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Foreign Capital Inflows and Economic Development In Nigeria

By

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Abstract

This study investigated the impact of foreign capital inflows on economic development in Nigeria, covering 24 years between 1999 and 2022. The study employed data on foreign direct investment, foreign aid, remittance, external debt and human development index from the CBN Statistical Bulletin (2023), the World Bank Development Indicator (2022) edition and Human Development Index Report (2023). From the Ordinary Least Squares (OLS) estimation, the study observed that foreign aid and foreign direct investment have positive and significant impacts on the human development index in Nigeria at a 5% significance level. However, further finding reveals that remittance and external debt have positive but insignificant impacts on the human development index. The study therefore concluded that foreign direct investment and foreign aid have significantly contributed to economic development in Nigeria. The study suggests that the government should explore alternative sources of foreign investment that are more likely to produce positive effect on the country economy. Also, the government should promote national investment strategies to showcase investment opportunities through digital platforms, investment conferences and summits, as this can help to promote investment potentials.

Keywords: Foreign Direct Investment, Foreign Capital Inflow, Human Development Index, Economic Development

Introduction

In today's interconnected global economy, the significance of foreign capital inflows cannot be overemphasized, as they are essential to a country's advancement. According to Ifionu, Kerema

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(2017) and Chen (2024), foreign capital inflows is defined as the transfer of funds for trading, investing, or commercial purposes. This may consist of investments such as loans, bonds, stocks, direct investment, and other forms of capital that cross national borders. The authors further define foreign capital inflows as a broad concept that encompasses various types of financial resources transferred between countries. For low-income nations, foreign capital inflows, also known as international inflows, are vital for accelerating the rate of investment and accumulation of capital necessary to promote economic development. Alongside international trade, FDI serves as a significant avenue for transferring foreign technology across nations (Zamani & Tayebi, 2022). By providing a source of financing for investments in physical and human capital, these inflows have the potential to catalyze the economic development of low-income countries. However, many of these countries are stuck in a poverty cycle, with extremely low incomes causing insufficient savings and low levels of investment. The cycle of poverty not only limits economic development, but it also undermines the government's ability to raise tax revenue. With low incomes, the government has a limited capacity to collect taxes, which further limits its ability to fund important public services like education, healthcare, and infrastructure.

By incorporating multiple dimensions of human development, the HDI provides a more holistic view of economic progress. This measure was introduced by Ul Haq (2003). Wang, Shah, Ali, Abbas, and Ullah's (2019) projects that a rising index will cause economic wealth to fall, which will lower people's standards of living, and vice versa. However, there is a great deal of debate among scholars regarding the actual effects of international capital inflows on economic development, both in developed and developing countries. While some argue that foreign capital inflows can be beneficial by stimulating investment and increasing productivity, others argue that such inflows can have negative effects, such as currency appreciation and over-reliance on volatile and uncertain sources of financing. Reviewing the past literature, previous research has not established a clear link between foreign capital inflows and economic development, and there is conflicting and inconclusive information regarding this relationship. Given this, the present study builds upon previous research by using more recent empirical evidence to investigate the impacts of foreign capital inflows on Nigeria's economic development between 1999 and 2022. The study is organized as follows. The first section introduces the research and its context. The second section contains a review of related literature in the field, followed by the methodological approach adopted by the study in section three. In section four, observed results were presented using a Table, while the research ends with a conclusion and recommendations in section five.

Literature Review

The concept of capital flows, including capital flight, has been a topic of discussion and debate among scholars, according to Igwemma, Egbulonu, and Nneji (2018). The term "capital" can be defined in various ways, ranging from a narrow definition that refers to assets used in the production of goods and services, to a broader definition that encompasses anything of value or benefit to its owner. In the context of international finance, the movement of capital across borders is referred to as foreign capital flows. Capital outflows are capital exported to another nation, whereas capital inflows are monies received from another nation, usually in the form of aid or investment. Foreign capital inflows' main goal is to promote economic development and growth

via supplying additional funding for enterprises and infrastructure initiatives, therefore improving modernity and economic growth. These inflows may be foreign or in other forms, loans and grants of various kinds, portfolio investments, and direct investment (FDI). FDI has emerged as the most important source of external resource flows to developing nations over time, contributing significantly to capital formation in these economies. It is commonly known that foreign direct investment (FDI) is important for boosting growth in underdeveloped nations. An estimated \$616 billion in foreign direct investment (FDI) inflows to developing nations occurred in 2021, making up over 75% of all private capital flows worldwide (UNCTAD, 2021).

