries like Egypt and Morocco; thus serving as a good source of capital inflow. This has been shown to play an important role in the ability of migrant families to educate, provide decent shelter, healthcare as well as setting-up of self-sustaining micro finance schemes, and in poverty alleviation in general (Adenuga and Bala-Keffi 2005).

According to a National Economic Empowerment Development Strategy (NEEDS) document (2007), the Western Union Money Transfer Agency estimates that on the average, an immigrant transfers US\$300 to relatives in Africa and the IMF estimates that the African Diaspora now constitutes the biggest group of foreign investors in Africa, while in Latin America the immigrants send approximately US\$250 eight to ten times annually!). Though researchers have undertaken to estimate the magnitude and nature of remittances and investigate their impact on the development of countries of origin, it is seen that aside from Egypt in the African region; sub-Saharan Africa, particularly Nigeria has given very little attention to the issue of remittances. The questions are: why is there no interest in this source of foreign exchange by the Government? Should there not be deliberate policies to address the issue of remittances? What are the relationships between remittances and financial sector development in Nigeria? This emerging development calls for intense efforts by the governments and monetary authorities to identify the usefulness and contribution of remittances and design strategies on how to improve its flow and impact on developing an economy like Nigeria.

### **2.1.2) What is financial development?**

According to Okonta (2011), financial sector development is defined as the ability of financial intermediaries to identify profitable projects, monitor and control managers, ease risk management and facilitate resource mobilization. Usually, scholars concentrate on banking sector credits to private firms and households or access to loans. (Newman, 1993). Guiliani and Ruiz (2005), opined that recent literatures on financial development

includes several indicators to proxy for financial development. Usually, scholars concentrate on credit to private firms and household from banks and nonbank financial intermediaries (Greenwood and Jovanovic, 1990) or access to loans (as in Banerjee and Newmann, 1993; Galor and Zeira, 1993). More generally, proxies for financial development can be classified into two broad categories: those relating to the banking sector and those relating to the stock market (see Levine, Loayza, and Beck, 2000; and King and Levine, 1993). In this study we will use five variables as measures of financial development, all of them related to the financial sector.

First, liquid liabilities of the financial system (M2/GDP). They equal currency plus demand and interest bearing liabilities of banks and nonfinancial intermediaries divided by GDP. It is considered the broadest measure of financial intermediation and includes three types of financial institutions: the central bank, deposit money banks, and other financial institutions.

Second, the sum of demand, time, saving, and foreign currency deposits to GDP (DEP/GDP). It measures the ability of banks to attract financial savings and provide a liquid store of value.

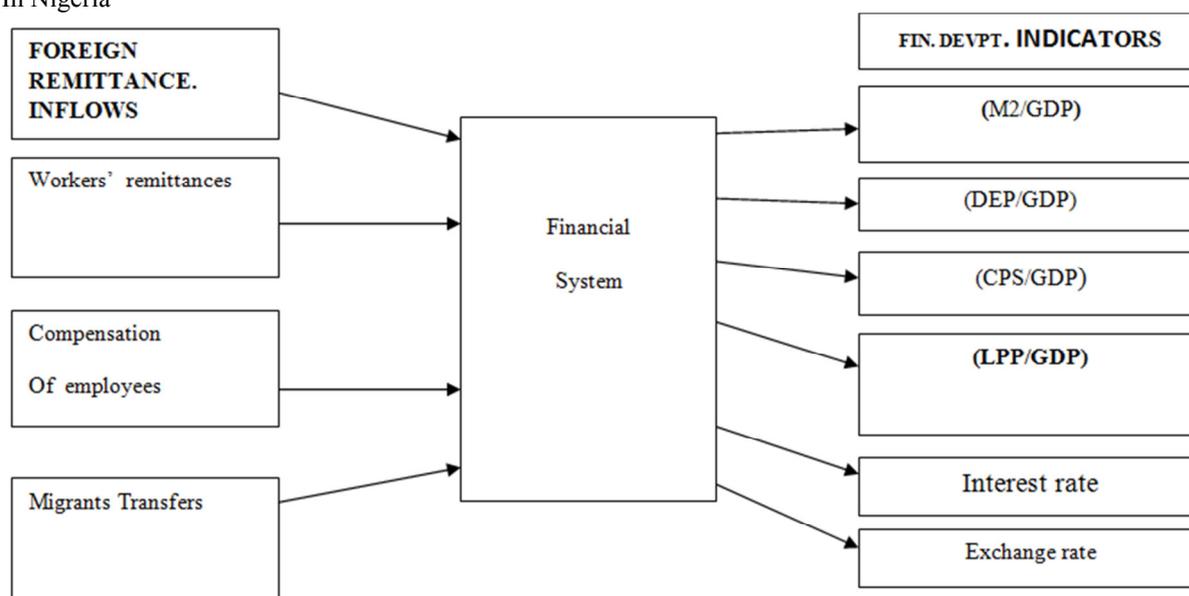
Third, claims on the private sector divided by GDP (LOAN/GDP). They measure the extent to which the private sector relies on banks to finance consumption, working capital, and investment.

Fourth, credit provided by the banking sector to GDP (CREDIT/GDP), which measures how much intermediation is performed by the banking system, including credit to the public and private sectors. Fifthly is the impact foreign remittance inflows on exchange rate.

Lastly is the impact of foreign remittance inflows on prevailing interest rates in the financial system.

The relationship between foreign remittance inflows, the financial system and financial development are aptly captured in figure 2.1 below:

Figure 2.1: The relationship between foreign remittance inflows, the financial system and financial development. In Nigeria



Adapted from the works of Okanta(2011); journal of banking ; the CIBN

## 2.2. THEORETICAL FRAMEWORK ON FOREIGN MIGRANTS REMITTANCES.

According to Englama(2009), theories on remittances had been based on pessimistic and optimist views as they varied from the Developmentalist optimism of the 1950s and 1960s to the large scale Pessimism which prevailed in the 1970s and 1980s to the optimism of the 1990s. A plethora of theories have been enunciated to explain the concept of migration and Migrant workers' remittances. The theories include:1) Theory of liberalization and globalization 2) Todaro Migration Model 3) Macroeconomic School of thought on migration.4)Microeconomic school of thought on migration. 5) Classical or Developmentalist theory, 6) Neoclassical theory, 7) Structuralist and dependency theories, 8) Neo Marxist theory 9) New Economics of labor Migration (NELM) and livelihood approaches, (A pluralist perspective)10) Social Network theory,11) Theory of pure altruism, 12) Theory of self interest, 13) Theory of informal contracts of insurance and 14) Portfolio diversification theory.

Of all the highlighted theories ; we intend to hinge our present study on the theory of liberalization and globalization. This is briefly discussed below:

### 2.2.1) THEORY OF LIBERALIZATION AND GLOBALIZATION

#### Theories of Globalization:

Globalization as an unrestricted inflow and outflow of commodities, money, ideas and also unrestricted

movement of people in different countries of the globe. This definition highlights the free movement of goods, ideas and people among the states. In other words, it is the denial of national boundaries which are so keenly maintained by the states. In its economic dimension (globalization is mainly an economic term though it is associated with politics). It refers to the remarkable expansion of markets where imports and exports of commodities take place. This means that globalization is another name of integration of world markets under a single umbrella. Globalization is not a single- process but a complex of processes, sometimes overlapping and interlocking and at times contradictory and oppositional. There are three theories of globalization which are described below:

### **1. Economic Theory of Globalization:**

Globalization is based on a foundation of neo-liberal theory of market economy- theory which strongly advocates liberalization of economic policies and principles and non-interference of state in the economic field.

### **2. Marxist Theory of Globalization:**

If globalization is the product of the 1980s how can we attribute it to Marx? The question is quite pertinent. Marx did not directly refer to globalization, but he had clear and deep conception about the various aspects of capitalist production, capitalism and, above all, colonialism. We need not forget that all these combined constitute the core elements of globalization.

### **3. Mercantilist Theory:**

Mercantilist's concept of globalization can be stated in the following way. The role and importance of the nation-state have not declined. With the help of advanced and sophisticated technology, the mercantilists say, the nation-states have been able to enhance their various capacities. They regulate the internal and external relations and activities, determine the functions of institutions and organizations according to their choice. Today's states are far more stronger than they were one century ago. This can be attributed to improved technology. The nation-states are receiving foreign aid in the form of investment, capital, technology and services. But the terms and conditions are not always decided by the donor states. The global situation has radically changed during the last three or four decades. The multinational and transnational corporations are not the sole actors of economic relations. The nation-states are trying to finance their projects from internal sources rather than international borrowings.

### **Criticisms of Globalization:**

1. Globalization has Caused Inequality: This is the most unhealthy and undesirable consequence of globalization. The main cause of the inequality is that though the globalization creates opportunities and skill, all the categories of people and workers are not equipped with the intelligence and ability to utilize them; and the inevitable result is inequality.

