



ECONOMIC RISK FACTORS, FOREIGN DIRECT INVESTMENT AND GROWTH IN NIGERIA

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Abstract: The objectives of this study are to evaluate the effect of risk factors on FDI inflows to Nigeria as well as examine the relationship between the volume of FDI and the level of economic growth in Nigeria. The data employed were purely time series (secondary) data, covering 1990 to 2021. Using ADF unit root test, ARDL bounds test for cointegration, and FMOLS technique to establish the long run relationships between some risk factors and inflows of FDI into Nigeria, the results show that market size (LGDPC), political instability (LPS), inflation (LINF), and corruption (LCOR) have a positive and significant influence on FDI inflows into Nigeria's economy. Similarly, the coefficient values of foreign direct investment (LFDI), gross fixed capital formation (LGFCF), and government expenditure (LGOVT) were positive and statistically significant on economic growth in Nigeria, while balance of trade (LBOT) depicted a significant negative relationship with economic growth (LGDPC). The recommendations are that the federal government must fix the country's infrastructure gap to enable Nigeria to attract and maintain foreign investment. To ensure political stability in the country, the focus of the government in Nigeria should be on ensuring good governance. In addition, government expenditure must be made more efficient.

Keywords: risk factor, foreign direct investment, economic growth, cointegration, fully modified ordinary least squares.

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1. INTRODUCTION

The roles that foreign investment flows play in capital-deficient countries cannot be over-emphasised. These flows constitute important sources of external finance to such countries and are therefore regarded as being critical to their sustainable growth and development. They are also often cited as part of the criteria for assessing how globalised economies are. Despite the various socio-economic reforms introduced in Nigeria to boost FDI, successive governments have achieved little progress in attracting foreign direct investment, notwithstanding the prominence of globalisation. In recent times, the rate at which multinationals are divesting from Nigeria has become a worrisome issue for the country. As of 2013, Nigeria used to be the number one investment destination as foreigners from all over the world were willing to take advantage of the country's thriving business environment and huge population base, which was a major indicator of a good market base (Thisdaylive, 2022).

However, from 2014 to 2021, Nigeria experienced a drop in its FDI to less than one per cent due to its unfriendly investment climate amidst different series of economic recessions, which began majorly as a result of the fall in international oil prices in 2014. Thisdaylive (2022) also attributed the decline in foreign investment in Nigeria to the spate of insecurity in the country, and naira volatility, characterised by a wobbly foreign exchange market. In the same vein, analysts said the then political climate relating to the forthcoming presidential election had made many foreign investors withdraw investments in the short run due to political uncertainty (Thisdaylive, 2022).

A large number of empirical works have been carried out on FDI determinants in Nigeria (Odozi, 1995; Ekpo, 1997; Soumyananda, 2009; Offiong & Atsu, 2014; Ebiringa & Emeh, 2013; Akenbor & Tennyson, 2014; Kokoa et al., 2017; Danjuma, 2021); however, none of the studies have employed data to empirically determine the effects of these risk factors on FDI inflows. Due to the perceived importance of economic growth in Nigeria, there is a need for FDI to be studied, and extensive research work should be done on it to have a clear understanding of what its contribution to economic growth is, and to know whether the call for more FDI is truly justified. Given Nigeria's fragile economy, this has serious implications for policy directions.

Nevertheless, there have been some studies on foreign direct investment and economic growth in Nigeria with varying results and submissions: Ogiogio

(1995); Oseghale and Amonkhiehan (1987); Adelegan (2000); Akinlo (2004). Presently, three African countries, namely Egypt, Ghana and Congo, all of which have comparatively smaller economies, have a higher FDI inflow ranking than Nigeria (Ogunbiyi, 2022). The main objective of this study is to examine the relationship between foreign direct investment (FDI) and economic growth in Nigeria. The other objective is to examine the effect of risk factors on FDI inflows to Nigeria.

The rest of the paper is divided into 3 sections: Section 2 discusses methodology and sources of data as well as estimation techniques. Section 3 presents results and discussion, while Section 4 contains the conclusion and recommendation.