This study is underpinned by dual-gap theory. Many countries have found it difficult to close the gap between investment and savings, which has resulted in a dependence on borrowing from outside sources to close the gap (Omoruyi, 2015). According to Chenery (2018), this disparity emphasizes the purpose of external debt, which is to make up for a country's lack of investment and savings. Economic growth requires increases in investment and savings, as stated by Hunt (2017). According to Oloyede (2012), the dual-gap approach offers a paradigm that highlights the value of investment in national development and the fact that domestic savings are frequently insufficient to propel progress. This hypothesis, which has its roots in national income accounting identities, contends that the surplus of imports over exports (foreign exchange gap) is equal to the excess investment expenditure (investment-savings gap). Essentially, the dual-gap hypothesis emphasizes how important savings and investment are to attaining economic growth and development, but it also draws attention to the difficulties that many countries encounter in closing this gap. Empirically, Chude (2023) used secondary data from the Central Bank of Nigeria's Statistical Bulletin and Ordinary Least Square (OLS) analysis to examine how foreign capital inflows affected Nigeria's economic growth between 1981 and 2021. The study looked at how foreign aid, remittances from overseas labor, and foreign direct investment affected real gross domestic product. The findings demonstrated that while worker remittances have a negative but statistically negligible effect on economic growth, foreign aid and foreign direct investment have a positive and statistically significant impact. The study came to the conclusion that foreign capital inflows significantly and favorably affect Nigeria's economic growth, underscoring the significance of foreign investment and aid in fostering economic progress.

Muhammed and Afroz (2023) studied how international commerce and foreign capital inflows affected Nigeria's economic expansion. The study used secondary data and a dynamic autoregressive distributed lag methodology for data analysis. Real gross domestic product serves as the study's dependent variable, and domestic investment and foreign capital inflows serve as its independent variables. Eighteen observations were found for each variable, according to the results. The study came to the conclusion that general government spending, local investment, and foreign capital inflows all consistently influence Nigeria's economic growth. Yusuf (2023) used a quantitative methodology and the autoregressive distributed lag method to investigate investment indicators and economic growth in Nigeria. Gross domestic product is the study's dependent variable, and gross fixed capital formation, foreign direct investment, and government capital expenditure are its independent factors. The results demonstrate a strong correlation between growth and the private credit sector, economic liberalization, and portfolio investment. The study concludes that Nigerians have a huge disparity between their savings and investments because of their low levels of domestic savings and income. Nabila, Hamza, Mosab, Basem, and Asma (2023) looked into how political economy and foreign capital inflows affect economic growth. The

research made use of quarterly data from 2000 to 2020. The gross domestic product is the dependent variable, whereas foreign direct investment and the repayment of external debt are the independent variables. The results showed that high levels of government spending are encouraged by electoral pressure to attract voters and improve the likelihood of winning the next election. The study found that while election time hinders growth in low growth regimes, it has a favorable effect on growth in high growth regimes.

Olaleye (2022) used foreign direct investment, external debt, and foreign portfolio investment as explanatory variables to examine the impact of foreign capital inflows on Nigeria's unemployment rate between 1990 and 2021. According to the study, there is a significant inverse link between the unemployment rate and foreign portfolio investment, meaning that as foreign portfolio investment rises, unemployment falls. On the other hand, the analysis discovered a positive correlation between the unemployment rate, external debt, and foreign direct investment, indicating that rising levels of these factors cause rising jobless rates. According to the study's findings, external debt and foreign direct investment can be very important for Nigeria's economic development and joblessness reduction. Ireh and Ajayi (2022) looked into how foreign direct investment affected Nigeria's economic expansion. The Philip Person Test, Autoregressive Lag Test, and Augmented Dickey Fuller are the methods of analysis used in this work. Gross domestic product was used as the study's dependent variable, while real interest rates, trade openness, foreign direct investment, and exchange rates were used as independent factors. The findings showed that while interest rates and trade openness had negligible short- and long-term effects on economic growth, foreign direct investment and the real exchange rate had large positive short- and long-term effects on GDP. The analysis concluded that foreign direct investment and GDP were causally related in both directions.

