JOURNAL OF INTERNATIONAL ECONOMICS AND FINANCE
Vol. 3, No. 1, 2023, pp. 49-65

ISSN: 2583-1178

Macroeconomic Fundamentals and the Attractions of Diaspora Remittance in Nigeria

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To Cite this Article
OSAYI, Valentine Igbinedion and KASIMU, Abudu (2023). Macroeconomic Fundamentals and Attractions of Diaspora Remittance in Nigeria. *Journal of International Economics and Finance,* 3: 1, pp. 49-65.

Abstract: The Study investigated macroeconomic fundamentals as enhancers of the attraction of Diaspora remittance in Nigeria. The study used remittance inflows as measure of Diaspora Remittance and the Gross Domestic Product (GDP), inflation rate, exchange rate and unemployment rate as measures of macroeconomic fundamentals. The Ordinary Least Square (OLS) regression technique was deployed to analyse the data collected from the World Bank data base from 1990 to 2021. The findings revealed that the relationship between inflation rate and Diaspora remittance is positive and not significant, Gross Domestic Product (GDP) has both positive and significant relationship with Diaspora remittance, likewise unemployment rate and only exchange rate has a negative but significant relationship with Diaspora remittance in Nigeria. Following from the foregoing findings, the study recommended that the Central Bank of Nigeria (CBN) being the monetary and regulatory authority of the banking system, should formulate policies that would encourage the inflow of Diaspora remittance through the banking system, and also, the monetary authority should make efforts to reduce inflation rate to a single digit in Nigeria; such that Diaspora remittances are well utilized to boost employment generation in the economy.

Keywords: Macroeconomic Fundamentals, Diaspora Remittance, Gross Domestic Product, Monetary Authority

INTRODUCTION

Migration can generate gains in terms of welfare for migrants whether international or internal migration although the former exceeds the latter in terms of benefits associated with it. The implications of migration are more in less developed and developing countries compared to developed nations due to the high level of poverty, extensive downsizing of organizations, ethno-religious conflicts, refugee movements,

Received : 05 March 2023 • **Revised :** 28 March 2023 • **Accepted :** 18 April 2023 • **Published :** 29 June 2023

wide spread unemployment and rapid urbanization and its attendant consequences and patterns. The history of the human migration phenomenon in African continent started for a long time and it increases due to the dynamics of the societies. Several forms of migration exist, namely global migration, inter/intra continental, regional migration and sub-regional migration. Migration may be voluntary, where people relocate to new areas based on discretion for better economic opportunities outside their original home countries, or forced migration, where people leave in response to conditions beyond their control such as wars, conflicts and environmental catastrophes. Migrants' financial remittance is an important and growing source of foreign exchange for several less developed and developing countries. These remittance inflows have increased in the recent past and constitute a large source of foreign income relative to other financial inflows. The remittances of the Diasporans, despite being a show of attachment to the country of origin, serve as a vehicle towards the growth of the domestic economy.

The nature and size of remittances inflows warrant a systematic study of their significance to the macro economy. According to Chami, Barajas, Cosimano, Fullenkamp, Gapen and Montiel (2008), there are three main features of Diaspora remittances that provide impetus to investigate how the macroeconomic fundamentals of the recipient countries affect or attract the inflows. These are: size of these flows relative to the size of the recipient economies; the likelihood that these flows will continue unabated because of continued trend in globalization; and these flows are quite distinct from those of official aid or private capital. (In contrast to these remittances are composed of numerous small transfers between private individuals who are tied to familial relationship in the home country).

The following are key macroeconomic fundamentals driving remittances from the perspective of receiving countries like Nigeria; GDP per capita, domestic GDP, inflation and nominal exchange rate depreciation. Among non-policy variables; income levels in the host countries are expected to positively impact the remittance flows to Nigeria. However, the level of income in the receiving country (Nigeria) could have either a positive or a negative impact on the inflows of remittances, depending on motives behind the said remittance; whether altruistic or investment motive. Under the 'altruistic motive', the remittance inflows would rise with lower per capita income. If 'investment' or 'portfolio management' motives prevail, inflows would increase with higher per capita income.

Among policy variables; inflation would impact Diaspora remittance flows positively under the altruistic motive and negatively under the investment motive, as senders would be hesitant to send remittances to countries with unstable macroeconomic environments. Regarding exchange rate depreciation, remittance inflows would be impacted negatively under both altruistic and investment motives. With depreciation of local currency, remitters would send less cash under the altruistic motive because of the increased purchasing power of their foreign currency—denominated remittances. They would send fewer remittances even when motivated by investment possibilities, since depreciation may reflect weaknesses in macroeconomic policies.