2. Globalization is said to have undermined democracy”.

3. Globalization has failed to remove global disparities: The world still has “severe asymmetries of power”. There are very few big powers and only one superpower in the world. The rest of the world consists of small or medium powers. Even among the big powers there are wide differences. In fact, the present world is a uni- polar world.

4. People's Right to Protest and Protect is Usurped: The entire technological development is at the complete control of those few persons who are controlling capitalism and these few persons have practically become the real masters of the technology and I.T. They use it in their own way and for their own benefit. The people of the developing countries have not yet been able to control it and properly use it for their benefit.

5. Globalization is said to have caused social and political unrest: The rights and privileges are not equally/ properly distributed and the basic norms/principles of justice are flagrantly violated.

6. Globalization has considerably broadened the asymmetries among the nations. It has not been able to bring about integration. No doubt there has developed interconnectedness among the states but not full scale integration..

7. Globalization seeks economic development and industrialization through technological revolution. But a very real problem lies elsewhere. Industrialization or economic progress do not necessarily mean the development in the functioning of local institutions and organizations, In other words, local issues are neglected

## **2.3 FINANCIAL DEVELOPMENT**

The idea that financial development promotes growth was first put forth by Schumpeter as early as 1911 (Schumpeter, 1912). Several other economists have investigated this relationship and hold the view that financial development is a necessary condition for achieving high rate of economic growth [Patrick, 1966] , [Goldsmith, 1969] , [Mckinnon, 1973] and [Shaw, 1973] ). Other theoretical underpinnings on financial developments are presented below:

The **McKinnon-Shaw paradigm** postulates that government restrictions on the operations of the financial system, such as interest rate ceiling, direct credit programs and high reserve requirements may hinder financial deepening, and this may in turn affect the quality and quantity of investments and hence, have a significant

negative impact on economic growth.

The **Endogenous growth** literature also supports the argument that financial development has a positive impact on the steady-state growth. Well-functioning financial systems are able to mobilize household savings, allocate resources efficiently, diversify risks, induce liquidity, reduce information and transactions costs and provide an alternative to raising funds through individual savings and retained earnings. These functions suggest that financial development has a positive impact on growth.

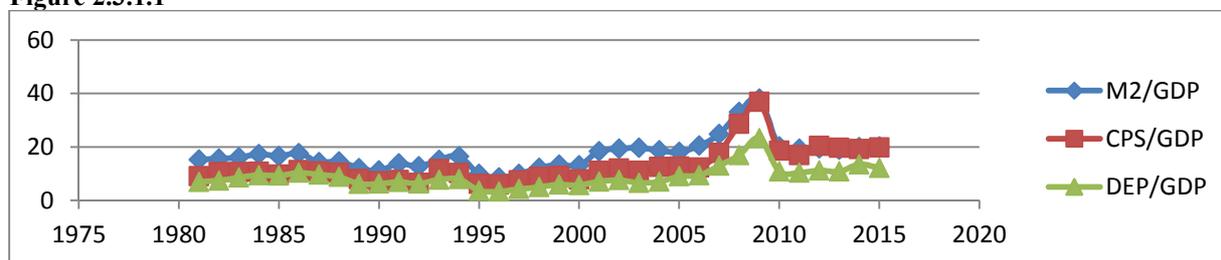
The '**Dept-intermediation**' view proposed by Shaw (1973) is based on an inside money model. He argues that high interest rates are essential in attracting more savings. With more supply of credits, financial intermediaries promote investment and raise output growth through borrowing and lending.

Lastly, the key findings of financial institutions approach are that countries with well-developed financial institutions tend to grow faster; particularly the size of the banking system and the liquidity of the stock markets tend to have strong positive impact on economic growth.

### 2.3.1) TREND OF FINANCIAL DEVELOPMENT IN NIGERIA.

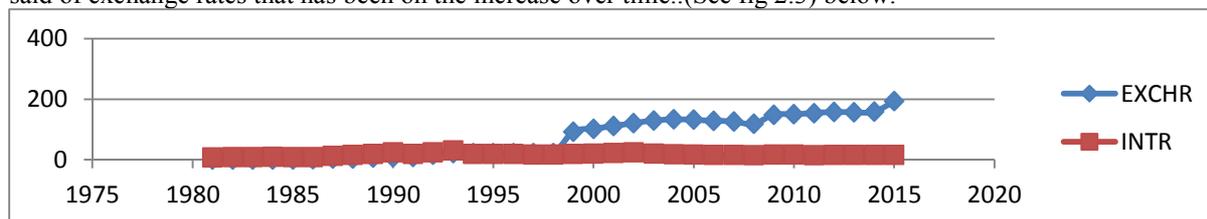
The trio of Broad money supply, Credit to the private sector and financial savings maintained a relatively stable trend in the 80s ,90s and early 2000 but shot up tremendously between 2007 and 2010 following the recapitalization and consolidation of Nigerian banks, after which it reverted to staturesque.(See fig 2.3.1.1 below).

**Figure 2.3.1.1**



Source: CBN Statistical Bulletin

On the other hand , interest rate has maintained a relatively consistent trend over time but that cannot be said of exchange rates that has been on the increase over time..(See fig 2.3) below:



Source: CBN Statistical Bulletin

## 2.4 EMPIRICAL REVIEW.

### 2.4.1) Review of Extant studies from the Global Perspective

The relationship between International Remittance Influence and financial Development is a major component of the International Finance – Government Hypotheses. Studies on the link between Remittances and Banking Sector Development Vary in methods and results.

One strand of the literature relates to the development impact of remittances. The other is the one that relates financial sector development conditions to the propensity to remit. In the first strand, authors emphasis the usefulness of remittances in explaining banking sector development conditions. They impact on banking sector development.

Remittance inflows present an opportunity for poor households to access formal financial services. Bringing recipient households into the financial sector is only the first step in using remittances more effectively. This, most likely, begins with savings products and investments in small-scale enterprises.

Caceres and Saca (2006) found that in El Salvador remittances were accompanied by a sharp decline in savings, so that economic activity actually contracted. Yet, Woodruff and Zenteno (2001) estimated that remittances accounted for about 20% of the capital invested in micro enterprises in urban Mexico.

Giuliano and Ruiz-Arranz (2005) explained the investment potential of remittance through a compensatory role for a bad financial system. In this regard, they argued that incoming remittances loosen liquidity whenever the banking system does not help them start productive activities due to lack of collateral or because of high lending costs of banks; and high level of income inequality occasioned by less efficient access to credit markets ins reduced. In the final analysis, Giuliano and his associate concluded that remittances tend to promote investment and stimulate growth.

The second strand of the literature is one that looks at the conditions under which the financial sector infrastructure influences the propensity to remit. The authors emphasized the importance of promoting competition among money transfer operators (MTOs) to reduce costs and promote remittances through formal channels.

They looked at the creation of innovative financial products or the promotion of microfinance banks, which encourage recipients to save and invest part of the remittances (Levine, 1993).

Using a model of interaction between remittances and financial development in a large sample of less developed countries, the authors found a significant role of remittances in growth-promotion in countries with shallower financial systems. This result holds true after addressing concerns regarding endogeneity.

Given the decentralized decision-making process that characterizes the use of remittances, it is difficult to gauge their aggregate effects whether through direct or indirect impact analysis. Therefore, the impact of remittances on banking sector growth in cross-country studies could be said to be inconclusive. While the evidence on contemporaneous impact of remittances on growth may be mixed, it is likely that remittances can affect long-run growth by fostering banking sector financial deepening. It is in the light of this that this paper attempts to examine the direct link between remittance inflows and banking sector development in Nigeria, a typical less developed economy.

As an extension to the previous work, and in order to confirm the relation between remittances and financial development, Peria, Mascaró and Moizeszowics (2007) focus on the Latin American and Caribbean region.

These authors carried out a macro-level analysis, based on 25 countries for the period 1975-2003, that reveals that the impact of remittances on financial development is positive but smaller than in other developing regions. In the authors' opinion, recurring crises in Latin America and the Caribbean have created a climate of distrust in the banking system, which explains why remittance recipients are less prone to use the financial system than in other regions. Nevertheless, micro-level evidence from 19 household surveys conducted in 11 Latin American and Caribbean countries shows that the probability of using financial services, namely bank accounts and credit, is higher among households that receive remittances than for the rest of the population. Lastly, country-specific studies in El Salvador and Mexico confirm that remittance recipients are better "banked" than other people, but do not find evidence that remittances affect credit levels.

Ambrosias (2006) argue that in some cases, remittances may neither substitute for nor complement financial development, but rather worsen the condition of the latter. In cases where remittances are spent exclusively on the import of consumption goods, foreign currency would not be available for the entrepreneurial sector, no multiplier effects would occur and there would be no positive impact on development in the financial sector. Another way by which remittances may be detrimental to financial development is the deposit pattern of remittance receivers.