Methodology

A quantitative method called ex-post facto research design is used in this study to look into the causal linkages between variables. With the help of this design, a study can test hypotheses regarding the influence of the independent variable on the dependent variable and investigate the effect of an independent variable on a dependent variable without actively changing the independent variable. All Nigerian economic sectors make up the study's population. Determining a sample size is not relevant because this study uses secondary data from the Human Development Index Reports (2023), CBN Statistical Bulletin (2022), and World Bank Indicators (2022). The data is provided in aggregate form, encompassing all Nigerians across all economic sectors. Furthermore, The study looks at how four independent variables—remittances (REM), foreign debt (FRD), foreign aid (FRA), and foreign direct investment (FDI)—relate to the dependent variable, the human development index (HDI). Following Wooldridge (2020), the process of model specification involves developing a statistical model that accurately captures the relationships between these variables. The specified model is:

$$HDI = f(FDI, FRA, EXD, REM)$$

The econometric form of the model is:

$$HDI = \alpha + \beta_{1t} FDI + \beta_{2t} FRA + \beta_{3t} REM + \beta_{4t} EXD + e \dots (1)$$

$$HDI_t = \alpha + FDI_t + FRA_t + REM_t + EXD_t + e \dots (2)$$

Where:

HDI = Human Development Index; FDI = Foreign Direct Investment; FRA = Foreign Aid

REM = Remittances; FRD = Foreign Debt; α = Constant term; β_1 - β_4 = Coefficient of independent variables and e = Error term

Taking the logarithm of the right side of equation 2 in equation 3 as:

$$HDI_t = \alpha + LNFDI_t + LNFRA_t + LNREM_t + LNEXD_t + e \dots (3)$$

The Ordinary Least Squares (OLS) method is used to analyze the data in this study. The OLS method is chosen due to its suitability for continuous data and normal distribution. This method enables the determination of statistical significance among variables. The analysis is conducted using the Econometric View statistical software (version 9), which serves as the primary tool for data analysis in this research study. The a priori expectation for this investigation can be expressed mathematically as follows: $\beta_1 > 0$; $\beta_2 > 0$; $\beta_3 > 0$; and $\beta_4 > 0$

Presentation and Interpretation of Results

Table 1: Correlation Analysis

DV: HDI

	HDI	REM	FRA	FDI	EXD
HDI	1.000000				
REM	-0.431945	1.000000			
FRA	-0.139074	0.070515	1.000000		
FDI	-0.570995	0.369348	-0.165379	1.000000	
EXD	0.176516	-0.017289	0.527733	-0.568271	1.000000

Source: Author's Computation from E-views 9 (2024).

The correlation results between the data series are shown in Table 1. According to the results, there is a moderately negative association between the human development index, remittances, and foreign direct investment (-0.431945 and -0.570995, respectively). However, there is a weak and negative association (-0.139074) between foreign aid and the human development index. The results also demonstrated a strong and positive association, at 0.176516 for the research period, between the foreign debt and the human development index.

Table 2: ADF Unit Root Test

DV: HDI

Variables	HDI	REM	FRA	FDI	EXD
Level of stationarity	I (0)	I (1)	I (1)	I (1)	I (1)

Source: Author's Computation from E-views 9 (2024).

The unit root test results for the factors taken into consideration in the study are shown in Table 2. Foreign aid, foreign direct investment, and the human development index are examples of data series that are stationary at the first difference with constant and trend at the 1% significance level. The vast majority of the variables are fixed. The dependent variable in particular. Using the

Augmented Dickey Fuller with constant and trend, all series are taken to be stationary. Regression analysis's applicability is thus confirmed by the stationarity test results.