According to Ihimodu (2005), the dearth of capital for financing developmental policies and project has been a major problem plaguing the country and has forestalled projected growth in Nigeria. Furthermore, the inability of government in Nigeria to generate sufficient foreign exchange due to heavy reliance on a mono-product export which is prone to negative price shock in the case of oil at the international market has led to many years of instability in government revenue and consequently served as checks on import demand and a constraint to effective implementation of national development plans (Adewuyi&Adeoye 2003).

While migrant remittances have been acknowledged to be increasingly important to developing countries (Nigeria) which is determined by the prevailing macroeconomic fundamentals, little incentives seem to have been put in place to strengthen them. The lack of policies to channel or encourage remittances through formal channels and investment in real sectors over time has probably impacted on the overall contribution of remittances to economic growth in Nigeria. Also, very few studies have been carried out on Diaspora remittance in Nigeria. In addition, the few studies tend to focus on the impact of Diaspora remittance on the economy of the recipient nation; none has looked at how the macroeconomic fundamentals of the recipient countries attract Diaspora remittance. It is against this backdrop that the study seeks to investigate the impact of macroeconomic fundamentals of the recipient countries on the attraction of Diaspora remittance.

CONCEPTUAL REVIEW

Before going further, it is apropos at this juncture to conceptually clarify and define the word "Diaspora". The word "Diaspora" comes from an ancient Greek word meaning, "to scatter about." This is directly what the persons of a "Diasporas" do. They travel from their homeland to places across the globe, spreading their culture and belief system as they go (Cambridge Advanced Learner's Dictionary and Thesaurus, 2018).

The Collins English Dictionary (2018) defines the word" Diaspora" as" populations of migrant origin who are scattered among two or more destinations, between which there develop multifarious links involving flows and exchange of people and resources: between the homeland and destinations countries".

The vocabulary.com defines "Diaspora as a large group of people with a similar heritage or homeland who has since moved out to places all over the world". According to the United Nations (2017), the word "diaspora" is now also used more generally to describe any large migration of refugees, language, or culture. Currently, Diasporas include composite mixes of persons who have converged at different times, through different channels, means, and legal statutes in their various destinations.

Today, there are large numbers of Nigerian populations around the world. According to the office of the Director General, Nigerian Diaspora Commission, the figure stood at about 15 million in 2018. Apart from the presence of Nigerians in this large number all over the world, in 2018, it was reported that Nigerians living abroad (Diaspora) sent home $22 billion in 2018, the highest in Sub-Saharan Africa and fifth in the world (World Bank, 2018). Comparing this to the year 2017 of $19.64 billion, representing 10% increase in 2018. The amount represents the highest in the Sub-Saharan Africa region followed by Senegal and Ghana year in year out from the early 2000s (World Bank, 2017). Similarly, World Bank posits that this growth in remittances is because of economic growth in Europe, the Russian Federation, and the United States of America (USA) due to higher oil prices and the strengthened euro and ruble.

DIASPORA REMITTANCE

Diaspora remittances are transfer of money by a foreign worker to his or her home country. According to Osayi and Akemieyefa (2022), diaspora remittance also known as workers' remittance is seen as the money transferred by a migrant worker who resides in a country other than his home country. In other words, the money sent home by the migrant worker who lives in diaspora is known as diaspora remittance. Due mainly to the large amount of money involved in diaspora remittances, it is now being recognized as significant sources of foreign exchange for economic growth and development of the domestic economy. In addition, because globalization has further fostered and facilitated flow of goods and services across national borders, workers' remittances to their domestic economies are also expected to increase and keep increasing. The anticipated increased remittances will help in the mobilization of foreign capital inflows into the economy such that would augment the available economic resources for growth and development (Osayi & Akemieyefa, 2022). According to World Development Indicator (WDI), diaspora remittances are seen as transfers of a personal nature which comprises all transfer in cash or kind independent of the sources of income of the receiver.

Ajayi, Ijaiya, Bello and Adeyemi, (2009), opined that diaspora remittances constitute monetary asset transferred by a foreign migrant worker to his domestic economy. Amuedo- Dorantes, and Pozo, (2004), contented that the notion of categorizing remittances as only monetary asset is wrong but rather it should include monetary aspect and non-monetary flows, such as social remittances. Singh, Haacker, Lee and Goff (2010), see diaspora remittances as capital transfers of financial assets made by migrant workers as they move from one country to another.