If most remittance receivers do not own bank account, especially when a high proportion of them reside in poor rural areas where knowledge about banking is very poor, remittances will be held as cash, and as a result reduce the likely positive effect (they would have and also limit their indirect effect on investment elsewhere).

Finally, when remittances are held as foreign currency rather than domestic, it will appear as if domestic currency is dollarized. This type of informal dollarization can lead to complete loss of control over monetary policy, including the loss of the central bank as a lender of last resort. The central bank can only issue local currency and intervene as a lender-of-last resort for claims in local money. When a run on bank accounts held in dollars or Euros occurs, it has no mechanism to provide banks with liquidity exceeding its foreign reserves.

#### **2.4.2 Review of Extant Studies on Sub-Saharan Africa.**

In country-specific surveys conducted by UNDP (2005) in Sub-Saharan African countries indicated that while typically a large proportion of remittances was spent on consumption the propensity to save part of the remittances among some households could be as high as 40%.

In a cross-country study of the Sub-Saharan African countries, using an unbalanced panel of 44 countries and six-time periods through 1975 and 2004, Gupta, et al (2007) argues that the impacts of remittances on banking sector development depend on how recipient poor households use the remittance. When they are mostly used for consumption, remittances dampen investment in financial assets.

#### **2.4.3) Review of Extant Studies from the Nigerian Perspective.**

Olubiyi (2009), examined the direction and magnitude of remittance effect on financial development in Nigeria. Using deposit money banks deposit, credit, loan and liquidity to proxy for financial development and adopting a structural dynamic model. Outcome of study revealed that workers' remittances showed a sign of positive effect on demand deposit, positive and significant effect on liquidity and positive and significant effect on deposit money banks credit and loan. This implies that workers' remittances in Nigeria are important drivers of financial deepening. Thus effort at making saving attractive and reducing parallel market premium will unarguably raise the proportion of banked remittance and improved development.

Okanta (2011), reviewed the relationship between international remittance inflows and banking sector development in Nigeria. Using a data series for remittances covering the period 1980-2007, the paper analyzed

Nigeria's capacity to use international remittance inflows and how its effective utilization has influenced local banking sector development. Outcome of the study revealed that, the steadily growing remittance inflows though positively associated with it are insignificant in explaining banking sector development in Nigeria over the years.

## 2.5 GAP IN THE LITERATURE

Having reviewed the arguments in favor of and against foreign remittance inflows on financial development, it is proper we state here that, beyond anecdotal report, little attention has been given to the role remittances play in financial development of the receiving countries, most especially in Sub-Saharan Africa, and particularly in Nigeria. The above trend of cited studies could attest to the fact that, most of the reviewed studies were from the Latin America.

Given that, financial institutions of a country are the lifeblood of economic activities as evident from their role in fostering growth and reducing poverty and the fact that financial development performs key economic functions, it is important we examine the role played by foreign remittance inflows on banking sector development in Nigeria. That, is a research gap that this study intends to fill.

## 3.0 RESERCH METHODOLOGY

A least square as well as a vector author regression analysis are carried out on a time series data. The essence was to test the relationship between the variables, whether positive or negative and if significant or not. To avert the emergence of spurious results, a unit root test will be carried out in order to test for stationarity and to determine the order of integration. While a co- integration test is carried out to detect if there exists a long run relationship between foreign remittance inflows and financial development in Nigeria. A Granger causality test is equally be carried out to ascertain if foreign migrants remittance granger causes financial development in Nigeria..

### 3.1 TEST STATISTICS:

**F and T statistics are used to ascertain model and variables significance respectively**

**Decision Rule- F test:** Reject  $H_0$  if  $F_{cal} > F_{0.01, 0.05(v_1, v_2)}$ , otherwise do not reject. Meaning that if computed F-ratio is greater than the table value we accept  $H_1$  and reject  $H_0$  then conclude that the model is significant. This means that the model is adequate and is reliable for any analysis drawn from it.

**The Student T-test**

**Decision Rule- T test:** If  $t_{cal} < t_{tab}$  at  $\alpha/2$  level of significance and  $n - k - 1$  degree of freedom; accept  $H_0$  and do not accept  $H_1$ . If  $t_{cal} > t_{tab}$  at  $\alpha/2$  level of significance and  $n - k - 1$  degree of freedom; reject  $H_0$  and accept  $H_1$  and conclude that the variable is significant.

### 3.2 SPECIFICATION OF MODELS

We specify the relationship between financial development and remittances as follows:

$$FINDEV = a_0 + a_1REM + A_2X + ui$$

Where **FINDEV** is the financial development variable, **REM** is Foreign Remittance inflow and **X** is a vector of other control variables that affect financial development. Here we intend to use GDP to control for country size and GDP Per Capita to control for the level of economic development. Other control variables will include Inflation represented by (Consumer Price Index (**CPI**), Degree of trade Openness (**DOPN**) and Exchange Rate( **EXCR**)

**Foreign Remittance Inflows** for the period 1981-2015, herein represented by the symbol **REM**, are regressed on components of financial development indicators for the corresponding period. **Financial development indicators** are hereby represented as follows:

**M2/GDP<sub>t</sub>** = Ratio of broad money supply to GDP in year, t.

**CPS/GDP<sub>t</sub>**=Ratio of credit to private sector to GDP in year, t.

**DEP/GDP<sub>t</sub>** = Ratio of financial savings to GDP in year, t.

**EXCHR**= The relationship between remittance inflows and exchange rate.

**INTR**= The relationship between remittance inflows and exchange rate

We assume a possibility that the data could be affected by business cycle fluctuations over the period and therefore we control such fluctuations by incorporating the variables CPI (Inflation rate), Degree of trade openness (**DOPN**) and Per capita GDP (**GDPPC**) into the model equation.

**The control variables are indicated thus:**

**GDP**= Gross Domestic Product in year, t

**GDPPc** = Gross Domestic Product per capita in year, t

**CPI**= Consumer price Index in year, t ; **DOPN** = Degree of trade openness in year t. and **t** = time

$\varepsilon$ =The error term assumed to be normally and independently distributed with zero mean and constant variance, which captures all other explanatory variables which influence economic growth but are not captured in the model.

### 3.5.1 ANTECEDENTS TO MODEL BUILD UP

This work drew some inspiration from the earlier works of Olubiyi (2009), where he examined the direction and magnitude of remittance effect on financial development in Nigeria. Using deposit money banks deposit, credit, loan and liquidity to proxy for financial development and adopting a structural dynamic model. Outcome of study revealed that workers' remittances showed a sign of positive effect on demand deposit, positive and significant effect on liquidity and positive and significant effect on deposit money banks credit and loan. This implies that workers' remittances in Nigeria are important drivers of financial deepening. Thus effort at making saving attractive and reducing parallel market premium will unarguably raise the proportion of banked remittance and improved development. It is over 7 (seven) years now, that the above research was conducted. It has become expedient that we undertake a fresh study to ascertain the current trends.

### 3.5.2 MODEL FORMULATION

Since there are short and long run relationships, mathematically, we present an impact assessment model of foreign remittance inflows on financial development thus:

Short run equilibrium model:

$$FD = b_0 + b_1REM + b_2PCGDP + b_3CPI + b_4DOPN + b_5EXCR + e_1.....Eq 1$$

While the Long run equilibrium model is represented thus:

$$FD = b_0 + b_1FD_{-1} + b_2REM + b_3PCGDP + b_4CPI + b_5DOPN + b_6EXCR + \text{equation 2}.....Equation 2$$

### 3.5.3 JUSTIFICATION OF THE CHOSEN VARIABLES

In this study we used 5 variables as measures of financial development, all of them related to the financial sector:

**Ratio of Broad Money to GDP (M2/GDP):** This refers to liquid liabilities of the financial system (M2/GDP). They equal currency plus demand and interest bearing liabilities of banks and nonfinancial intermediaries divided by GDP. It is considered the broadest measure of financial intermediation and includes three types of financial institutions: the central bank, deposit money banks, and other financial institutions.

**Ratio of credits granted to the private sector to GDP (CPS/GDP):** This refers to claims on the private sector divided by GDP (CP/GDP). They measure the extent to which the private sector relies on banks to finance consumption, working capital, and investment.

**Ratio of Financial Savings to GDP (DEP/ GDP):**This measures the extent to which financial savings impact on financial development in Nigeria.

**Exchange Rate:** This is a measure of the impact of remittance inflows on exchange rate

**Interest Rate** This is a measure of the impact of remittance inflows on interest rate

### 3.5.4 APRIORI EXPECTATIONS

In line with the above justification of chosen variables, it is expected that the remittance inflows will have positive relationships with broad money supply, credit to the private sector and financial savings. On the other hand, increased remittance inflows are expected to reduce exchange and interest rates

## 4.0 DATA ANALYSIS

Two (2) hypotheses of this study were individually tested using a multiple regression model, while the third was tested using granger causality test to ascertain if there exists a casual relationship between foreign remittance inflows and financial sector development Nigeria..