2. RESEARCH METHODOLOGY

2.1. Model Specification

In this study, two econometric models were formulated to achieve the objectives. Firstly, following Mugambi and Murunga (2017), the objective of investigating the effect of risk factors on FDI inflows was anchored on a basic traditional investment model. The general form of the traditional investment model is given by:

$$k = (y, r) \quad (1)$$

Where k is the preferred capital stock, y is the output, and r is the real cost of capital in a host country. The basic traditional investment model refers to the traditional determinants of investment for domestic investors (Udo & Obiora, 2006). As foreign investors make decisions on where to invest, other factors apart from the ones in the basic investment model become important. As such, some socio-political and economic risk variables were considered. They include corruption as well as macroeconomic risk variables like inflation and exchange rate instability, and economic instability (measured by interest rate). For simplicity and availability of data, the augmented model is specified as follows:

$$\begin{aligned} \text{LFDI}_t = & \tilde{\Omega}_0 + \tilde{\Omega}_1 \text{LGDP}_t + \tilde{\Omega}_2 \text{LPS}_t + \tilde{\Omega}_3 \text{LCOR}_t + \tilde{\Omega}_4 \text{LINF}_t \\ & + \tilde{\Omega}_5 \text{LEXR}_t + \tilde{\Omega}_6 \text{LINTREST}_t + \tilde{U}_t \end{aligned} \quad (2)$$

Where FDI is foreign direct investment; market size is measured by GDP (gross domestic p-product per capita or per capita income which shows

purchasing power), PS is political instability proxy by the index of political stability and absence of violence/terrorism which measures perceptions of the likelihood that the government will be destabilised or overthrown by unconstitutional or violent means, including politically-motivated violence and terrorism. COR is corruption proxy by the Corruption Perceptions Index, which is an indicator of perceptions of public sector corruption, i.e. administrative and political corruption; INF is inflation rate; EXR is foreign exchange rate; INTREST is interest rate; Where $\tilde{\Omega}_0, \tilde{\Omega}_1, \tilde{\Omega}_2, \tilde{\Omega}_3, \tilde{\Omega}_4, \tilde{\Omega}_5$ and $\tilde{\Omega}_6$ are coefficients or elasticities, which measure changes in the dependent variable due to changes in the explanatory variables, L represents the natural logarithm of variables (all the variables were transformed into their logs for easy interpretation as elasticities), t is time and \tilde{U} the disturbance term. A priori expectation is that $\tilde{\Omega}_1 > 0, \tilde{\Omega}_2 < 0, \tilde{\Omega}_3 < 0, \tilde{\Omega}_4 < 0, \tilde{\Omega}_5 < 0$ and $\tilde{\Omega}_6 < 0$.

To study the impact of FDI on economic growth in Nigeria, following Akanegbu and Chizea (2017), this study adopts a model based on a modified neoclassical production function where Foreign Direct Investment (FDI), labour, and capital are taken as inputs in the production function. The model is based on the assumption that FDI contributes to economic growth directly through new technologies, efficiency, and productivity (Lime, 2001). In the long run, FDI will affect growth through improvement in human capital formation, infrastructure, and institutions. Macroeconomic conditions that attract FDI will lead to increases in domestic investment and increase a country's capital stock. Thus, there will be productivity and output growth for countries such as Nigeria through technological progress from FDI. The model is thus presented as follows:

$$\begin{aligned} \text{LGDP}C_t = \tilde{\eta}_0 + \tilde{\eta}_1 \text{LFDI}_t + \tilde{\eta}_2 \text{LLAB}_t + \tilde{\eta}_3 \text{LGCFC}_t + \tilde{\eta}_4 \text{LGOVT}_t \\ + \tilde{\eta}_5 \text{LBOT}_t + \tilde{\omega}t \end{aligned} \quad (4)$$

Where GDP C is gross domestic product per capita (proxy for economic growth); FDI is foreign direct investment; LAB is labour proxy by labour force, total (million), GCFC is gross fixed capital formation proxy for capital; GOVT is government expenditure, BOT is balance of trade (the difference between the total export and total import. It is also known as net export). L represents the natural logarithm of variables, where the variables are as previously defined, t is time and $\tilde{\eta}_0, \tilde{\eta}_1, \tilde{\eta}_2, \tilde{\eta}_3, \tilde{\eta}_4, \tilde{\eta}_5$ are the estimated parameters. A priori expectation is that $\tilde{\eta}_0 > 0, \tilde{\eta}_1 > 0, \tilde{\eta}_2 > 0, \tilde{\eta}_3 > 0, \tilde{\eta}_4 > 0$ and $\tilde{\eta}_5 > 0$.