The International Labour Organization ILO (2001), sees diaspora remittance as the earnings of the international migrants workers transferred back home from his country of employment to his country of origin. According to Ahlburg (1991), diaspora remittance is seen broadly as transference of monetary dimension in the complex web of linkages existing between international migrant workers and their domestic economies.

According to Singh, Haacker, Lee and Goff, (2010), monetary assets in the form of cash are sent through a formal channel like banks via network of International Monetary Transfer Organizations (IMTOs) as Western Union and Money gram. Because of lack of functional administrative structures and mechanism, government has not been able to properly harness the financial potentials derivable from the gains of diaspora remittance for investment and national economic growth and development.

Remittance flows have other significant characteristics beyond their volume. The 2003 World Bank report also noted that they are more stable than other kinds of external financial flows, and indeed seem to be countercyclical. In times of crisis, whether natural or man-made, migrants tend to send more money to their families to help them survive or recover, whereas foreign investment and lending tend to dry up. Two important characteristics of remittances are worth underscoring: they are largely unaffected by political or financial crises, tending to increase in times of hardship and they are equally spread among developing countries than are other financial flows (Ratha, 2003, in IOM, 2006: 23). Diaspora remittances are experiencing growth and due to huge sums involved, it is now being recognized as an important contributor to the recipient country's growth and development. Migrants living abroad typically send money home to help their families. Remittances are an important source of external financing to the recipient country and may alleviate credit constraints and act as a substitute for financial development. Unlike private capital flows, remittances tend to rise when the recipient economy suffers an economic downturn following crisis, natural disaster, or political conflict because migrants send funds during hard times to help their families and friends.

MACROECONOMIC FUNDAMENTALS

Macroeconomic fundamentals are indices in the entire macro economy that either combine to facilitate or retard growth in the economy depending on the prevailing strength of the said fundamentals at any point in time. They are also indicators upon which the performance of the entire economy is assessed. Examples of such macroeconomic fundamentals are interest rates, inflation rates, Gross Domestic Product (GDP), National Income, employment rate, fiscal and monetary policies.

Interest rates: The value of a nation's currency greatly affects the health of its economy. Interest rates reflect the amount of return earned by investing money within a country's financial system. Higher interest rates indicate a higher value for the currency of the National economy.

Inflation: Inflation is the consistent and general rise in the level of prices of goods and services in the country within a particular period of time. It describes an increase in the average cost of goods or services over a period of time. Inflation that occurs rapidly is a measure of economic instability or downturn while steady inflation is usually predicted as a normal economic factor.

Fiscal and Monetary policy: Fiscal policy is the deliberate use of the instrument of governmental expenditure and taxation to influence the direction of the economy. Monetary policy on the other hand is the manipulative use of the interest rates and money supply to control credit and allocate same to the desired sectors of the economy. Monetary policy is shaped by large financial institutions in both the public and private sectors. Large banks and government agencies make decisions that impact interest rates, inflation and federal budgets. This guides the flow of money in circulation within an economy.

Gross Domestic Product (GDP): Gross domestic product (GDP) is the total monetary or market value of all the finished goods and services produced within a country's borders in a specific time period. As a broad measure of overall domestic production, it functions as a comprehensive scorecard of a given country's economic health .Gross domestic product (GDP) is a monetary measure of the market value of all the final goods and services produced in a specific time period by countries.GDP (nominal) per capita does not, however, reflect differences in the cost of living and the inflation rates of the countries; therefore, using a basis of GDP per capita at purchasing power parity (PPP) may be more useful when comparing living standards between nations, while nominal GDP is more useful comparing national economies on the international market. Total GDP can also be broken down into the contribution of each industry or sector of the economy.] The ratio of GDP to the total population of the region is the per capita GDP and the same is called Mean Standard of Living.

GDP definitions are maintained by a number of national and international economic organizations. The Organization for Economic Co-operation and Development (OECD) defines GDP as "an aggregate measure of production equal to the sum of the gross values added of all resident and institutional units engaged in production and services (plus any taxes, and minus any subsidies, on products not included in the value of their outputs) An IMF publication states that, GDP measures the monetary value of final goods and services that are bought by the final user produced in a country in a given period of time (say a quarter or a year).GDP is often used as a metric for international comparisons as well as a broad measure of economic progress. It is often considered to be the "world's most powerful statistical indicator of national development and progress". However, critics of the growth imperative often argue that GDP measures were never intended to measure progress, and leave out key other externalities, such as resource extraction, environmental impact and unpaid domestic work. Critics frequently propose alternative economic models such as doughnut economics which use other measures of success or alternative indicators such as the OECD's Better Life Index as better approaches to measuring the effect of the economy on human development and well being.

