International Remmitance Inflow And Economic Growth In Nigeria

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Abstract: The broad objective of the study is to determine empirically the impact of international remittances inflows to domestic economy, using Nigeria as a case study between 1980 and 2015. The specific objectives are to determine to what extent international remittance inflows impact on the growth of domestic economy; to investigate if there is significant casual relationship between international remittance inflows and the growth of domestic economy in Nigeria and to compare the influence of oversea development assistance and international remittance inflows to the growth of domestic product in Nigeria. In the model specified, real gross domestic product (RGDP) is a function of the growth international remittance inflows (IRIGWT), oversea development assistance, (ODAGNI), balance of trade (BOT), and inflation (INFL). The study used co- integration, vector error correction mechanism and granger causality for estimation of specified models. The results of estimation depict a negative significant relationship between IRIGWT and RGDP. Also ODAGNI has positive significant correlation with RGDP, BOT has positive significant relationship while INFL exhibit positive insignificant relation with RGDP. Granger causality results report that causality exist between IRIGWT and RGDP. The study recommends that Federal Government of Nigeria should adopt strict policy measures to regulate remittances and also to encourage international remittances passing through official channel by reducing the cost of remittances.

I.   INTRODUCTION

International remittance inflows are part of the global financial system and can be defined as financial and non financial earnings voluntarily sent to migrant households in the home countries. Due to their scope and effect on international economic system, they have become the major sources of foreign exchange transfer to domestic economies of developing countries like Nigeria. Statistics from various international financial organizations indicate that remittance inflows have been on the increase in recent years. According to the World Bank (2014), the total international remittance inflows in 2012 was $436 billion dollars and in 2013, international remittance inflows contributed about 0.31% to the world gross domestic product. The emerging economies have been observed to be major recipients of remittance inflows. It has been estimated that remittance inflows constitute 27% of the gross domestic product of developing economies, according to the World Bank. The increasing migration trend from developing to developed economies has attracted the interest of researchers on the motivation for remittance inflows, classification of remittances, cost of remittances, the contribution of remittances in the reduction of poverty and inequality globally and consequently the effect of remittance inflows on the growth of world economy, especially the growth of the emerging economies such as Nigeria.

In 2011 for instance, the total remittance inflows to Nigeria was $10.681 billion as against $1.392 billion in 2004 which was about an increase of 767 percent in 10 years. Also in 2011, remittance inflows were about 5% of the gross domestic product of Nigeria (CBN 2014). International financial inflows to Nigeria have complemented receipt from international trade, especially from goods exported to other economies. Such international financial flows come in form of foreign grant, foreign direct investment, foreign portfolio investment, overseas development assistance, and workers' remittance. Nigeria in the recent times has witnessed massive migrant outflows of both skilled and unskilled workers to developed economies, a trend believed to be associated with endemic corruption in Nigerian economies that has increased poverty of the people in addition to political crises. Nigeria has also witnessed the movement of professionals to developed economies in search of greener pasture.

Historically, according to Beine, Docquier and Rapoport (2008) most international migration took place in Europe till 1950s and since then, the international migration flow has undergone a drastic change, with the developing countries emerging as major sources of international migrations. The increase in migration to

developed nations which resulted to the increases in international remittance inflows to the developing economies can be linked to many factors, such as the result of heavy indebtedness or debt crises of developing economies in Africa, Asia, and Latin America in the 1990s. Also, somewhat as a result of effective measure by affluent countries to develop globally accepted policy framework that can contribute to global economic growth or tackle poverty in the least developed economies. More so, as a result of the failure of structural adjustment programme recommended by the International Monetary Fund being conditions for accessing the international development loans. Political instability, also, has contributed to the increase of migration from south to the north (IOM, 2009). The Nigeria's migrants, which include skilled and unskilled workers scattered in different parts of the globe have become the main source of huge workers remittance inflows into Nigerian economy.

According to the World Bank (2014), Nigeria received about 65% of the official recorded remittance inflow to Africa and about 20% of the global remittance inflows. It is estimated that remittance inflows into the Nigerian economy have outgrown foreign direct investment, official development assistance, and other capital inflows into the country. The remittance inflows are next to oil revenue as a foreign exchange earner to Nigeria (CBN, 2014). World Bank Report depicted that Nigeria has the highest migrant skill workers in the United States, (US), United Kingdom, (UK), and Saudi Arabia. The annual report of International Organization of Immigration, IOM (2009), on the other hand, stated that, Nigerians in Diaspora are highly qualified with relevant skills in education, medicine, law, information technology, engineering, and other professions. United Nations, (UN) Population Division (2013) outlined the category of Nigerian migrants, which includes: skill emigrants, students, irregular emigrants and involuntary emigrants. UNDP Report (2014) categorized Nigeria's migrants according to continent of residences. Africa has the highest Nigerian migrants with 36.5 percent, followed by Europe (34.2 percent), The North America which includes US and Canada (26.4 percent), and the rest of the population spreads in Asia, Oceania, Latin America and Caribbean. The 2013 publication of Migration Policy Institute (MPI) of the World Bank has detailed information of remittance inflows, sending countries and the Nigerian emigrant population, Migration Policy Institute, MPI (2013).