2.2. Estimation Techniques

The fully modified ordinary least squares (FMOLS) estimator was employed for estimation of the specified models. Chang and Philip's (1995) theory for time series regression with unknown mixture of $I(0)$ and $I(1)$ variables established that the method of FMOLS applies to models with some unit roots and unknown cointegrating rank. This method is also applicable in cases of estimation of models involving small datasets, particularly where it is quarterly time series data for robust parameter estimates.

It is required that the variables of a model are cointegrated for the FMOLS technique to be applied. This is to say that a long-run relationship between the variables of the model must be established to proceed with the model estimation. Before performing the cointegration test, the stationarity (or unit root) test was conducted to ascertain whether the variables have unit roots. The Augmented Dickey-Fuller (ADF) unit root test was performed. Following the unit root test conducted with the aid of ADF, it appears that there is a mixed order of integration, that is, $I(0)$ and $I(1)$ of the variables for this study. Thus, this study used autoregressive distributed lag (ARDL) bounds test to check the long-run relationships among the variables. Thereafter, the FMOLS estimator was deployed for estimation of the specified models.

2.3. Data Source

The data for the study are purely secondary and are sourced from texts, journals, publications of organisations and periodicals. The data used in this study are annual time-series data on the variables covering the period 1990-2021. The major sources of these data are the publications of Central Bank of Nigeria annual statistical Bulletin, World Development Indicators (WDI) of the World Bank, Journals, and the Internet (mostly from the online database of Indexmundi).

3. EMPIRICAL RESULTS

3.1. Unit Root Test

Time series data are often assumed to be non-stationary, and thus, it is necessary to perform a unit root test to ensure that the data is stationary. The test was employed to avoid the problem of spurious regression. Therefore, the

Augmented Dickey-Fuller (ADF) unit root test was used to determine the stationarity of the data to complement each other. The decision rule based on the ADF test is that their statistics must be greater than Mackinnon's critical value of 10%, 5%, or 1% and at the absolute term, i.e., ignoring the negativity of both the ADF and Mackinnon critical value, before the variable can be adjudged to be stationary. Otherwise, we accept the null hypothesis (H_0), i.e., data is non-stationary, and reject the alternative hypothesis (H_1), i.e., data is stationary.

The results from ADF unit root tests as reported in Table 1 show that variables: LBOT, LCOR, LINF, LLAB, LFDI, and LPS are all I(1) variables, whereas LEXR, LGCFC, LGDPC, LGOVT, and LINTREST are I(0) variables. Although unit root test is not a customary practice when using the ARDL bound test for cointegration analysis, the need to carry out this test is to ensure that none of the chosen variables is I(2) because the ARDL bound test makes no meaning in the face of I(2) variables. The outcome of this analysis implies that we can proceed to the ARDL bound test as the chosen variables are a mixture of I(0) and I(1).

Table 1: ADF Unit Root Test Results

Variable	ADF test				Order of integration
	Levels		1 st difference		
	Intercept	Trend & Intercept	Intercept	Trend & Intercept	
LBOT	-1.462351	-2.834956	-3.189018**	-3.241297	I(1)
LCOR	-2.173567	-3.153607	-5.171673*	-5.354084*	I(1)
LEXR	-2.516630	-7.867314*	-19.12439*	-18.89527*	I(0)
LGCFC	0.056568	-3.609067**	-4.082243**	-4.014180*	I(0)
LGDPC	-0.593389	-1.417613	-4.326586*	-4.255939**	I(1)
LGOVT	-3.474592**	-1.712451	-4.044785*	-5.590068*	I(0)
LINF	-2.428052	-2.836371	-4.647290*	-4.543555*	I(1)
LINTREST	-6.447283*	-6.351307*	-6.447283*	-6.547237*	I(0)
LLAB	-1.549532	-2.108831	-3.673196*	-2.662196	I(1)
LPS	-1.452502	-1.258402	-5.080965*	-3.368530**	I(1)
LFDI	-1.518261	-2.076929	-7.189654 *	-7.220305 *	I(1)

Note: *, ** and *** imply statistical significance at 1%, 5% and 10% levels, respectively.