Gross domestic product describes the overall economic value of the goods and services produced by a country. GDP is also a measure of spending by a government and its citizens along with the financial impact of trade and investments within a nation. GDP is usually calculated annually.

National income: National income is the combined amount of money a country generates within its economy. This figure helps economist's measure economic growth along with standards of living for citizens including income distribution.

Employment: The unemployment rate of a country offers an indication of the economic health within a nation. A higher employment rate versus those unemployed indicates a stronger economy. When a majority of citizens are employed, their spending increases the amount of money in circulation and boosts the economy.

THEORETICAL REVIEW

Theory of Remittance

There are litanies of theories explaining the behaviour of remittance inflow. The most prominent of these theories in the literature which form the focus of this study are the altruistic and self-interest theories. Altruism was coined by Augute Comte a French Philosopher in the 19th Century. Altruism is the attitude and ethical way that is concerned with the happiness of others. Self-interest (selfishness) on the other hand is the opposite of altruism, which is selflessness. However, the self-interest classification includes the following motives: exchange, insurance, investment, inheritance and strategic. One of the vital motives of migrants' remittance is based on the altruism drive. Lopez – Cordova and Olmedo (2006) posit that remittance does not involve any present or future reimbursement or represents payment of debt. Lucas et al (1985) state that remitter derives convenience from the well –being of relative-recipients at home. As a result, negatively violate the amount remitted. Chipeta and Kachaka (2004) supported this motive and suggest altruistic motive is behind remittance in Malawi.

This brings to common reasoning that altruistic behavior of remitter may be to militate against those factors that affect the wellbeing of the family such as poverty. Exchange motive as a self-interest for remitting money home is to render services that take care of the migrant's children, house, property, repayment of loan borrowed by the migrant to cover his/her immigration cost or education etc. Cox, Eser, and Jimencz (1998) survey household in Peru and found evidence consistent with exchange motive. Another self-interest motive for remittance is an investment. In this motive, money sent home to acquire a piece of land and build a house or buy a house, financial assets or to start a small business because of their perception of the market at home being better than their host countries.

Money remitted is sometimes used for outlay where the financial sector cannot provide the credit requirements of local entrepreneurs (Giuliano&Ruiz – Arranz, 2005). In Ecuador during financial distress caused by adverse shock funds sent were used for the upkeep of children in schools (Calero, Bedi& Sparrow, 2009). Also, remittances help to quicken recovery from disaster and rebuilding after a destructive earthquake. This was the case of Pakistan in 2005. Migrant remittances may also be driven by legacy. The study of (Schrieder and Knerr, 2000) in Cameroon confirmed this theory and asserts that the reason for remittances was to keep sizeable inheritance. In the Dominican Republic, (De La Briere, Benedicte, Sadoulet, de Janvry and Lambert, 2002) opined that remittance is a condition on future inheritance.

Osili (2004) conducted a survey in Chicago of 112 Nigerian migrant households with a corresponding sample of 61 families in Nigeria. She found out that one-third of the remittances were used on real estate investments in the previous year. She further reveals that the migrants housing investment has a positive impact on macroeconomic determinants. Remittance can act as insurance (self-interest) motive. This motive comes in different forms, for example, migrants' remittances alleviate the risk of crop failure, price fluctuation, and insecurity of land tenancy, livestock diseases and inadequate availability of agricultural wages (Stark &Levhari, 1982). Remitter household members back home can go into an agreement in which migrants would be indemnified against the event of a deficit in their income. This type of arrangement is encouraging because government-sponsored social insurance is generally poor or non-existent (Yan & Choi, 2005). A conduct of a literature web metric analysis also shows that one motive of sending money home is for strategic purpose with the highly skilled migrants. The transfer to low-skill workers is to make them remain at home. This is done to protect their wages against competition from potential immigrants (Kithe, 2009). Rapoport and Docquier (2005) argued that the reason is obvious when migrants are heterogeneous in skillfulness and individual output is not wholly visible on the labour market of the host country.