### 4.1 Unit Root Tests

This is carried out using Augmented Dickey Fuller Test to determine whether the data set is stationary or not and the order of integration.

Variable	Level	First Difference	Second Difference	Level of Integration	Prob.	Test Statistics @1%	Test Statistics @5%	Test Statistics @10%
M2/GDP	-	-5.237769	-	1(1)	0.0001	-3.646342	-2.954021	-2.615817
CPS/ GDP	-	-5.730811	-	1(1)	0.0000	-3.653730	-2.957110	-2.617434
DEP/GDP	-	-6.255641	-	1(1)	0.0000	-3.646342	-8.021954	-2.615817
GDPPC	-	-6.038261	-	1(1)	0.0000	-3.646342	-2.954021	-2.615817
REM/GDP	-	13.70126	-	1(1)	0.0000	3.653730	-2.957110	-2.617434
EXCHR	-	4.954776	-	1(1)	0.0003	-4.954776	-3.646342	-2.615817
INTR	-	4.959256	-	1(1)	0.0022	-3.653730	-2.957110	-2.617434
INFL	-	-5.749853	-	1(1)	0.0000	-3.646342	-2.954021	-2.615817
OPN	-	8.153572	-	1(1)	0.0000	-.646341	-2.954021	-2.615817

Source: E-Views version 7 statistical package

From the above table, we observed that all the variables turned stationary at the ‘‘ first difference’’.

#### 4.3.1. THE INFLUENCE OF REMMITANCE INFLOWS ON FINANCIALDEVELOPMENT IN NIGERIA.

##### Test of Hypothesis 1

**Ho<sub>1</sub>:** There is no significant long run relationship between foreign remittance inflows and the level of financial development in Nigeria.

**Table 4.2: Summary of the Global Statistics (Ordinary least Square(OLS) and Vector Autoregressive (VAR) Models (1981 – 2015).**

Test Statistics	M2/GDP		CPS/GDP		DEP/GDP	
	Model 1 OLS	Model2 VAR	Model 1 OLS	Model 2 VAR	Model 1 OLS	Model2 VAR
R-Square	0.500524	0.722214	0.5988043	0.730850	0.576087	0.712316
Adjusted R-Square	0.433928	0.658110	0.544449	0.668738	0.519566	0.645927
S.E of Regression	4.398599	-	4.420404	-	2.652493	-
Sum Sqrd Residual	580.9301	320.8540	586.1990	387.118	211.0716	141.5979
Log Likelihood	-98.81022	-84.35387	-98.98330	-87.45137	-81.10771	-70.85695
Durbin Watson Stat	-0.999456	-	1.155910	-	1.232177	-
Mean Dep. Variance	17.26571	17.37576	12.84000	13.02121	8.824571	8.923030
SD Dep. Variance	5.846263	6.007913	6.549279	6.704185	3.826813	3.921891
Akaike. Inf Criterion	5.932013	5.536598	5.941903	5.72432	4.921441	4.718603
Schwarz Criterion	6.154205	5.854039	6.164095	6.041767	5.142633	5.036044
F-Statistics	7.515746	11.26621	11.15873	10.19232	10.19232	10.72949
Prob-(F-Statistics)	0.0003	-	0.000012	-	0.0025	-

Source: E-view statistical package version 7.0

**Table 4.3: Summary of the Global statistics (Ordinary least Square (OLS) and Vector Autoregressive (VAR) Models (1981 – 2015).**

Test Statistics	INTEREST RATE		EXCHANGE RATE	
	Model 1 OLS	Model2 VAR	Model 1 OLS	Model 2 VAR
R-Square	0.335212	0.645265	0.775398	0.9554291
Adjusted R-Square	0.246574	0.563404	0.745451	0.943742
S.E of Regression	4.373635	-	33.44944	-
Sum Sqrd Residual	573.8606	250.7772	33565.94	6343.743
Log Likelihood	-98.61102	-80.28792	-169.8164	-133.5938
Durbin Watson Stat	0.785844	-	0.712229	-
Mean Dep. Variance	17.80514	18.32503	71.53742	75.83414
SD Dep. Variance	5.038744	4.700211	66.29845	65.85608
Akaike. Inf Criterion	5.920630	5.290177	9.989511	8.520836
Schwarz Criterion	6.142822	5.607618	10.21170	8.838277
F-Statistics	3.781800	7.882374	25.89243	90.46884
Prob-(F-Statistics)	0.013196	-	0.00000	-

Source: E-view statistical package version 7.0

**4.3.3 DECISION RULE:** Going by the outcome of ordinary least square regression analysis, we will undertake a decision rule in the short run for M2/GDP, CPS/GDP, DEP/GDP, INTEREST RATE AND EXCHANGE RATES thus :

Since F-ratio calculated (7.51, 11.16, 10.19, 3.78 and 25.89) respectively for M2/GDP, CPS/GDP, DEP/GDP , Interest Rate and Exchange rates are greater than F-ratio critical (3.26, 2.31), at both 1% and 5% levels of significance respectively. We conclude thus; that foreign remittance inflows have a significant relationship with the level of financial development in Nigeria in the short run.

**4.3.4. DECISION RULE:** Again going by the outcome of Vector Auto Regression analysis, we undertake a decision rule in the long run for M2/GDP, CPS/GDP, DEP/GDP, INTEREST RATE AND EXCHANGE RATES thus :

since F-ratio calculated ( 11.26, 11.77, 10.73, 7.88 and 90.46 ) respectively for M2/GDP, CPS/GDP, DEP/GDP , Interest Rate and Exchange Rate are greater than F-ratio critical (3.32, 2.34), at both 1% and 5% levels of significance respectively. Thus, we reject  $H_{01}$  and conclude that foreign Remittance inflows have a significant long run relationship with the level of financial development in Nigeria.

**4.3.5. TEST OF HYPOTHESIS 2**

**Ho<sub>2</sub>:** Financial development indicators individually do not have any significant long run relationship with the level of foreign remittance inflows in Nigeria.

Having tested the significance of the model, we go a step further to test the significance of the foreign remittance inflows in contributing to the total variation in the level of financial development in Nigeria. This is achieved through the student t-test. We refer to the regression result in Table 4.5 below:

**BROAD MONEY SUPPLY (M2/GDP)**

**Table 4.4: T-Statistics Table- For M2/GDP in the short run**

Variable	GDPPC	INFL	OPN	REM
<b>Test Statistics</b>				
Coefficient of the variable	<b>0.001434</b>	<b>-0.045</b>	<b>-0.09</b>	<b>1.06</b>
Standard Error	<b>0.0009</b>	<b>0.045</b>	<b>0.042</b>	<b>0.26</b>
T-Statistics Calculated	<b>1.56</b>	<b>-0.99</b>	<b>-2.25</b>	<b>4.08</b>
T-Statistics Tabulated@1%	<b>2.77</b>	<b>2.77</b>	<b>2.77</b>	<b>2.77</b>
T-Statistics Tabulated@5%	<b>2.05</b>	<b>2.05</b>	<b>2.05</b>	<b>2.05</b>
Significance	<b>Not. Sig</b>	<b>Not .Sig</b>	<b>Significant @5%</b>	<b>Significant</b>

**Source:** E-views statistical package version 7.0

From Table 4.4 above, while the degree of trade openness proved to have a significant negative relationship with broad money supply, Foreign remittance inflows proved to be a significant contributor to broad money supply and by extension to financial development in Nigeria at both 1% and 5% levels of significance in the short run. The other variables had no significant impact on financial development in Nigeria.

**Note:** F-ratio tabulated DF= (8, 27); 1% = 3.26, 5% =2.3.1, T-ratio DF (27) and N.S =”Not Significant”. The resulting estimated model in the short run is given as:

$$M2/GDP = 17.6 + 0.001GDPPC - 0.045INFL - 0.09OPN + 1.06 REM \quad \text{.....Equation 4.1}$$

From equation 4.1 above, the Beta coefficient of GDPPC, INFL, OPN and REM are 0.001, 0.045, 0.09 and 1.06 respectively. This implies that while GDPPC and REM have positive relationship with M2/GDP, INFL and OPN have negative relationship with M2/GDP in the short run. Next, is to ascertain the impact of foreign remittance inflows on broad money supply in the long run.