Economic growth is the increase of economy overtime with the capacity to produce goods and services it needs to improve the welfare of the greater percentage of its citizens. Miyazaki (1990) investigated major world economic indicators, such as economic growth rate, inflation rate, unemployment rate, world trade, oil prices, cumulative debts, current account balance, and world arms expenditures and asserted that world economy for the past decades has undergone a number of changes. How have these changes affected the growth of Nigeria economy for the past decades, in regards to major macroeconomic indicators, especially the international remittance inflows is the focus of this study.

II. STATEMENT OF THE PROBLEM

The increasing trend in international remittance inflows is filling the gap of foreign exchange shortages in Nigeria and other developing countries. However, some researchers argued that increase in the international remittance inflows contribute to brain drain in the developing countries. Singabele (2013) quoting Emeagwali (2008) stated that brain drain was one of the greatest hindrances to the socio-economic development of African continent. According to Singabele, referring to the work of Dovlo (2008), argued that Africans, Nigerians inclusive, will remain at the mercy of poverty, disease, hunger and social unrest, if those who should build the pillar of the continent's development are abandoning their moral obligations for the so-called greener pastures. Former South African President, Thambo Mbeki, in his "African Renaissance" speech in 1998 made emotional appeal, calling African professionals in developed countries to think about their continent. In his view, he looks forward to the return of Africa's skilled professionals from Europe and North America back to the continent. Mbeki argued that brain drain syndrome was being institutionalized in the continent. He opined that institutionalization of brain drain was devastating African economy and crippling the very fabric of African development as the continent's potentials were left lying raw and under-utilized due to absence of expert (Singabele,2013). Brain drain has been major argument against international remittance inflows to Nigeria. Other issues are the contribution of remittance inflows to the growth rate of GDP in Nigeria when compare to other international inflows, such as oversea development assistance (ODA). The trend of the growth rate of gross domestic product (GDP) and international remittance inflows in Nigeria, according to UNDP, World Development indicators (2015) is stated as follows: In 1980, 1985, 1990, 1995, 2000, 2005, 2010, and 2015, gross domestic product growth rate were 4.2%, 8.3%, 12.77%, 2.5%, 5.4%, 6.94%, -0.23%, and 8% respectively while international remittance inflows growth rates within the periods were 0.03%, 0.03%, 0.03%, 2.82%, 3.0%, 13.4%, 5.35%, and 3.81% respectively.

The trend above is in contrast to general view of most economists who believe that there is positive relationship between international remittance inflows and the growth of gross domestic product. The proponents of the positive relationship between the international remittance inflows and economic growth, such as (Docquier, Rapoport, and Shen, 2007), in their optimistic theory of international remittance inflow, contended that remittance inflows decrease inequality in the recipient countries, enable household to relieve budget

constraints, and stimulate demand of goods and services, which, in turn, stimulate increase in gross domestic product. The pessimistic theory, according to Stark, Taylor and Yitzhaki (1986), argued against the positive effect of remittance flows. The pessimistic theory opined that remittance inflows may generate a level of domestic demand that exceeds the economy's production capacity, and thus may represent a source of inflation, or unemployment, if cheaper imports are brought in to expunge the remittance-induced excess demand. From the trend of UNDP, World Development Indicator (2015) as stated above, it is clear that the relationship between growth rate of gross domestic product (GDP) and international remittance inflows did not follow a consistent trend pattern in Nigeria. There are no visible policy actions by Nigerian government regarding efficient application of international remittance inflows. Most previous studies concentrated on the analysis of the remittances as a contributor to brain drain in Nigeria. Also, these previous studies did not compare international remittance inflows together with other key and important variables like balance of trade, oversea development assistance, exchange rate etc, thereby creating a need for further studies on their impacts and short-term and long-term relationships. Some researchers argue that oversea development assistance contribute meaningfully to economic growth through infrastructural and capital development more than international remittance inflows which end mostly on consumption. This study, in formulating research questions, objectives of the study, and hypotheses intends to look at the growth rate of international remittance inflows and growth of domestic economy in Nigeria with hope of making policy recommendations.

The study then asks the following questions;
1. To what extent do international remittance inflows impact on the growth of domestic economy in Nigeria?
2. Is there significant casual relationship between international remittance inflows and the growth of domestic economy in Nigeria?
3. To what extent does overseas development assistance influence the growth of domestic economy in Nigeria more than international remittance inflows?

CONCEPTUAL REVIEW

International remittance is a concept dealing with the transfer of migrant earning from one country to the other. Some basic issues regarding international remittance are diaspora movement, international migration, workers' remittances, financial development, ODA, poverty alleviation, exchange rate, capital flows, human capital development, and economic growth. In macroeconomic consideration, the concept of international remittance inflow can be investigated through its impact on poverty, consumption, savings, and balance of payment, balance of trade, trade deficit, exchange rate, import, investment and micro finance. According to the study by Global Forum on Migration and Development(GFMD, 2013), sponsored by Swedish Government in 2013, the impact of international remittance inflows on gross domestic product original migrants can be felt in the areas of trade, investment, skills and knowledge transfer.

Various schools of economic analyst agreed that international remittance inflows play a very critical role in gross domestic product of low and middle-income countries in recent time. These remittance inflows have been increasing in these low and middle countries every year. It is somewhat generally agreed among economists that remittance inflows have become a very significant sources that contribute to the reduction of poverty and inequality globally. In developing economies, it can be assumed that most citizens, especially, the relevant stakeholders in financial institutions, both in public and private sectors, including the civil society, seemed to appreciate the opportunity remittances represent, given its trend in recent years.