EMPIRICAL REVIEW

A number of researchers have attempted to situate the position of macroeconomic fundamentals as necessary conditions for the attraction of Diaspora remittance inflow into the economy of any nation through empirical investigations with mixed findings. For example;

Ugherughe and Jisike (2020) studied the impact of Nigerian Diasporas' remittance inflows on the economy of Nigeria. The study used remittance inflows and the macroeconomic variables of the exchange rate and inflation rate as control element sources on the Nigeria economy (Gross Domestic Product) as to evaluate the impact of remittance inflows on the economy of Nigeria. Ordinary Least Square (OLS) and Granger Causality tests were deployed to analyse the data collected from the World Bank and International Monetary Fund database from 1977 to 2017.The result of the study revealed that there is a long run equilibrium relationship between remittance inflows of the Diasporas and the economy of Nigeria. Furthermore, the causality test shows unidirectional causality from migrant remittances to the gross domestic product, gross domestic product to exchange rate, and exchange rate to migrant remittances.

Olayinka and Damilola (2021) investigated Diaspora Networks and Investments in Nigeria Using social network theory, the primary data for this article were gathered using in-depth interviews from 2019 to 2020. This is in addition to the authors' primary insights over more than three decades into migration trajectories, diaspora existentialities, and investment domains in Nigeria. Findings suggest that some Diasporas involve their networks such as family members and friends in their investment decision-making processes and eventual investments, while others have mistrust for their networks with implications for real investment choices and eventual outcomes. The article clearly shows that the diaspora networks within their investments' thresholds, the roles of significant others, and the challenges of the diaspora are highly dynamic and ambivalent, as demonstrated through the Nigerian experience.

Iheke (2012) analyzed the effect of remittances on the Nigerian economy. The study employed secondary data covering the period 1980-2008. Data sources included official publications of the World Bank, Central Bank of Nigeria, National Bureau of Statistics, Journals and other relevant publications. Data collected were analyzed using trend and regression analysis. Results of data analysis revealed that remittance inflow has been on the increase over the past two decades. Also, remittances, per capita income, investment and time were the positive and significant factors influencing output while consumer price index significantly influenced output negatively.

Dietmar-Meyer and Adela (2016) examined the impact of remittances on economic growth using Trend and Regression Analysis, dataset of six high remittances receiving countries, Albania, Bulgaria, Macedonia, Moldova, Romania and Bosnia Herzegovina during the period 1999–2013 were considered. These countries have experienced a major increase in remittance inflows, and at this time accounts for the bulk of total remittance receipts, compared to other countries. Most countries remittances represent the largest source of foreign exchange earnings and represent more than 10 percent of GDP. In other words, the econometric analysis was based on those six remittance receiving countries. The results suggest that remittances have a positive impact on growth and that this impact increases at higher levels of remittances relative to GDP.

Andrew (2013) estimated short-run and long-run effects of diaspora remittances on growth of economy in Kenya and took into considerations the two factors of domestic savings and financial deepening as independent variables. The data were sourced from the World Bank, Central Bank of Kenya, Kenya National Bureau of Statistics and the National Treasury. The study used time series data for the period 1970 to 2017. STATA software was used for the analysis and Granger causality test was used to test the direction of causality between diaspora remittances and economic growth. The Granger causality tests showed that there was unidirectional causality between Diaspora remittances and economic growth in Kenya for the period under study (1970-2017). This means that diaspora remittances accelerate economic growth in Kenya and that economic growth does not lead to increase in diaspora remittances in Kenya. Based on the maximum rank two of the cointegration, GDP and diaspora remittances were cointegrated. The study used ordinary least squares estimation to determine both the short-run and long-run effects of diaspora remittances on economic growth in Kenya. It was found that there was a short run and long-run relationship between GDP and diaspora remittance at 10 percent level of significance and similarly between GDP and domestic savings. The explanatory variables chosen in the ordinary least squares model explained 48.81 percent of the variation in GDP. Regression results showed that diaspora remittances has a positive impact on economic growth both in the short-run and long-run at 10 level of significance leading to a 0.45 percent increase in GDP.

Margaret and Ajibola (2016) investigated the contributions of foreign remittances on economic growth in Nigeria from 1980 to 2016, using the Vector Error Correction Modelling (VECM) technique to analyze the long run and short run impact of disaggregated remittances that is Migrants 'Remittances and Workers' Remittances to find out whether they will perform differently in relation to economic growth in Nigeria. The two components of remittances performed differently. While the Migrants remittance component exhibits along run positive, statistically significant relationship with economic growth, the other component i.e Workers Remittance has a negative statistically significant impact in the long run, short run relationship was also established among the variables as the ECM term was negative and statistically significant. The results showed a unidirectional causality from GDP per capita to Migrants remittances while no causality was found between workers' remittances and gross domestic product per capita.