Source: Author's computation using Eviews 10

3.2. ARDL Bound Test

The autoregressive distributed lag (ARDL) bounds testing approach to co-integration was applied. The use of this technique has numerous advantages over other techniques of estimation, like Engle and Granger (1987) and Johansen (1991). One of the major advantages of this technique is that it can be applied irrespective of the order of co-integration of the independent variables (either $I(1)$ or $I(0)$ or both). More so, ARDL model is statistically a significant tool of econometric analysis and has advantages over other techniques of analysis because it can accommodate small sample sizes. The rule of ARDL bounds testing is that if the computed F-statistic falls below the lower bound, we would conclude that the variables are $I(0)$, so no cointegration is possible, by definition. If the F-statistic exceeds the upper bound, we conclude that we have cointegration. Finally, if the F-statistic falls between the bounds, the test is inconclusive.

ARDL long run form and bounds test were estimated, and the result is shown in Tables 4 and 5. The first model is specified in its original form where FDI is the dependent variable and GDPC, PS, LCOR, LINE, LEXR, and LINTREST are independent variables. Maximum lag length was 3 for the dependent variable and independent variables. In addition, the specification was with restricted constants, and the model selection criterion was Akaike information criterion. The result in Table 2 revealed that the null hypothesis of no long-run relationship exists is rejected since the F-statistic value 18.01750 is greater than the upper bound $I(1)$, which has a value of 3.99 at 1% level of significance.

Table 2: F-Bounds Test

Null Hypothesis: No level relationship

Test Statistic	Value	Signif.	$I(0)$	$I(1)$
F-statistic	18.01750	10%	1.99	2.94
K	6	5%	2.27	3.28
		2.5%	2.55	3.61
		1%	2.88	3.99

Source: Author's computation using Eviews 10

Similarly, for the second model, when LGDPC is the dependent variable and LFDI, LLAB, LGCFC, LGOVT, and LBOT are independent variables, the

maximum lag length was set at 3 for the dependent variable and independent variables. In addition, the specification was with restricted constants, and the model selection criterion was Akaike information criterion. Results from Table 3 revealed that the null hypothesis of no long-run relationship exists is rejected since the F-statistic value 6.757771 is greater than the upper bound $I(1)$, which has a value of 4.15 at 1% level of significance.

Table 3: F-Bounds Test

Null Hypothesis: No level relationship

<i>Test Statistic</i>	<i>Value</i>	<i>Signif.</i>	<i>I(0)</i>	<i>I(1)</i>
F-statistic	6.757771	10%	2.08	3
K	5	5%	2.39	3.38
		2.5%	2.7	3.73
		1%	3.06	4.15

Source: Author's computation using Eviews 10

4. REGRESSION RESULTS

4.1. FMOLS Estimates for Model 1

To evaluate the effect of risk factors on FDI inflows to Nigeria, the FMOLS estimation was conducted with constant and linear trend specification, and the results obtained from the regression, as depicted in Table 4, show that the overall performance of the model is satisfactory with most of the coefficients correctly signed and five of the explanatory variables statistically significant. The results show that market size (LGDPC) exerts a positive influence on FDI inflows in Nigeria's economy in the long run. The market size of the recipient country is crucial, as the target economies can provide greater economies of scale and spillover effects. According to the results, a 1% increase in market size as measured by GDP per capita results in a 1.340096% increase in GDPFDI inflows. The variable also proved significant at 1% level of significance. This finding is consistent with Obadan (1982), Chakrabarti (2001), Masayuki and Ivohasina (2005), and Wafure and Abu (2010).

Furthermore, political instability (LPS) has a positive relationship with FDI inflows (LFDI). Specifically, the result reveals that a 1% increase in political instability induces about 1.591279% rise in FDI inflow in Nigeria. This result is statistically significant at 1% significance level. The positive impact

of political instability on FDI, as explained by Wafure and Abu (2010), reflects the situation in Nigeria's oil sector that has continued to attract more foreign investment regardless of the political situation in the country.