**Table 4.5: T-Statistics Table- For M2/GDP in the Long Run**

variable Test Statistics	GDPPC	INFL	OPN	REM	M2/GDP (t-1)	M2/GDP (t-2)
Coefficient of the Variable	1.26 E-0.5	-0.047	0.05962	0.686803	0.67362	-0.133282
Standard Error	0.00091	0.036	0.03495	0.22	0.16981	0.17812
T-Statistics-Calc	0.00009	-1.289	- 1.706	3.06	3.96	-0.74
T-Statistics-Tab @1%	2.79	2.79	2.79	2.79	2.79	2.79
T-Statistics-Tab d@5%	2.06	2.06	2.06	2.06	2.06	2.08
Significance	<b>Not Significant</b>	<b>Not Significant</b>	<b>Not Significant</b>	<b>Significant</b>	<b>significant</b>	<b>Not Significant</b>

Source: E-views statistical package version 7

From the above table, foreign remittance inflows and the lagged value of M2/GDP, taken as a variable was found to be positively significant in the long run. The resulting estimated model in the long run is thus:

$$\text{M2/GDP} = 1.26 \text{ E-0.5} - 0.047 \text{ INFL} + 0.0596 \text{ OPN} + 0.69 \text{ REM} + 0.67 \text{M2/GDP (t-1)} - 0.18 \text{M2/GDP (t-2)} \dots \text{Eq.4.2}$$

From equation 4.2 above, the Beta coefficient of INFL, OPN, REM, M2/GDP (t-1), M2/GDP (t-2) are -0.047, 0.0596, 0.69, 0.67 and - 0.18 respectively. This implies that, while there is a positive relationship between M2/GDP, OPN and M2/GDP (t-1), there exists a negative relationship between M2/GDP, INFL and M2/GDP (t-2) in the long run... Next is to consider the relationship between foreign remittance inflows and credit to the private sector.

**CREDIT TO THE PRIVATE SECTOR (CPS/GDP)**

**Table 4.6: T-Statistics Table- For CPS/GDP in the short run**

Variable Test Statistics	GDPPC	INFL	OPN	REM
Coefficient of the variable	0.003477	-0.018968	-0.082622	0.955573
Standard Error	0.000921	0.045373	0.042248	0.260893
T-Statistics Calculated	3.7774343	-0.418052	-1.955639	3.662701
T-Statistics Tabulated@1%	2.77	2.77	2.77	2.77
T-Statistics Tabulated@5%	2.05	2.05	2.05	2.05
Significance	significant	Not significant	significant@10%	Significant

Source: E-views statistical package version 7.0

From Table 4.6 above, while degree of trade openness proved to have a significant negative relationship with credit to the private sector at 10% Alpha level, Foreign remittance inflows and Gross domestic product per capita proved to be significant contributors to credit to the private and by extension to financial development in Nigeria at both 1% and 5% levels of significance in the short run. The other variables had no significant impact on financial development in Nigeria.

**Note:** F-ratio tabulated DF= (8, 27); 1% = 3.26, 5% =2.31, T-ratio DF (27) and N.S =”Not Significant”. The resulting estimated model in the short run is given as:

$$\text{CPS/GDP} = 10.83 + 0.0035 \text{GDPPC} - 0.018 \text{ INFL} - 0.08 \text{ OPN} + 0.96 \text{ REM} \dots \text{Equation 4.2}$$

From equation 4.2 above, the Beta coefficient of GDPPC, INFL, OPN and REM are 0.0035, -0.018, - 0.08 and 0.96 respectively. This implies that while GDPPC and REM have positive relationship with CPS/GDP, INFL and OPN have negative relationship with CPS/GDP in the short run. . Next, is to ascertain the impact of foreign remittance inflows on credit to the private sector in the long run.

**Table 4.7: T-Statistics Table- For CPS/GDP in the Long Run**

Variable Test Statistics	GDPPC	INFL	OPN	REM	CPS/GDP <sub>(t-1)</sub>	CPS/GDP <sub>(t-2)</sub>
Coefficient. of the variable	0.0015	-0.0259	-0.488	0.6709	0.637	-0.196633
Standard Error	0.00131	0.04039	0.04039	0.2443	0.1800	0.19982
T-Stat-Calc	1.15448	-0.6435	-1.26514	2.7459	3.5404	-0.988406
T-Stat.tab @1%	2.79	2.79	2.79	2.79	2.79	2.79
T-Stat.tab@5%	2.06	2.06	2.06	2.06	2.06	2.06
Significance	Not Sig	Not Sig.	Not Sig	Sig@ 5%	sig	Not sig.

Source: E-views statistical package version 7

From table 4.7 above, foreign remittance inflows and the lagged value of CPS/GDP, taken as a variable was found to be positively significant in the long run. The resulting estimated model in the long run is thus:

$$\text{CPS/GDP} = 6.41 + 0.0015\text{GDPPC} - 0.0259\text{INFL} - 0.0488\text{OPN} + 0.67\text{REM} + 0.637\text{CPS/GDP}_{(t-1)} - 0.196\text{CPS/GDP}_{(t-2)} \dots \text{Eq.4.3}$$

From equation 4.3 above, the Beta coefficient of INFL, OPN, REM, CPS/GDP<sub>(t-1)</sub>, CPS/GDP<sub>(t-2)</sub> are 0.0015, -0.0259, -0.0488, 0.67, 0.637 and -0.196 respectively. This implies that, while there is a positive relationship between CPS/GDP, GDPPC, REM and CPS/GDP<sub>(t-1)</sub>, there exists a negative relationship between CPS/GDP, INFL, OPN and CPS/GDP<sub>(t-2)</sub> in the long run.

Next is to ascertain the impact of remittance inflows on financial savings in Nigeria.

**FINANCIAL SAVINGS (DEP/GDP)**

**Table 4.8: T-Statistics Table- For DEP/GDP in the short run**

Variable Test Statistics	GDPPC	INFL	OPN	REM
Coefficient of the variable	0.0017	0.016486	0.092777	0.653478
Standard Error	0.000553	0.027227	0.025351	0.156551
T-Statistics Calculated	2.99	0.6055120	-3.659702	4.174289
T-Statistics Tabulated@1%	2.77	2.77	2.77	2.77
T-Statistics Tabulated@5%	2.05	2.05	2.05	2.05
Significance	Significant	Not significant	Significant	Significant

Source: E-views statistical package version 7.0

From Table 4.8 above, while degree of trade openness proved to have a significant negative relationship with financial savings (Deposits), Foreign remittance inflows and Gross domestic product per capita proved to be significant contributors to financial savings (Deposits) and by extension to financial development in Nigeria at both 1% and 5% levels of significance in the short run. Inflation had no significant impact on financial development in Nigeria.

**Note:** F-ratio tabulated DF= (8, 27); 1% = 3.262.81, 5% = 2.07, T-ratio DF (23) and N.S = "Not Significant". The resulting estimated model in the short run is given as:

$$\text{DEP/GDP} = 9.79 + 0.017\text{GDPPC} - 0.016\text{INFL} - 0.093\text{OPN} + 0.65\text{REM} \dots \text{Equation 4.4}$$

From equation 4.3 above, the Beta coefficient of GDPPC, INFL, OPN and REM are 0.017, -0.016, -0.093 and 0.65 respectively. This implies that while GDPPC and REM have positive relationship with DEP/GDP, INFL and OPN have negative relationship with DEP/GDP in the short run. Next, is to ascertain the impact of foreign remittance inflows on financial savings (Deposits) in the long run.

**Table 4.9: T-Statistics Table- For DEP/GDP in the Long Run**

variable T-Stat	GDPPC	INFL	OPN	REM	DEP/GDP <sub>(t-1)</sub>	DEP/GDP <sub>(t-2)</sub>
Coefficient. of the variable	0.000198	-0.0317	-0.0624	0.5212	0.4595	0.083529
Standard Error	0.00067	0.02474	0.02473	0.1482	0.17311	0.17454
T-Stat-Calc	0.29656	-1.28306	-2.5254	3.5162	2.6546	0.47858
T-Stat.tab @1%	2.70	2.79	2.79	2.79	2.79	2.79
T-Stat.tab@5%	2.06	2.06	2.06	2.06	2.06	2.06
Significance	Not sig	Not Sig	Sig @ 5%	Sig.	Sig @5%	Not sig

Source: E-views statistical package version 7

From table 4.9 above , foreign remittance inflows and the lagged value of DEP/GDP , taken as a variable was found to be positively significant , while inflation and degree of trade openness maintained a negative relationship with financial savings (Deposit) in the long run. The resulting estimated model in the long run is:

$$\text{DEP/GDP} = 5.67 + 0.000198\text{GDPPC} - 0.031738 \text{INFL} - 0.062\text{OPN} + 0.5212\text{REM} + 0.0835 \text{DEP/GDP}_{(t-1)} + 0.4595\text{DEP/GDP}_{(t-2)} \dots \text{Eq.4.5}$$

From equation 4.5 above, the Beta coefficient of GDPPC, INFL, OPN, REM, DEP/GDP (t-1), and DEP /GDP (t-2) are 0.000198, -0.031738, -0.062, 0.521 0.0835 and 0.459 respectively. This implies that, while there is a positive relationship between CPS/GDP, GDPPC, REM, DEP/GDP(t-1) and DEP/GDP(t-2) , there exists a negative relationship between DEP/GDP, INFL, and OPN in the long run. Next, is to ascertain the impact of foreign remittance inflows on exchange rates in the short run.