Although, trade and investment are two major areas of potentials for Diaspora involvement in the economic growth and development of their countries of origin, another important area is skills and knowledge transfers. International Organization for Migration managed project, known as Migration for Development in Africa helped in coordinating a training of about 21,000 health workers and student in Ghana by Ghanaian professional resident in Europe.

Also according to the study by IOM, Chile Diasporas with their Chile Global project promoted and facilitated the development of key economic cluster in Chile in the area of information technology. More also, International Organization of Migration (IOM) study referred to the role of Indian diasporas in helping to develop information technology sector as an example of a successful story. It is generally believed that the Indian ICT growth was initiated by Indian engineers and entrepreneurs in Silicon Valley, USA. Other milestone by Indian diasporas is their domination in the global diamond cutting and industry in Antwerp, Belgium and also in health tourism pioneered by Dr. Prathap Reddy, a cardiologist, who established a 150-bed private hospital in Chennai in 1983. Dr. Reddy conglomerate of Apollo Hospital Group controls about 8,500 beds in 50 hospitals in Asia.

III. INTERNATIONAL REMITTANCE INFLOWS AND ECONOMIC GROWTH ISSUES IN NIGERIA

The origin of Nigeria migration can be traced to Trans- Sahara migration between Northern Nigeria and North African countries. However, between 1950 to 1970s most Nigerian migrants went to Europe and Americas, notably United Kingdom and United States to study. Most emigrants in this category somewhat returned home after their studies. Most analysts argued that a major outflow of Nigerians, especially the skilled emigrants to overseas was after the introduction of Structural Adjustment Programme(SAP) by President Ibrahim Babangida in 1986. As result of SAP policy, the country's economy experienced stagnation and the country experienced increasing migration of both skilled and unskilled labor force. It can be argued that what contribute to the increase in Nigerian migration population can be traced to the 1990s, when most Nigerian descendants overseas, notably second and third generations in the UK and US somewhat swelled the population of Nigerians living overseas. With the country returning to democracy in 1999, with the increase in the population of Nigerians in diaspora and the development of positive attitude by Nigerians towards their country, Nigeria experienced increasing inflows of international remittances.

Remittances by Nigerians in Diaspora to the country's domestic economy by 2013 exceeded the flow of foreign direct investment and far above the foreign aids and grants, according to data from Nigeria Central Bank of Nigeria(CBN, 2013). More also, due to inability to capture the unofficial remittances inflow to Nigeria, the figures from World Bank and other international agencies might be less than the actual figure of total remittance inflows to Nigeria. Although, many researchers have tried to investigate what influences the choice of sending money to Nigeria by Nigerians in diasporas, there is no generally accepted opinion. However, most researchers agreed that greater percentage of remittance inflows to Nigeria are for family maintenance, such as paying of school fees, food, and building of houses. Percentage of the remittances going for investment purposes is still disputable.

Apart from the final uses of remittances inflow to Nigeria, other area of arguments about international remittance inflows to Nigeria is geopolitical destination of the international remittances inflows. More also, there is the issues of the effectiveness of transfer mechanism, and issues regarding Nigerian Government policy framework towards the diasporas. Some analysts argued that, even though major money transfer services providers, such as Post offices, Western Union, Banks, and Bureau de Changes are involved in international remittances inflow to Nigeria, other unofficial means, such as through proxies, cash, and friends, importation of goods are major sources of international remittance inflows to Nigeria. On geopolitical destination, the question of which geopolitical zones receives more of the remittances inflows to Nigeria is an important economic issues that can help states in Nigeria to promote programmes that can encourage their indigenes overseas to partner with their home states and local governments. Many experts have opined for national policy framework for Nigerians in diaspora with hope that will help motivate Nigerians in diasporas to remit more to Nigerian economy or partner in national development as many countries such as India, Philippine, and Ghana have done.

In discussing international remittance inflows to Nigeria, it is important to refer to various definitions and discussions of economic literatures on domestic economic growth and remittance inflows. Each of these economic literature must have made significant advances in the understanding of the international remittance inflows and economic growth process. It is necessary to investigate the branches of the development literature that explored the joint effects of remittances and domestic economic growth of migrant-sending/receiving country. Most importantly, it must complement the opinions of expert by exploring what drives the growth of remittance flows in a broader perspective of remittance theory, offering a unified treatment of remittance flows and growth in the migrant-sending country, highlighting the role played by immigration policy at the destination country in mediating the growth effects of migration and remittance flows. On international remittances inflows, evidences on the development effects of the inflows are depicted from the experiences of countries like India, Mexico, Philippines, and others. Number of studies confirmed that remittance flows have a positive effect on domestic economic growth, while others are less optimistic.