Renata (2015) examines the effect of Diasporas' remittance on economic growth in Malawi by using an Auto Regressive Distributed Lag (ARDL) model or Bound Testing approach. The study employed time series data from 1985 to 2015. The outcome of the study revealed that, the impact of Diasporas' remittances during the study period is positive and significant. Besides this, the other growth determinant factor which was found positive and has significant effect on economic growth of Malawi was official development assistance (ODA) while population growth was significant but negatively affected growth. The effect of other determinant factors on economic growth of Malawi happened not to be significant.

Kelechukwu and Oluchi (2018) examined Foreign Remittances and Nigeria's Economic Growth (1990 – 2018). The ADF test was used to test for stationarity. The variables were all found to be integrated at 1st difference so the OLS technique was used to analyze the data. Results show a positive relationship between foreign remittances and economic growth. Also a strong two-way relationship was established between foreign remittances and external reserve. Foreign remittances have come to be a major source of income for Nigerian families' and households. Infant mortality rate which was included in the model as a measure of social welfare and human development was also seen to be on the decline and having no causality relationship with foreign remittances. This was rightly so because, as the study shows, the expenditure pattern of foreign receipts by households is tilted towards consumption.

From the empirical literature reviewed, it is seen that all the researches focused on the impact of diaspora remittance on economic growth. None tried to look at macroeconomic fundamentals as attractions of diaspora remittance; thus creating a gap in the literature for which this study has come to fill.

METHODOLOGY

The study employs longitudinal and causal research design. This entails measuring the cause and effect relationship between the dependent and independent variables over a long period of time. The periods covered by the study are 1990 to 2020. The choice of this period is because it is the period which precedes major economic reforms- Structural Adjustment Programmes (SAP) of the Federal government of Nigeria. The data for this study are collected from the Central Bank of Nigeria (CBN) statistical bulletin for various years, the National Bureau of Statistics (NBS) Quarterly Reports as well as the World Bank Development Indicators (WDI) for various years.

Model Specification: The model for this study is patterned after Osayi and Akemieyefa (2022) with slight modifications. The model is specified to fit into an equation that can show relationship between macroeconomic fundamental and diaspora remittance inflow in Nigeria. The model used variables such as Inflation Rate (INF), Gross Domestic Product (GDP), Exchange Rate (EXR), Unemployment Rate (UMR) and Diaspora Remittance (DRM) to represent macroeconomic fundamentals and Diaspora Remittance inflow respectively. The model is:

$$DRM - f(INF, GDP, EXR, UMR) \quad (1)$$

Where

DRM = Diaspora Remittance

INF = Inflation Rate

GDP = Gross Domestic Product

EXR = Exchange Rate

UMR = Unemployment Rate

The econometric form of the model is presented as:

$$DRM_t = \beta_0 + \beta_1 INF_t + \beta_2 GDP_t + \beta_3 EXP_t + \beta_4 UMR\mu_{\delta t} \quad (2)$$

Where;

t = Time series property,

μ_t = Error term

β_0 = Intercept

β_1 to β_4 = Coefficients

The *a priori* expectation of the models are:

$$\beta_0 > 0, \beta_1 \text{ to} \beta_4 > 0$$

Analytical Technique: The study used descriptive statistics, Augmented Dickey Fuller (ADF) unit root test for normality and stationarity of the series and the Least Square Method (LSM) of linear regression to analyze the data.

Descriptive Statistics: The individual descriptive statistic for Diaspora Remittance (DRM), Inflation Rate (INF), Gross Domestic Product (GDP), Exchange Rate (EXR) and Unemployment Rate (UMR) 1990- 2020 are presented in the table below:

Table 1: Descriptive Statistics

	DRM	*INF*	*GDP*	*EXR*	*UMR*
Mean	26322399	18.56900	43920.73	140.3742	3.499032
Median	20132347	12.72000	23121.88	128.2900	3.820000
Maximum	65544714	72.84000	154252.3	381.0000	9.010000
Minimum	10008540	5.390000	499.6800	8.040000	-28.60000
Std. Dev.	16195470	16.76423	47873.75	95.11752	6.193422
Skewness	1.253725	2.079282	0.925831	0.865310	-4.634387
Kurtosis	3.185268	6.185525	2.587458	3.251950	24.92003
Jarque-Bera	7.638640	34.30154	4.648507	3.950594	731.5971
Probability	0.021943	0.000000	0.097856	0.138720	0.000000
Sum	7.63E+08	557.0700	1361543.	4351.600	108.4700
Sum Sq. Dev.	7.34E+15	8150.146	6.88E+10	271420.3	1150.754
Observations	29	30	31	31	31