From Table 4.11 below, only Gross domestic product per capita and foreign remittance inflows proved to have significant positive relationship with exchange rate and by extension to financial development in Nigeria at both 1% and 5% levels of significance in the short run. Inflation had a negative impact on exchange rate though not statistically significantly

#### EXCHANGE RATE (EXCHR)

**Table 4.10: T-Statistics Table- For Exchange Rate in the short run**

Variable	GDPPC	INFL	OPN	REM
Coefficient of the variable	0.041321	- 0.521315	0.591029	4.641944
Standard Error	0.006972	0.343342	-1.518354	0.1394
T-Statistics Calculated	5.926852	-1.518354	1.848345	2.351315
T-Statistics Tabulated@1%	<b>2.77</b>	<b>2.77</b>	<b>2.77</b>	<b>2.77</b>
T-Statistics Tabulated@5%	<b>2.05</b>	<b>2.05</b>	<b>2.05</b>	<b>2.05</b>
Significance	Significant	Not Sig.	Not Sig	Sig @ 5%

Source: E-views statistical package version 7.0

. The resulting estimated model in the short run is given as:

$$\text{EXCHR} = 4.5 + 0.041\text{GDPPC} - 0.52\text{INFL} + 0.59 \text{OPN} + 4.64 \text{REM} \dots \text{Equation 4.6}$$

From equation 4.6 above, the Beta coefficient of GDPPC, INFL, OPN and REM are 0.041, -0.521, 0.59 and 4.64 respectively. This implies that while GDPPC, OPN and REM have positive relationship with Exchange rate. INFL has a negative relationship with exchange rate in the short run.. Next, is to ascertain the impact of foreign remittance inflows on exchange rates in the long run.

From the table 4.11 below, only the lagged value of exchange rate taken as an explanatory variable was found to be positively significant, while foreign remittance inflows had a positive but not significant relationship with exchange rate in the long run. The resulting estimated model in the long run is:

$$\text{EXCHR} = 7.97 - 0.001\text{GDPPC} - 0.15\text{INFL} + 0.50 \text{OPN} - 0.25 \text{REM} + 0.96 \text{EXCHR}_{(t-1)} + 0.04 \text{EXCHR}_{(t-2)} \dots \text{Eq.4.7}$$

The Beta coefficient of GDPPC, INFL, OPN, REM, EXCHR (t-1), and EXCHR (t-2) are 0.001, -0.15, 0.5, -0.25, 0.96 and 0.04 respectively. This implies that, while there is a positive relationship between CPS/GDP, GDPPC, REM, DEP/GDP (t-1) and DEP/GDP (t-2), there exists a negative relationship between DEP/GDP, INFL, and OPN in the long run.

**Table 4.11: T-Statistics Table- For EXCHANGE RATE in the Long Run**

Variable. Stat	GDPPC	INFL	OPN	REM	EXCHR (t-1)	EXCHR (t-2)
Coefficient. of the Variable	-0.001	-0.148	0.501	-0.252	0.963	0.004
Standard Error	0.00545	0.16802	0.16082	1.10975	0.21706	0.23382
T-Stat-Calc	- 0.193	-0.881	0.31153	1.109	4.44	0.19
T-Stat.tab @1%	<b>2.79</b>	<b>2.79</b>	<b>2.79</b>	<b>2.79</b>	<b>2.79</b>	<b>2.79</b>
T-Stat.tab@5%	<b>2.06</b>	<b>2.06</b>	<b>2.06</b>	<b>2.06</b>	<b>2.06</b>	<b>2.06</b>
Significance	N.S	N.S	N.S	N.S	Sig	N.S

Source: E-views statistical package version 7

Next, is to ascertain the impact of foreign remittance inflows on Interest rates in the short run.

**INTEREST RATES (INTR)**

**Table 4.12 : T-Statistics Table- For Interest rates in the short run**

Variable \ Test Statistics	GDPPC	INFL	OPN	REM
Coefficient of the variable	-0.0005	0.10	0.11	- 0.022
Standard Error	0.0009	0.044	0.04	0.25
T-Statistics Calculated	-0.55	2.30	2.59	-0.09
T-Statistics Tabulated@1%	<b>2.77</b>	<b>2.77</b>	<b>2.77</b>	<b>2.77</b>
T-Statistics Tabulated@5%	<b>2.05</b>	<b>2.05</b>	<b>2.05</b>	<b>2.05</b>
Significance	N.S	<b>Sig @ 5%</b>	<b>Sig @5%</b>	N.S

Source: E-views statistical package version 7.0

From Table 4.12 above, only inflation and degree of trade openness proved to have significant positive relationship with interest rate and by extension on financial development in Nigeria at both 1% and 5% levels of significance in the short run. GDPPC and foreign remittance inflow had negative impacts on interest rate in the short run, though not statistically significantly. The resulting estimated model in the short run is given as:

$$INTR = 11.27 - 0.0005GDPPC + 0.1 INFL + 0.11 OPN - 0.022 REM \dots\dots\dots \text{Equation 4.9}$$

From equation 4.9 above, the Beta coefficient of GDPPC, INFL, OPN and REM are 0.0005, 0.1, 0.11 and -0.022 respectively. This implies that while INFL and OPN have positive relationship with interest rates. GDPPC and REM have negative relationship with interest rates in the short run. Next, is to ascertain the impact of foreign remittance inflows on Interest rates in the long run.

**Table 4.13: T-Statistics Table- For Interest Rate in the Long Run**

variable \ Test Stat	GDPPC	INFL	OPN	REM	INTR <sub>(t-1)</sub>	INTR <sub>(t-2)</sub>
Coefficient. of the Variable	-0.0003	0.043	0.05	-0.09	0.742	-0.167
Standard Error	0.00065	0.037	0.041	0.184	0.193	0.237
T-Stat-Calc	-0.595	1.17	1.27	-0.49	3.86	-0.71
T-Stat.tab @1%	2.79	2.79	2.79	2.79	2.79	2.79
T-Stat.tab@5%	2.06	2.06	2.06	2.06	2.06	2.06
Significance	N.S	N.S	N.S	N.S	SIG	N.S

Source: E-views statistical package version 7

From table 4.13 above, only the lagged value of Interest rate taken as an explanatory variable was found to be positively significant. While inflation and degree of trade openness has a positive relationship with interest rate, though not statistically significant; GDPPC, Foreign remittance inflows and lagged value of interest rate (at second level), maintained a negative relationship with interest rates., though not statistically significant. The resulting estimated model in the long run is:

$$INTR = 5.14 - 0.0003 GDPPC + 0.043 INFL + 0.050 OPN - 0.09 REM + 0.74 INTR_{(t-1)} - 0.17 INTR_{(t-2)} \dots\dots\dots \text{Eq.4.10}$$

From equation 4.10 above, the Beta coefficient of GDPPC, INFL, OPN, REM, INTR<sub>(t-1)</sub>, and INTR<sub>(t-2)</sub> are - 0.0003, 0.043, 0.05, -0.09, 0.742 and -0.167 respectively. This implies that, while there is a positive relationship between interest rates, Inflation, degree of trade openness and the lagged value of interest rates (at first level), there exists a negative relationship between interest rates and foreign remittance inflows, GDPPC and the lagged value of interest rates (at second level) in the long run. This is in line with our apriori expectation; as foreign remittance inflows increase, interest rates are bound to go down, since investors have alternative mode of financing.

**Table 4.14: CO- INTEGRATION TESTS**

Trace test					Max Eigen value test				
Hypothesized No. of CEs	Eigen value	Trace Stats	0.05 Critical value	Prob**	Hypothesized No. of CEs	Eigen value	Max-Eigen Stats	0.05 Critical value	Prob**
None *	0.958416	366.7972	197.3709	0.0000	None *	0.958416	104.9416	58.43354	0.0000
At most 1 *	0.869187	261.8557	159.5297	0.0000	At most 1 *	0.869187	67.12163	52.36261	0.0009
At most 2 *	0.844548	194.7340	125.6154	0.0000	At most 2 *	0.844548	61.42691	46.23142	0.0007
At most 3 *	0.745404	133.3071	95.75366	0.0000	At most 3 *	0.745404	45.14656	40.07757	0.0123
At most 4 *	0.648520	88.16058	69.81889	0.0009	At most 4 *	0.648520	34.50488	33.87687	0.0421
At most 5 *	0.536914	53.65570	47.85613	0.0129	At most 5 *	0.536914	25.40479	27.58434	0.0926
At most 6	0.430563	28.25091	29.79707	0.0746	At most 6	0.430563	18.58255	21.13162	0.1096
At most 7	0.232502	9.668354	15.49471	0.3071	At most 7	0.232502	8.732436	14.26460	0.3091
At most 8	0.027963	0.935918	3.841466	0.3333	At most 8	0.027963	0.935918	3.841466	0.3333
Trace test indicates 6 co-integrating equations (s) at the 0.05 level					Max-eigenvalue test indicates 5 co-integrating equations(s) at the 0.05 level				

Source: E-views statistical package version 7

The above tests strongly reject the null hypothesis of no co integration .i.e. no long run relationship between the dependent and the independent variables in favor of at least five (5), co-integrating vectors.