IV.   THEORETICAL REVIEW
Optimistic and Pessimistic Theory

Proponents of the positive effect contended that international remittance inflows decrease inequality in the recipient countries (Docquier, Rapoport, and Shen, 2007). Also the optimistic argued that international remittance inflows enable household to relieve budget constraints, and stimulate demand of goods and services, which, in turn, stimulate production and employment (Stark, Taylor and Yitzenaki, 1986, 1988; Taylor and Wyatt, (1996). Moreover, Quibria (1997), and Ratha (2003) argued that international remittance flows provide the much needed currency for importing essential inputs that are unavailable in domestic economy. Pessimism about the positive effect of remittance flows has two main arguments. Firstly, remittance flows may generate a level of domestic demand of goods that exceeds the domestic economy's production capacity, and thus may represent a source of higher inflation (Adams, 1992), or increasing unemployment, if cheaper goods are imported to expunge the remittance-induced excess demand of goods. Secondly, given the income effect of international remittance flows, recipients of international remittances could afford to work less. Resulting in the

decrease in labor supply, which in turn, may somewhat lead to a negative effect of on domestic economic growth. As determinants of gross domestic product (GDP), international remittance inflows have been extensively studied by economists. However, the most existing works, both empirical and theoretical, either treated them separately (Rapoport and Katz, 2005; Beine, Docquier, and Rapoport, 2008), or when treated jointly (e.g., McCormick and Wahba, 2000), their economic growth implications are not discussed.

Neo-Marxist Theory

Neo-Marxist views migration with negative perspective. According to this school of thought, especially, as depicts by Azam and Gubert, (2006), migration and international remittance inflows reproduced and reinforced the capitalist system by encouraging inequality between developed and least developed countries. Neo-Marxist, as regards the socio-cultural perspectives, argued that migration and remittance were seen as having negative effect as they expose migrant family to the taste of foreign goods.

Structural or Dependence Theory

The structural or dependency theory was theory studied by Todaro (1997) and Chami et al (2003) which assumed that dependency on global political-economic system have been dominated by the industrialized nations. The theory argued that as capitals from the industrialized nations grow, migration was assumed to have negative effect on traditional societies by undermining their economic potential and motivating migration from the less developed to developed countries. According to this theory, brain drain is one of the negative outcome of capitalism on less developed societies. Structural or dependency theory concurs with Marxist and Neo-Marxist Theories on the negative impact of migration from least developed to developed countries.

Neo-Classical Economic Growth Theory

Neo-Classical theory as analyzed by Roel (2006) opined that real salary differences between economies gave rise to bidirectional flows that culminated into a new international equilibrium in which real wage earning of all countries are the same. According to Roel, the flow starts from flowing of low skilled labor from low-wage earning countries to high-wage earning ones. His second assumption was capital flows from high-wage earning countries to low-wage earning ones. In his view, capital flows comprise labor intensive industrial capital moving together with high-skilled labor migration. Roel's second assumption agrees with Markovitz portfolio frontier theory and can be explained through utility function of Capital Asset Pricing (CAPM) which depicts that the cost of equity capital is determined only by the systematic or market risk. More so, Roel referred to Keynesian theory which views migration differently. He asserted that Keynesian regards labor supply to depend on the nominal wages, not real wage which implies that nominal wages is critical factor in labor migration. In essence, the major issue here is migration and income. Income is important variable to look at economic growth. The neoclassical production function of the Cobb-Douglas form in which output (GDP) is specified as a function of labor (L), capital (K), workers' remittances, and a technological factor or efficiency parameter (A) is very important function of economic growth.

V. EMPIRICAL LITERATURE REVIEW

The International Remittance inflows and The Growth of Domestic Economy (Global Experience)

Cjanci and Cerav (2014) investigated the role of remittances received on the post-communist Albania's financial development. They applied multiple regression model estimates, using the ARDL bounds testing approach. The result of their findings indicated a significant positive role of remittances in the country's financial development, depicting in particular that, a 10% increased in remittances was associated with approximately a 11.78% increase in the financial development. Other financial development enhancing variables they used were trade openness and the sum of foreign direct investment and official development assistance.

Esteves and Khoudour-casteras (2009) conducted studies on remittances, capital flows and financial development during the Mass Migration Period, 1870-1913. They quantified a sizable and significant relation between remittances and measures of development of the financial sector. They argued that given that financial development is regularly included among the conditions for economic growth and catch up of developing nations. Their study added to the understanding of the multiple impacts of the mass migration phenomenon on the economies of emigration countries.

Buch, Kuckulenz, and Manchec (2002) investigated worker remittances and capital flows, looking at the debate on the risks and benefits of the globalization of international capital markets. Their study focused on the volume and the volatility of the main capital flows, such as foreign direct investment (FDI), portfolio investment(PI), and foreign bank lending(FBL).Their empirical result provided an analysis on the magnitude of remittances, their volatility, and their relationship to other capital flows.

The International Remittance inflows and the Growth of Domestic Economy (African Experience)

Lodigiani, Marchiori and Shen (2013) comprehensively researched on revisiting the brain drain literature with insights from a general equilibrium world . They asserted that existing brain drain literature has found various mechanisms through which the high-skilled South-to-North migration affects developing economies. They argued that some of the newfound effects of the subject remained disputable due to limited evidence. Their study aimed to provide suggestive guidelines for future research by identifying the mechanisms that can generate larger economic impacts at the aggregate. Their analysis was based on a dynamic general equilibrium world model that is calibrated to published statistics and incorporates empirical estimates on the effects of brain drain. Also their analysis simulated the investigation of the short- and long-run impacts of increased brain drain on GDP per capita, GNI per capita, and income inequality. The result of their findings suggested that more studies should be conducted to further examine how the brain drain influences human capital formation and technology spillovers. According to them, human capital formation and technology have significant impacts on domestic production and national income. They recommended that a better understanding of different remitting patterns is also desirable because it can affect income inequality to a large degree.