Source: Author's computation, 2023 using Eview 8.0

The results of the mean as presented in table 1 revealed that only DRM, GDP and EXR have considerable high mean values in the distribution of the series. The other variables INF and UMR have mean values that are averagely distributed. Of all the variables UMR has the lowest value with a mean value of 3.4990. In the standard deviation value, except for DRM and GDP, the other variables show trends that oscillate around the mean point. This is good for the distribution of the series used for estimation and for inference in the study. The result of the skewness shows that all the variables are positively skewed except UMR. The implication of this is that the series used in the study lie to the left of their respective means (left-tailed) except UMR. The results of the Kurtosis are all greater than 3 (leptokurtic) except GDP, implying that the values pass the test for Kurtosis. This means that the series are normally distributed. Using 5% level of statistical significance, the probability value for Jarque-Bera statistic for all the variables except GDP and EXR are greater than 5% which means that the series pass the normally test (DRM 0.02 < 0.05; INF 0.00< 0.05; GDP 0.097 > 0.05; EXR 0.13 > 0.05; UMR0.00 < 0.05). Since the Jarque-Bera statistics revealed that the series are normally distributed except for GDP and EXR, there is need for stationarity test for data suitability for inferences.

Unit Root Test: The study uses (ADF) unit root test to find out whether the variables exhibit unit roots property. The table below shows this:

Table 2: Summary of Unit Root Test Results

Variables	*ADF Test Statistic*	*95% Critical ADF Value*	*Order of Integration*	*Remarks*
DRM*	-3.656904	-3.004861	1(0)	Stationary
INF*	-4.095300	-2.9981038	1(0)	Stationary
GDP*	8.512872	-2.963972	1(0)	Stationary
EXR*	-4.660622	-2.967767	1(0)	Stationary
UMR	-18.35591	-2.963972	1(0)	Stationary

Source: Author's computation, 2023 using Eview 8.0 * indicates significant at 5% levels.

From the table above, it is seen that all the variables are stationary at levels. This is confirmed from the ADF statistic which is greater than the 95% critical ADF values for all the variables. This shows that the time series properties of the data were relatively stable as there is no biasedness of information, indicating that the result is reliable.

INTERPRETATION

The result revealed a very high R-squared which is 0.71. This means that the model formulation captured 71 percent of the systematic variation of the impact of macroeconomic fundamentals on the attraction of diaspora remittance inflow in

Table 3: Model Regression and Interpretation

Dependent Variable: DRM
Method: Least Squares
Date: 04/30/23 Time: 08:10
Sample (adjusted): 1990 2018
Included observations: 28 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	41590138	7118331.	5.842681	0.0000
INF	142743.4	158073.9	0.903017	0.3759
GDP	282.5836	138.7139	2.037169	0.0533
EXR	-251799.7	74658.90	-3.372669	0.0026
UMR	1241348.	449423.4	2.762091	0.0111
R-squared	0.712491	Mean dependent var		26765411
Adjusted R-squared	0.627707	S.D. dependent var		16312741
S.E. of regression	12340596	Akaike info criterion		35.65512
Sum squared resid	3.50E+15	Schwarz criterion		35.89301
Log likelihood	-494.1717	Hannan-Quinn criter.		35.72785
F-statistic	6.044658	Durbin-Watson stat		1.691461
Prob(F-statistic)	0.001779			

Source: Author's computation, 2023 using Eview 8.0

Nigeria. The remaining 29 percent is not captured by the model. The adjusted R-squared which is 0.62 is also very high, meaning that the model has 62 percent predictive ability. The Durbin Watson (DW) statistic is 1.69; and is within the acceptable range. It shows the overall performance of the model and indicates that there is no serial correlation; as such the result is reliable.