Table 3: Regression Analysis
DV: HDI

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG(REM)	0.011632	0.013491	0.862172	0.3993
LOG(FRA)	-0.030209	0.011526	-2.620912	0.0168
LOG(FDI)	-0.038634	0.018114	-2.132791	0.0462
LOG(EXD)	-0.000468	0.012851	-0.036396	0.9713
C	1.747017	0.419456	4.164964	0.0005
R-squared	0.542909	Durbin-Watson stat		1.701454
Adjusted R-squared	0.446679			
F-statistic	5.641794			
Prob(F-statistic)	0.003626			

Source: Author's Computation from E-views 9 (2024)

The regression result showed an R-squared (R²) value of 0.542909 (54%), as shown in Table 3. The remaining 46% are variables or factors that could affect the dependent variable but were left out of the model. The 54% R² could be further explained by the fact that the predictors can only account for 54% of the variation in the human development index after controlling for the degree of freedom. With p values of 0.0168 and 0.0462, respectively, the T-test results indicate that FRA and FDI are statistically significant, whereas REM and EXD are statistically insignificant. The constant value of 0.0005 indicates that the human development index will rise by 0.0005 when the independent variable remains constant. The human development index will rise for each unit increase of remittances, according to the REM coefficient of 0.011632 and p value of 0.3993. Foreign aid's coefficient of -0.030209 and p value of 0.0168 indicate that the human development index will fall for every unit increase in foreign help. Additionally, the foreign direct investment coefficient, which stands at -0.038634 with a significant value of 0.0462, shows that the human development index will decline for every unit increase in foreign direct investment. The combined significance of the variable used is the T-test. For an independent variable to explain a dependent variable, it must be jointly significant. The F-test can be used to verify this. We can reject the null hypothesis and accept the alternative hypothesis if the F statistic's p-value is less than 5% (0.05). We can do the opposite if not. The p-value for the finding is 0.003626, which is below the significance level of 5%. Therefore, the study denies the null hypothesis (H₀). To determine whether auto serial correlation is present or not, the Durbin-Watson test is utilized. Since the Durbin-Watson projected value of 1.701454 is inside the significant level, it is acceptable. As a result, the model lacks a first order position.

Table 4: Post Estimation Techniques

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	2.511433	Prob. F (2,17)	0.1108
Obs*R-squared	5.473801	Prob. Chi-Square (2)	0.0648

Source: Author's Computation from E-views output (2024)

The results of the post estimation technique were presented in Table 4. These tests include the Breusch-Godfrey Serial Correlation LM Test. As stated by the results, there is an absence of autocorrelation among the variables since the p-value of 0.0648 exceeds 0.05 (5% significance value).

Discussion of Findings

This study used the ordinary least squares regression method to examine how foreign capital inflows affected Nigeria's economic performance over 24 years (1999–2022). With a p-value of less than 5%, the statistical analysis of this study shows that foreign aid and foreign direct investment significantly reduce Nigeria's human development index. Because their p-values are higher than 5%, the analysis also showed that remittances have a positive but negligible effect on the human development index. Because the p-value is below the significance level, indicating that the model is significant, the model performs rather well overall. The study's findings are consistent with the a priori expectations. The study's results are also in line with earlier research by Chude (2023), Olaleye (2022), Oloke, Faseesin, Adebayo, Awofala, and Aderemi (2022), Oyegoke and Aras (2021), Godly (2014), Kolade (2019), and Fedrick (2019), which found that foreign aid and foreign direct investment significantly and favorably affect economic development. The study, however, differs from that of Ugwuegbe, Okore, and John (2013), who discovered that foreign direct investment (FDI) had a marginally beneficial effect on Nigeria's economy. Changes in economic situations, policies, variables, and theoretical viewpoints could all be to blame for this. The Dual-Gap hypothesis, which emphasizes the crucial role that investment and savings play in attaining economic growth and development, is used to support the conclusion.

Conclusion and Recommendations

Based on the results, the study concludes that while external debt and remittances had little impact on Nigeria's economic development, foreign direct investment and foreign aid had a major negative impact. The study recommends that government should explore alternative sources of foreign investment that are more likely to have a positive impact on the economy. The government should also establish zones with favourable business conditions, and offer tax breaks subsidies and other incentives to attract foreign direct investment to the sectors that are strategically important to the development of Nigeria's economy.

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