Fayad (2010) investigated Remittances and Dutch Disease, using a Dynamic Heterogeneous Panel Analysis on the Middle East and North Africa Region. The study examined the potential Dutch disease threat of remittance inflows in a panel of net labor exporters in the Middle East and North Africa (MENA) region. The study used the dynamic pooled mean group (PMG) estimator, developed by Pesaran et al.(1999). The study accounted for the empirically proven complementarily between international migration and inward foreign direct investments (FDI) and for the resulting simultaneity between inflows of remittances and FDI. According to the result of their findings, the standalone appreciative effect of remittances, usually found in the literature was increasingly attenuated by the productivity-enhancing depreciative effect of simultaneous FDI. The study found a threshold level of net FDI was beyond the appreciative real exchange rate, the effect of remittances turned depreciative. The study also presented novel evidence on the reverse Dutch disease effect of large remittance outflows from the MENA net labor importers and major oil producers, using an augmented version of the PMG estimator which accounts for error cross-section dependence.

The International Remittance inflows and The Growth of Domestic Economy (Evidence from Nigeria)

Ahoure(2009) study is related to the role of governance in the relation between remittances and economic growth in Sub-Saharan African countries, based on panel data over the period 2002-2006. The study is estimated by generalized method of moments of Blundell and Blond (1998) for dynamic panel data, which is more efficient with short time series. It showed a negative effect of remittances on the growth of the GDP per capita when we control for governance. However, according to the study, this negative impact is lowered by almost half for the countries that are over the median in governance levels compared to lesser performers. The study identified that political stability and control of corruption as well as generalized state of good governance appeared as prerequisites to improve the impact of remittances on economic growth in the considered countries. It also comes out that the negative incidence of remittances on growth is reduced when remittances are linked to gross capital formation. The study recommended that efforts to enhance good governance are thus crucial for a better allocation of remittances towards activities likely to support economic growth in Sub-Saharan African countries.

Barajas, Chami, Ebeke, and Tapsoba (2012) showed that remittance flows significantly increased the business cycle synchronization between remittance-recipient countries and the rest of the world. They used both aggregate and bilateral remittances data in a panel data setting, the study demonstrated that the effect was robust and causal. Moreover, their econometric analysis revealed that remittance flows were more effective in channeling economic downturns than upswings from the sending countries to remittance-receiving economies. Their study's analysis suggested that measures of openness and spillovers could be enhanced by accounting for the role of the remittances channel.

Ogbuagu (2013) conducted a comprehensive research on remittances and in-kind products as agency for community development and anti-poverty sustainability, making a case for Nigerian in diaspora. The author asserted that successive governments in Nigeria, having divergent and often personal, rather than community sustainability agendas have increasingly impoverished the citizenry, leaving them with no hope for self, family and community actualization and sustenance. He argued that , over the course of the installation of many rouge governments, individuals and communities who hitherto were self-sufficient were, through badly formulated, badly implemented policies and unbridled corruption, literally stripped of their means of livelihood and in most cases, also their dignity. That, family members who could no longer take the abuse and had the courage and wherewithal to undertake such venture, left the country in search of livelihood and sustenance for themselves and their families. As Diasporas, he argued, they began and have been remitting money and other in-kind products to their homebound family members. In this regard, and more than any country in Africa, that Nigerians in the Diaspora has remitted an inordinate and disproportionate amount of money and financial and in-kind products to their families, relatives, friends, business associates and other medium of social engagement.

The author's study explored the impact of such Diasporic remittances and in-kind gifts on the physical, mental and psychological well-being of family members. More poignantly, the study used non-structured interviews, participant and non-participant observation and meta-analysis to underscore the agency of pecuniary remittances and in-kind products for community development, homeostasis and anti-poverty sustainability.

Okodua (2014) stated that remittance flows to Sub-Saharan African (SSA) region has steadily been on the increase in recent history. In his view, remittance unlike capital inflows which generally create obligations for future outflows either in the form of debt servicing or investment income and other payments, do not outflow as they are generally unilateral and unrequited. His study investigated the economic growth and developmental role of workers' remittances in selected Sub-Saharan African (SSA) countries. Specifically, it sought to determine the contributions of workers' remittances to output growth in SSA, analyzed the importance of workers' remittances to the level of domestic investment in SSA, and determined the effects of remittances on trade balance in the selected SSA countries. He employed the framework of an extended standard neo-classical growth model, the system Generalized Method of Moments *(GMM)* estimation technique on a set of three linear dynamic panel data models. He used these models to estimate the links between remittances and output growth, remittances and domestic investment, and; remittances and trade balance. He identified two major and important complications arising from an effort to estimate dynamic panel data models using macroeconomic panel data. First, is the presence of endogenous and/or predetermined covariates and second, are the small time-series and cross-sectional dimensions of the typical panel data set. He applied the Blundell and Bond (1998), extended version of the generalized method of moments (GMM) estimator, (also known as system GMM estimator) to estimate the specified models. According to him, this estimator is widely believed to be adequate in overcoming complications that may arise from efforts to estimate the usual linear dynamic panel data models.