On the significance of the individual variables, INF is found not to have significant effect on DRM (INF Prob. 0.3759 > 0.05), GDP is found to have significant and positive effect on GDP (GDP Prob. 0.0533 < 0.05), EXR has a very significant but negative effect on DRM (EXR Prob. 0.0026 < 0.05) and UMR is also found to have a very significant and positive effect on DRM (UMR 0.0011 < 0.05)

On the direction of the effect of the independent variables on the dependent variable, GDP has positive significant effect on DRM. A unit increase in GDP will result in 282.5 increases in DRM. EXR has a negative effect on DRM. A unit increase in EXR has a decrease of 251799.7 on DRM. A unit increase in UMR will result in 1241348 direct increases in DRM. This can be expressed mathematically as:

$$DRM = 142743.4*INF + 282.5836*GDP + -251799.7*EXR + 1241348*UMR$$

From the empirical analysis, the study therefore states that macroeconomic fundamentals has significant positive effect on the attraction of diaspora remittance inflow in Nigeria (GDP Prob. = 0.05 < 0.05). Also, Exchange rate (EXR) as a macroeconomic fundamental does significantly affect the attraction of diaspora remittance inflow in Nigeria but it negatively affects (EXR Prob. = 0.0026 < 0.05). In addition, unemployment rate as a measure of macroeconomic fundamental does have significant positive impact on the attraction of diaspora remittance inflow in Nigeria (UMR Prob. 0.0111 < 0.05).

EMPIRICAL VALIDATION OF HYPOTHESIS USING T-STATISTIC

H01: There is no relationship between macroeconomic fundamental and the attraction of diaspora remittance inflow in Nigeria.

From the estimated regression result in table 3, the calculated t-statistic of 2.03, 3.3 and 2.7 representing Gross Domestic Product (GDP), Exchange Rate (EXR) and Unemployment Rate respectively ar far greater than the critical t-tabulated value of 2. The implication of this is that the null hypothesis is rejected while the alternate hypothesis is accepted. This is so because the decision rule of the t-statistic on test of hypothesis stipulates that the study rejects the null hypothesis when the computed t-value is greater than the tabulated t-value or accept the null hypothesis when the computed t-value is less than the tabulated t-value. In the light of the foregoing, the study rejects the null hypothesis and concludes that there is significant relationship between macroeconomic fundamentals and the attractions of diaspora remittance inflow in Nigeria.

DISCUSSION OF FINDINGS

It can be seen from the result of the study that inflation rate does not have impact on diaspora remittance in Nigeria. Inflation rate in the result is not significant in the model estimation. The relationship is though positive but it is not significant as revealed from the table above.

Also, as can be observed from the result in the table above, gross domestic product has significant impact on diaspora remittance in Nigeria. The relationship is both positive and significant. This implies that stability of the macro economy is necessary to attract diaspora remittance in Nigeria. This is similar to the findings of Fayissa and Nsiah (2010) who examined the summative impact of remittance on economic growth of 18 Latin American countries for the period 1980 to 2005.

It is observed from the result in the table above that exchange rate does have a very strong significant relationship and impact on diaspora remittance in Nigeria. The relationship is though negative but significant. The finding is similar to the findings of Mbutor (2010) who examined the pressure of monetary policies on remittance in Nigeria.

In addition, as can be observed from the result in the table above, unemployment rate has significant impact on diaspora remittance in Nigeria. The relationship is both positive and significant. The implication of the finding is that diaspora remittance has the capacity to reduce unemployment rate in Nigeria if the remittance is well utilized in the productive sectors of the economy. This is similar to the findings of Azam and Khan (2011) who found out that the impact of workers' remittances on economic growth is positive and statistically significant.

CONCLUSION AND RECOMMENDATION

The Nigerian economy as a whole needs special attention in view of the critical and dire state of the various sectors of the economy. As the study observes, creating a stable macro economy is a precondition to mobilising the needed financial resources for which diaspora remittance forms a critical part. The positive impact of macroeconomic factors in the attractions of diaspora remittance cannot be overemphasized in view of the critical role by diaspora remittance as a major source of foreign exchange in Nigeria.

(i) Based on the findings of the study, the following recommendations are therefore made;

(ii) The Central Banks of Nigeria (CBN) as the major regulatory authority of the Deposit Money Banks (DMBs) in Nigeria should formulate policies that would encourage the inflow of diaspora remittance through the banking system.

(iii) The monetary authority should intensify its effort at reducing inflation rate to a single digit in Nigeria. This will go a long way in attracting investors in the economy.

(iv) There should be regular intervention of the Central Bank of Nigeria in the management of the Foreign exchange market. This will go a long way in achieving exchange rate stability in the economy.

(v) The Federal government of Nigeria through the Ministry of Finance should complement the effort of the monetary authority by formulating fiscal policy that will ensure that diaspora remittances are well utilized to boost employment generation in the economy.

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