**Table 4.15: Granger causality test on foreign Remittance Inflows and Financial Sector development in Nigeria.**

Null Hypothesis:	Obs	F-Statistic	Prob.
REM does not Granger Cause M2 M2 does not Granger Cause REM	33	2.81429 0.11968	0.0770 0.8877
REM does not Granger Cause CPS CPS does not Granger Cause REM	33	5.30088 0.36938	0.0112 0.6945
REM does not Granger Cause DEP DEP does not Granger Cause REM	33	2.08030 0.88818	0.1438 0.4227
REM does not Granger Cause EXCHR EXCHR does not Granger Cause REM	33	0.57952 1.75764	0.5667 0.1909
REM does not Granger Cause INTR INTR does not Granger Cause REM	33	1.02756 0.60775	0.3710 0.5516

Source: E-views statistical package version 7.0

#### RESULT OF GRANGER CAUSALITY TESTS

It was observed that foreign remittance inflows granger causes credit to the private sector at 1% Alpha level and Broad money supply at 10% level of significance..

#### 4.4 DISCUSSION OF RESULTS

The importance of workers' remittances in economic development has since the last two decades been receiving attention. One of the roles played by workers' remittances in development is in the area of financial development. The literature does not unanimously agree on the impact. Given the fact that financial institutions of a country is a lifeblood of economic activities due to their role in fostering growth and reducing poverty, it is, therefore, important to examine the behavior of foreign remittances inflows on financial development in Nigeria. Specifically, the study sought to answer this question: does foreign remittance inflows substitutes for, compliments or worsen financial development in Nigeria?

We used bank deposits, credit to the private sector, Exchange rates, and interest rates and banking sector liquidity – M2 – as measures of financial development. We also controlled for other capital flows, trade flows, inflation, and country size among others. We adopted a regression analysis to establish both the short and long-run relationships between foreign remittances and financial development in Nigeria .

Taking data spanning 35years from, 1981 to 2015, we found that foreign remittance inflows proved to be a significant contributor to broad money supply and by extension to financial development in Nigeria at both 1%

and 5% levels of significance in the short run. In the long run foreign remittance inflows and the lagged value of M2/GDP, taken as a variable was found to be positively significant

It could be recalled that broad money comprises monetary base, deposit money bank, money in other financial institutions like insurance, stock market and even thrift in case of Nigeria. The positive effect suggests that remittances complement financial deepening of the country. It could be said that a good proportion of remittances are deposited in deposit money banks. Recipients of foreign remittance inflows, who have not opened an account are convinced to open and operate one.

In our present study it was ascertained that foreign remittance inflows and Gross domestic product per capita proved to be significant contributors to financial savings (Deposits) and by extension to financial development in Nigeria at both 1% and 5% levels of significance in the short run. In the long run foreign remittance inflows and the lagged value of DEP/GDP taken as a variable was found to be positively significant

It is pertinent we mention here that financial savings (Bank deposits) shows the extent to which deposit money banks can attract financial savings and also provide a liquid store of value. This implies that though remittances have potential to raise financial saving, and that banks have taken the necessary steps in the right direction by retaining such funds. Thus a good proportion of remittances do not find its way back to the banks as deposit. Quite unlike before now, the saving culture of remittance receivers are gradually looking up.

In our present study, it was ascertained that foreign remittance inflows and Gross domestic product per capita proved to be significant contributors to credit to the private and by extension to financial development in Nigeria at both 1% and 5% levels of significance in the short run. In the long run foreign remittance inflows and the lagged value of CPS/GDP, taken as a variable was found to be positively significant

It is pertinent to mention here that credit to the private sector measures the extent to which commercial banks are able to play their roles as a financial intermediary by making credit available to the private and public, we found that remittances positively and significantly affect this variable. Perhaps the reason why remittances significantly affect credit is that the latter is a short-term loans, and as a result, banks prefer to engage more of their liquidity in short-term loans rather than long-term loans and remittances play an important role in increasing the amount of credit available for the private sector. This implies that foreign remittance inflows complement financial development through availability of credit to the private sector. This also implies that remittances show a sign of complementing financial sector in making more money available as loans to the private sector.

foreign remittance inflows and Gross domestic product per capita and proved to have significant positive relationship with exchange rate and by extension to financial development in Nigeria at both 1% and 5% levels of significance in the short run. In the long run foreign remittance inflows had a positive but not significant relationship with exchange rate, while the lagged value of exchange rate taken as an explanatory variable was found to be positively significant.

Exchange rate premium is informed by the difference between parallel market exchange rate and official (both the CBN/WDAS and interbank) rates. Monetary policies as enunciated by the central bank has helped to reduce the gap between official and unofficial exchange rates and has equally helped to re-circulate such inflows eventually back to the financial system.

In our current study foreign remittance inflows had negative impacts on interest rate at both the short and long runs. This is in line with our apriori expectations. The more the foreign remittance inflow, the more the financial system is awash with cash. All things being equal, this is bound to reduce interest rates as investors have alternative means of funding other than from deposit money banks.

The outcome of this research also corroborates the earlier works of Olubiyi (2009), who opined that foreign remittance inflows are important drivers of financial deepening in Nigeria.

#### 4.5 APPLICATION OF RESEARCH FINDINGS AND CONTRIBUTION TO KNOWLEDGE

Ordinarily, foreign remittance inflows are expected to exert wide and significant influence on financial development in Nigeria. Hence, its application rests mainly on the contributions of the various findings of the study and how it could help in the formulation and implementation of economic policies. The impact of such policies will be appreciated from the standpoint of how rapidly and effectively it fosters, innovates or modernizes financial development in Nigeria. Thus, this study produced the following prediction models, both in the short and long runs respectively on the relationship between foreign remittance inflows and financial development in Nigeria.

##### 4.5.1. PREDICTION MODELS

The resulting estimated model for M2/GDP in the short run is given as:

$$\text{M2/GDP} = 17.6 + 0.001\text{GDPPC} - 0.045\text{INFL} - 0.09\text{OPN} + 1.06 \text{REM} \dots\dots \text{Equation 4.1}$$

In the long run, it is given as:

$$\text{M2/GDP} = 1.26 \text{E-0.5} - 0.047 \text{INFL} + 0.0596 \text{OPN} + 0.69 \text{REM} + 0.67\text{M2/GDP} (t-1) - 0.18\text{M2/GDP} (t-2) \dots\dots \text{Eq.4.2}$$

The resulting estimated model for CPS/GDP in the short run is given as:

$$\text{CPS/GDP} = 10.83 + 0.0035\text{GDPPC} - 0.018 \text{INFL} - 0.08 \text{OPN} + 0.96 \text{REM} \dots \text{Equation 4.3}$$

In the long run, it is given as:

$$\text{CPS/GDP} = 6.41 + 0.0015\text{GDPPC} - 0.0259 \text{INFL} - 0.0488 \text{OPN} + 0.67 \text{REM} + 0.637\text{CPS/GDP}_{(t-1)} - 0.196 \text{CPS/GDP}_{(t-2)} \dots \text{Eq.4.4}$$

The resulting estimated model for DEP/GDP in the short run is given as:

$$\text{DEP/GDP} = 9.79 + 0.017 \text{GDPPC} - 0.016 \text{INFL} - 0.093 \text{OPN} + 0.65 \text{REM} \dots \text{Equation 4.5}$$

In the long run, it is given as:

$$\text{DEP/GDP} = 5.67 + 0.000198\text{GDPPC} - 0.031738 \text{INFL} - 0.062\text{OPN} + 0.5212\text{REM} + 0.0835 \text{DEP/GDP}_{(t-1)} + 0.4595\text{DEP/GDP}_{(t-2)} \dots \text{Eq.4.6}$$

The resulting estimated model for Exchange rate in the short run is given as:

$$\text{EXCHR} = 4.5 + 0.041\text{GDPPC} - 0.52\text{INFL} + 0.59 \text{OPN} + 4.64 \text{REM} \dots \text{Equation 4.7}$$

In the long run, it is given as:

$$\text{EXCHR} = 7.97 - 0.001\text{GDPPC} - 0.15\text{INFL} + 0.50 \text{OPN} - 0.25 \text{REM} + 0.96 \text{EXCHR}_{(t-1)} + 0.04 \text{EXCHR}_{(t-2)} \dots \text{Eq.4.8}$$

The resulting estimated model for interest rate in the short run is given as:

$$\text{INTR} = 11.27 - 0.0005\text{GDPPC} + 0.1 \text{INFL} + 0.11 \text{OPN} - 0.022 \text{REM} \dots \text{Equation 4.9}$$

The resulting estimated model for interest rate in the long run is:

$$\text{INTR} = 5.14 - 0.0003 \text{GDPPC} + 0.043 \text{INFL} + 0.050 \text{OPN} - 0.09 \text{REM} + 0.74 \text{INTR}_{(t-1)} - 0.17 \text{INTR}_{(t-2)} \dots \text{Eq.4.10}$$

Thus, one of the major contributions of this study, is that it is possible from these set of models to predict the level of financial development in Nigeria (both in the short and long runs), given that the levels of foreign remittance inflows are known. It is expected that; results obtained in this study will provide better and more robust estimates of the relationship between foreign remittance inflows and financial development in Nigeria.