Laniran and Adeniyi (2015) study asserted that international remittances have grown to become an integral source of finance for development. In their view, existing literature posited that there was an association between remittances and growth in developing countries. They opined that economic growth models highlighted the importance of capital accumulation and high level financial flows, the inadequacy of which characterizes developing countries and often explains their fate. They argued that remittances provided a panacea to the serious poverty experienced in such developing economies by increasing financial flows and household income, which would in turn stimulates consumption, savings, economic growth and ultimately development. According to them, the robustness of this relationship is, however, often questioned, as the propensity of remittances to achieve these aspirations very much hinges on the determining factors motivating the remitters and the magnitude of the remittances. Their study gave the significant flows of remittances to the developing countries, and hereby attempt an analysis of the determinants of remittances to Nigeria. They used key econometric model testing using time series data from 1980 to 2013 to analyze the macroeconomic variables with theoretical potentials of influencing the level of remittances received. The results of their finding indicated that the level of remittances received was more a function of portfolio motives than other macroeconomic factors.

Ekwe (2014) stated that the volume of investment capital flows between foreign nationals and developing nations has necessitated that a study be conducted to assess the impact of this foreign capital flows on the economic growth of these developing nations. His paper aimed to empirically determine the extent to which foreign capital flows have impacted on the growth performance of the Nigeria economy from 1982–2012. Data for analysis were drawn from the publications of the Nigerian Bureau of Statistics (NBS), the Central Bank of Nigeria (CBN) and the World Bank report. He adopted multiple regression analysis method for the test of the hypotheses. He used SPSS statistical software (version 17.0) for the data analysis. The results of the finding discovered that foreign capital inflows had a positive and significant effect on economic growth as proxied by the GDP, which was an indication that foreign capital inflows exerted considerable influence as a key fiscal policy instrument of economic growth over the stated period. Also that the Foreign Capital Outflow in the same vein had a positive and significant effect on the GDP, which is another indication that it exerted considerable influence as a key fiscal policy instrument of economic growth over the stated period.

GAP Globally, many researchers have conducted studies on remittances and economic growth. Few of the studies investigated the economic growth and developmental role of workers' remittances in selected Sub-Saharan African (SSA) countries. Specifically, they have sought to determine the contributions of workers' remittances to output growth globally and regionally, analyzed the importance of workers' remittances to the level of domestic investment in form of capital inflows. Regardless of what has already been done in terms of study, scope, geographical spread, specification of variables and adoption of econometric methodology, there are many areas yet uncovered making this research necessary so as to fill the omitted aspect in this area of study. For instance, Ahoure (2009) study was related to the role of governance in the relation between remittances and economic growth in Sub-Saharan African countries, based on panel data over the period 2002-2006, a scope which cannot capture recent development in this area of study.

VI.   RESEARCH DESIGN

The research design is the overall strategy a researcher applies to integrate different components of the study towards addressing the research problem. Research question determines the type of research design to adopt for a study. Research design, in essence, constitutes the blueprint for data collection, measurement, and analysis. For the purpose of this study, ex-post facto research is adopted. Ex-post facto research design is systematic and empirical inquiry in which the researcher does not have direct control of independent variables because their manifestations have already occurred or because they are inherently not manipulated. Ex-post facto is used because the study intends to apply what already exist and look backwards to explain why. The study is based on analytical examination of dependent and independent variables. More so, independent variables are studied in retrospect for seeking possible and plausible relations and the likely effects, the changes in independent variables produce on a dependent variable. The variables used in this study is real GDP, (RGDP), as dependent variable , the explanatory variable is the growth rate of international remittance inflows (IRIGWT), gross national index of overseas development assistance(ODAGNI), balance of trade (BOT) , exchange rate (EXR) and inflation (INFL). In broad terms, co integration method and error correction are employed for model evaluation with the use of E view analytical tool.

VII.   MODEL SPECIFICATION

In order to exhaustively test the specified hypotheses of the study, the researcher adopted the Output – Remittance model of neoclassical endogenous growth theory which assumes that the relationships between output and remittance are motivated primarily by altruism and hence will most often exhibit countercyclical characteristics, Chami et al (2003). The assumption of altruistically motivated remittances is adequately captured within a system of equations characterized by three endogenous variables namely: growth rate of output (*YGR*), workers' remittances (*WR*), and per capita income (*PCI*). The neoclassical production function of the Cobb-Douglas form in which output (GDP) is specified as a function of labor (L), capital (K), workers' remittances, and a technological factor or efficiency parameter (A) is written explicitly as follows:

$$GDP = f (A, L, K, WR, PCI) \qquad\qquad (1)$$

Where A is the technological factor of the efficiency factor within the system can be re-written as:

$$GDP = AL^{\alpha}K^{(1-\alpha)}WR, PCI \qquad (0 < \alpha < 1)$$

$$(2)$$

Where α is the relative share of labor in total output and (1-α) is the relative share of capital in total output. The above model is modified to accommodate the relevant variables in this study as
RGDP=f(IRIGWT, ODAGNI, EXR, INFL,BOT)   (3)
Where, RGDP= Real Gross Domestic Product (The Proxy variable for Growth of Domestic Economy), IRIGWT= Growth rate of International Remittance Inflows, ODA= Oversea Development Assistance (Gross National Index), EXR= Exchange Rate, INFL = Interest Rate, BOT = Balance of trade.

VIII.   PRESENTATION OF RESULTS

After collecting data with the aid of important tools and method, the next essential step is to present the result, analyze and interpret the result with aim of getting the empirical solution to the problem identified in the research work. So data analysis means operating on the data to get the pattern and trends in data sets. Data analysis is a very vital step and it is the heart of every research work. Therefore the results for the data analysis are presented here.
Unit Root Test
The Augmented Dickey-Fuller (ADF) statistic was employed to test for the existence of unit roots in the data using trend and intercept. Test results presented below are model 1 and 2:

Unit Root
Table 1: Augmented Dickey – Fuller Unit Root Test Result

Variables	Level	5%crt.val	Pval.	1st diff	5% crt.val	Pval.
RGDP	-1.184539	-3.544284	0.8983	-10.64834	-3.548490	0.0000
IRIGWT	-2.476189	-3.544284	0.3371	-6.250958	-3.548490	0.0001
ODAGNI	-3.254943	-3.544284	0.7888	-5.430184	-3.548490	0.0005
DCPS	-2.118668	-3.544284	0.5180	-4.633705	-3.548490	0.0039
EXR	-2.159829	-3.544284	0.4961	-5.543668	-3.548490	0.0004
INFL	-3.050712	-3.544284	0.1337	-5.428573	-3.548490	0.0005
BOT	-3.04228	-3.552973	0.2488	-12.42141	-3.557759	0.0000

Sources: Author's computation, 2017 using E view 9.0

The unit root test above showed that all variables are stationary at first difference in both model one and two, this was indicated by the t- statistics and p values that are less than 0.05 (5%) level of significance as shown in table 1.

Co-Integration Test

Table 2: Co integration Test
In the first model, the co integration test is stated thus;
Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
RGDP *	0.770049	109.9820	69.81889	0.0000
IRIGWT *	0.650749	64.41551	47.85613	0.0007
ODAGNI *	0.392892	31.80463	29.79707	0.0290
BOT *	0.348950	16.33413	15.49471	0.0373
INF	0.093114	3.029881	3.841466	0.0817

Trace test indicates 4 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level

Vector Error Correction Mechanism

Table 3: VECM Test

	Coefficient	Std. Error	t-Statistic	Prob.
ECT (-1)	-0.014621	0.006696	-2.183701	0.0411
D(RGDP(-1))	-0.081698	0.208402	-0.392023	0.6992
D(IRIGWT(-1))	-6.874905	2.365044	-2.906883	0.0087
D(ODAGNI(-1))	8.643742	3.024274	2.858121	0.0097
D(BOT(-1))	7.52E-06	1.64E-06	4.572819	0.0002
D(INF(-1))	0.049625	0.203463	0.243902	0.8098
C	23.80973	6.438959	3.697760	0.0014
R-squared	0.715719	Durbin-Watson stat		1.676831
F-statistic	4.577527	Prob(F-statistic)		0.001596

The result above revealed an error correction term of -0.014621 with a significant Pval. of 0.0411. IRIGWT was found to have a negative significant relationship with economic growth (RGDP) with a coefficient of -6.874905 and Pval. of 0.0087. Also ODAGNI had a positive significant correlation with RGDP with the coefficient of 8.643742 and Pval. of 0.0097. BOT and INF exhibited positive significant and positive insignificant relationship respectively with economic growth in Nigeria within this period of study. All the explained relationships are found in the lower chamber of VECM which depicts the short run effect among variables inclusive of the vital signs and coefficient of other estimation parameters. R- Square showed an output of 0.715719, DW was 1.67; while F-statistics was 4.577527 and the Prob. Of F-stat was 0.0015

IX.   GRANGER CAUSALITY TEST

The result of the causality test among the variables was reported using the block exogeneity Wald test output as stated below. The result shows that causality does not exist between international remittance inflow and economic growth in Nigeria contrary to the outcome of the error correction term which is negative, fractional and significant. A negative error correction term implies a long run relationship among the dependent and independent variables as it is indicative of the speed of adjustment from the short run to long run equilibrium in the event of distortions in the economy.

VEC Granger Causality/Block Exogeneity Wald Tests
Date: 05/08/17   Time: 15:33
Sample: 1980 2015
Included observations: 32

Dependent variable: D(RGDP)

Excluded	Chi-sq	Df	Prob.
D(IRIGWT_)	1.380991	1	0.2399
D(ODAGNI)	0.006309	1	0.9367
D(BOT)	1.175844	1	0.2782
D(INF)	1.044307	1	0.3068
All	5.657969	4	0.2262

Dependent variable: D(IRIGWT_)

Excluded	Chi-sq	Df	Prob.
D(RGDP)	0.994322	1	0.3187
D(ODAGNI)	1.076824	1	0.2994
D(BOT)	4.129850	1	0.0421
D(INF)	0.194218	1	0.6594
All	4.340801	4	0.3618

Dependent variable: D(ODAGNI)

Excluded	Chi-sq	Df	Prob.
D(RGDP)	0.354109	1	0.5518
D(IRIGWT_)	2.731441	1	0.0984
D(BOT)	0.419335	1	0.5173
D(INF)	0.524232	1	0.4690
All	3.283745	4	0.5115

Dependent variable: D(BOT)

Excluded	Chi-sq	Df	Prob.
D(RGDP)	0.733787	1	0.3917
D(IRIGWT_)	2.335348	1	0.1265
D(ODAGNI)	0.009514	1	0.9223

D(INF)	0.004564	1	0.9461
All	5.648711	4	0.2270

Dependent variable: D(INF)

Excluded	Chi-sq	Df	Prob.
D(RGDP)	0.162189	1	0.6871
D(IRIGWT_)	0.384219	1	0.5354
D(ODAGNI)	1.699188	1	0.1924
D(BOT)	0.814575	1	0.3668
All	2.967906	4	0.5632

X.   DISCUSSIONS OF RESULT

The findings of the result are discussed in order to bring out the basic information from the analysis of each variable in the model estimated and also to link the discussion of the findings with the existing theory on the particular research work.