## 5.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS

### 5.1 SUMMARY

The main findings are itemized below as follows:

- The level of financial development in Nigeria bears a significant relationship with foreign remittance inflows in both in the short and long runs and so desires a closer watch for improved performance.
- Foreign remittance inflows proved to be a significant contributor to broad money supply and by extension to financial development in Nigeria at both 1% and 5% levels of significance in the short run. In the long run foreign remittance inflows and the lagged value of M2/GDP, taken as a variable was found to be positively significant.
- Foreign remittance inflows and Gross domestic product per capita proved to be significant contributors to credit to the private and by extension to financial development in Nigeria at both 1% and 5% levels of significance in the short run. In the long run foreign remittance inflows and the lagged value of CPS/GDP, taken as a variable was found to be positively significant.
- Foreign remittance inflows and Gross domestic product per capita proved to be significant contributors to financial savings (Deposits) and by extension to financial development in Nigeria at both 1% and 5% levels of significance in the short run. In the long run foreign remittance inflows and the lagged value of DEP/GDP taken as a variable was found to be positively significant.
- foreign remittance inflows and Gross domestic product per capita and proved to have significant positive relationship with exchange rate and by extension to financial development in Nigeria at both 1% and 5% levels of significance in the short run. In the long run foreign remittance inflows had a positive but not significant relationship with exchange rate, while the lagged value of exchange rate taken as an explanatory variable was found to be positively significant.
- In the short run foreign remittance inflow and GDPPC had negative impacts on interest rate in the short run, though not statistically significantly, while inflation and degree of trade openness proved to have significant positive relationship with interest rate and by extension on financial development in Nigeria at both 1% and 5% levels of significance in the short run.  
 In the long run, Foreign remittance inflows, GDPPC, and the lagged value of interest rate (at second level), maintained a negative relationship with interest rates, though not statistically significant, while the lagged value of Interest rate taken as an explanatory variable was found to be positively significant. Inflation and degree of trade openness has a positive relationship with interest rate, though not statistically significant.

### 5.2 CONCLUSION

On the basis our findings, the study therefore concludes that foreign remittance inflows are important drivers of

financial development in Nigeria. The above conclusion is in tandem with earlier works by Olubiyi (2009).

### 5.3 RECOMMENDATIONS

The study shows positive effect of foreign remittance inflows on financial development in Nigeria. To make foreign remittance inflows more effective in Nigeria, policy directives at making savings attractive in the country will unarguably raise the proportion of banked remittances. One way of doing this is to arrange a particular interest rate for remittance receivers, by promising them relatively high returns if they will convert their hard currency to domestic currency and deposit a large proportion of it in banks.

Remittance receivers who have not opened an account can be convinced to open and operate one.

Another way of improving financial through remittances is to allow more financial transfer agents as is done in the western world. The existing financial transfer agents appear oligopolistic and hence reduce the efficiency gain and increase dead weight loss by making cost of transfer relatively costly for the remitter while the intermediary reaps all the benefit of transfer.

There is need to close the gap or reduce the gap between the official and unofficial exchange rates, to allow the banks retain more of the remittance inflows.

Lastly, some deposit incentives and promotions can be embarked upon by deposit money banks. Such incentives can be enforced by the central bank of Nigeria.

### REFERENCE

- Abeng .M.O.(2011), Remittances, Economic Growth and poverty Nexus: Evidence from Nigeria, Economic and Financial Review, Central Bank of Nigeria.
- Adebusoye, P.(2006). Geographic labor Mobility in Sub-Saharan Africa. IDRC Working paper on globalization, growth and poverty. March No. 1.
- Aggwal, R, .A. Demiirguc-Kunt and M Peria(2006), Do workers Remittance promote Financial Development . Policy Research Working paper 3957, The world Bank.
- Ambrosius , C (2006). Financial stabilization Through Remittances? Some Remarks on the Macroeconomic effects of migrants remittances. – [www.boeckler.de/pdf/v\\_2007](http://www.boeckler.de/pdf/v_2007).
- Azam J and F. Gubert(2005), ‘Migrants Remittances and Economic Development in Africa: A review of evidences, ‘ IDEI Working paper 354.
- Banerjee , A.V Newman, A (1993), ‘*Occupational choice and the process of Development*’ IMF Working paper (1993/241), p12.
- Beck, T.A Demiirguc-Kunt, A and R. Levine (2000). ‘A New Database on Financial Development and structure’. World Bank Economic Review 14(3): 597-605
- Beck, T, R. Levine and N.Loayza(2000). Financial Intermediation and Growth Causality and causes. Journal of Monetary Economics, 46 , 31-77.
- Caceres, Luis R. and Saca .N.N (2006). *What do remittances do ? Analyzing the private remittance transmission mechanism* in El Salvador, IMF Working paper 06/250,p7 .
- Central Bank of Nigeria Statistical Bulletin, 2015
- Engel, R,F and Granger ,C.WJ(1987). Co-integration and error correction : Representation ,Estimation and Testing Econometrica , 55, 251-276
- Giuliano, P and Ruiz Arranz(2005). ‘*Remittances, Financial Development and Growth*’. IMF Working paper ( WP/05/234), PP3-8.
- Greenwood and Javanovic(1990). In Banerjee, A.V and Newman, A(1993). ‘*Occupational Choice and the process of Development*. ‘ IMF Working paper 93/241,pp 51-56.
- Gupta S, Pattilo, C and Wagh, S(2007). ‘*Making Remittances work for Africa*’. IMF Finance and Development IMF Balance of payment year book (2002)
- Johansen S and K Juselius (1990). ‘Maximum likelihood Estimation and Inference on cointegration-With Application to the Demand for Money ‘ Oxford Bulletin of Economics and statistics,52(2): 169-210
- Johansen S(1995), ‘Likelihood- Based Inferences in Cointegrated Vector Autoregressive models’ , Oxford university press. Oxford.
- Johansen S.(1991). Estimation and Hypothesis Testing in cointegrated vector Autoregressive models’ Econometrica 59: 1551-1580.
- King, R and Levine, R(1993). ‘*Finance , Entrepreneurship and Growth: Theory and Evidence*’. Journal of Monetary Economics, Vol. 32, pp513-542
- National Planning Commission (2005). National Economic empowerment and Development (NEEDS). Abuja, CBN.
- Mudaca, G(2005). Can Remittances Enhance Economic growth?. The role of Financial Markets Development . Mimeo University of Ohio.
- OECD(2004). The international mobility of Health professionals: An Evaluation and Analysis Based on the case

- of South Africa. Trends in international Migration, SOPEMI (2003) Editions, Paris
- Okonta.S.U (2011), International remittance inflows and banking sector development in less developing countries: Evidence from Nigeria, Journal of Banking , The chartered institute of bankers of Nigeria
- Olubiyi .E.A (2009), Workers Remittances and financial sector performance: The Nigerian Experience; Economic and Financial Review- Central bank of Nigeria
- Orozco , M(2007)'' Remittances, competition and fair financial access opportunities in Nigeria''. Paper prepared for united states Agency for International Development
- Ratha, D(2005).''*Remittance –A lifetime for Development*'' . IMF Finance and Development , December, pp 42-45.
- Soludo, C.C (2006).''*Towards the industrialization of Nigeria*'' . A paper presentation to The Nigerian Bar association, Abuja Branch ..
- Spatafora, N.(2005).''*Two current issues facing Developing countries*'' in world Economic outlook,2005 Washington : International Monetary Fund ,pp7-9
- Ugwuanyi ,E. (2008), ''Nigerians in Diaspora sent home 3.4 billion'' .e Nation , April 2012.
- United Nations Development Programmes (UNDP), (2005).''Human Development Index(HDI) Report for African countries'', IMF Survey, Vol.30,No.2, p.62.
- Woodruff, C and Zenteno. R(2001). Remittances and Micro-enterprises in Mexico, IMF Working paper 01/29, p62.
- World Bank (2005), Economic Implications of Remittances and Migration''. World Global Economic Prospects , Washington : World bank, p 8.
- World Bank (2014), World Bank Development reports (2013/2014).