Co-integration Test

The result of the Johansen co integration test for real gross domestic product and international remittance inflow, overseas development assistance, balance of trade and inflation indicated four (4) co integrating vectors as shown in table 2 depicting the existence of stable long run relationship between the dependent and independent variables. This implies that the result of the estimation can be relied upon in taking long run decisions in the economy within the study period.This result agrees with the findings in Singh and Mehra (2014), Jawaid and Raza (2012), Salahuddin (2013), Nkoro and Uko (2012), Omobitan (2012) and Uda (2011) whose studies indicated long run relationship between international remittance inflows and economic growth.

Vector Error Correction Model

ECM which stands for error correction model met required conditions. Result of the ECM was significant indicating that inverse and statistical significant of ECM coefficients are essential conditions in order that any disequilibrium to be corrected. In light of this, the coefficient of ECM (-1) = --0.014621. Inverse result of ECM satisfied one condition and the P-value [0.0411] < 5% [0.05] critical value satisfied another condition of been statistical significance. Result of ECM with the coefficient of (--0.014621) indicated that the speed of adjustment amid the short run dynamics and the long run equilibrium is 1%. Thus, ECM will adequately act to correct any deviations of the short run dynamics to its long-run equilibrium by 1% annually.

Computed coefficient of multiple determination (R^2) value of 0.715719showed that 71% of total change in economic growth is accounted for, by the explanatory variables: international remittance inflows (IRIGWT), overseas development assistance (ODAGNI) balance of trade (BOT) and inflation (INF) while 29% of the changes in economic growth (proxied by RGDP) can be attributed to other factors not included in the regression equation influence. F – Statistics = 4.577527, with p value of 0.001596 which is less than 0.05 shows that explanatory variables jointly influence dependent variable significantly. Result of DW which stands for Durbin Watson is used to determine if there is autocorrelation among residuals, since the DW has the value of 1.67; it indicates the absence of auto correlation among the residuals.

The result of the VECM showed a negative significant relationship between international remittance inflows and real gross domestic product in the short run as indicated by a t-statistics of -6.874905 and a p-value of 0.0087. This means that international remittance inflows contribute negatively to the growth of Nigeria economy. This result agrees with the views of the pessimistic, neo Marxist and dependence school of thought who believes that international remittance inflows does not contribute positively to the economy of the recipient country. The finding also agrees with Kaasschieter (2014) and Agu (2009) who discovered negative relationship between international remittance and economic growth. The researcher is of the opinion that the attitude of recipients of international remittance could be responsible for this outcome. It has been argued that most international remittance especially to developing economies are usually consumed rather than being invested on productive ventures even as such free fund discourages the recipient from engaging in productive activities. Consequently, from the upper chambers of the VECM, international remittance inflow maintained a negative

relationship with economic growth in the long run, implying that even in the long run, international remittance inflow has not been beneficial to the Nigerian economy

Overseas Development Assistance and the Growth of Nigerian Economy
The result of the error correction model in the short run as indicated by the lower chamber of VECM showed a positive significant correlation between overseas development assistance and gross domestic product as indicated by the t-statistics of 8.643742 and p-value of 0.0097. This means that overseas development assistance contributes significantly to the growth of the Nigerian economy in the short run.

However, the result from the upper chamber of the VECM indicates a negative relationship between overseas development assistance and economic growth in the long run. The implication of this result is that policy makers should promote overseas development assistance in the short run in preference to long run planning if the economy will reap the fruit of such investment.

XI.   CAUSALITY TEST
The Wald test was adopted to evaluate the degree of causality between international remittance and economic growth in Nigeria as expressed in the second hypothesis. From the Wald test result, the p values of 0.3187 for RGDP and 0.2399 are greater than 0.05; therefore, the study accept the null hypothesis and concludes that causality does not run between international remittance inflows and real gross domestic product in Nigeria. This is contrary to the outcome of the error correction term. A negative error correction term implies causality among the dependent and independent variables as it is indicative of the speed of adjustment from the short run to long run equilibrium in the event of distortions in the economy.

The error correction term from the study is negative, significant and fractional. A negative error correction term implies causality among the dependent and independent variables as it is indicative of the speed of adjustment from the short run to long run equilibrium in the event of distortions in the economy. This is contrary to the result of the Wald test which indicated no causality among RGDP, IRIGWT, ODAGNI, BOT and INF. This implies that policy actions to manage international remittance inflow into the domestic economy could be discretionary. An increase in international remittance inflow can contribute to the growth of the economy if appropriate policy actions are taken to remedy possible gaps in remittance transmission process. The growth of the domestic economy can also assist in addressing negative issues associated with international remittance inflows, since a developed economy absorbs the best hands and saves such economy from brain drain.

XII.   CONCLUSION
In view of the above findings, the study makes the following recommendations;
The federal government should adopt strict policy measures to regulate international remittance inflows to Nigeria by ensuring proper investment of greater percentage of all remittances. This can be done by insisting that all remittance above certain level be accompanied with an investment plan or properly taxed.

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