Furthermore, the results reveal that exchange rate (LEXR) is insignificant in explaining changes in FDI inflows into Nigeria in the period covered in this study. A 1% depreciation in exchange rate causes FDI inflows to increase by approximately 0.143688%. Although the overall effect of exchange rate on FDI inflows may not be significant. This finding is not in line with Masayuki and Ivohasina (2005) and Wafure and Abu (2010) that exchange rate depreciation is significant and may encourage the inflow of foreign direct investment to the host country.

Also, the result shows that inflation (LINF) positively impacts FDI inflow in Nigeria and is statistically significant at the 5% level. For every 1% increase in inflation (LINF), foreign direct investment increases by 0.455620%. This result shows that the rate of inflation experienced in Nigeria does not affect the inflows of FDI into the country. According to Adeoye (2022), Nigeria has been experiencing double-digit inflation since March 2016, but the situation has been exacerbated by a chronic shortage of dollars and global pressure on prices because of the war in Ukraine. Nevertheless, according to Caon (2022), the relationship between inflation and foreign direct investment (FDI), however, is not straightforward. While high levels of inflation could be off-putting to foreign investors, as they reduce the value of assets pegged to the local currency and lead to currency depreciation relative to foreign currency, moderate levels of inflation benefit foreign direct investors by helping to promote domestic growth, reducing the value of debts to suppliers, and, via currency depreciation, increasing the competitiveness of exports.

The effect of corruption (LCOR) is positive at 5% significance level, indicating that the findings of this study are consistent with the previous work of Moustafa (2021), thereby lending support to Zangina and Hassan (2020). The report noted that corruption is a pressing issue in Nigeria, which affects public finances, business investment as well and standard of living. According to PWC (2017), corruption in Nigeria could cost up to 37% of Gross Domestic Product (GDP) by 2030 if it's not dealt with immediately. This cost is equated to around \$1,000 per person in 2014 and nearly \$2,000 per person by 2030. Institutionally, the finding from this study is counter-intuitive and challenges

the mainstream policy advice that weak governance and, hence, corruption put FDI at risk.

Finally, interest rate (LINTREST) is negative and insignificant on FDI inflow into Nigeria, as the result showed. This result aligns with Bett (2017), who found that interest rate is not a significant determinant of FDI inflows in Kenya. Similar is the case of transition economies in Central Asia, Acharya and Nuriev (2016). Nigeria's Monetary Policy Rate (MPR) at 16.5%, which is the benchmark interest rate of the country, is the highest among its African peers such as South Africa, Kenya, Morocco, and Egypt at 7%, 9.6%, 2%, and 13.75%, respectively. Nigeria's monetary policy committee (MPC) has been hiking the country's interest rate to address the accelerating inflation rate (Olatunji, 2022).

The adjusted R-squared of 0.725671 as depicted in Table 4 shows that about 72.57% of the total variation in FDI inflow in Nigeria is accounted for by the factors adopted in the study, leaving the remaining 27.43% for other factors not considered in the study.

Table 4: FMOLS Estimates for Model 1

<i>Variable</i>	<i>Coefficient</i>	<i>Std. Error</i>	<i>t-Statistic</i>	<i>Prob.</i>
LGDP	1.340096	0.261534	5.123980	0.0000*
LPS	1.591279	0.343107	4.637856	0.0001*
LCOR	0.886986	0.347960	2.549100	0.0179**
LINF	0.455620	0.162303	2.807221	0.0100**
LEXR	0.143688	0.136812	1.050256	0.3045
LINTREST	-0.073250	0.081020	-0.904097	0.3753
C	9.410993	2.015197	4.670012	0.0001*
@TREND	-0.138190	0.020094	-6.877363	0.0000*
R-squared	0.789681	Mean dependent var		21.44488
Adjusted R-squared	0.725671	S.D. dependent var		0.982538
S.E. of regression	0.514618	Sum squared resid		6.091132
Long-run variance	0.112917			

Note: *, ** and *** imply statistical significance at 1%, 5% and 10% levels, respectively.

Source: Author's computation using Eviews 10

4.2. Diagnostic Analysis

To ensure robustness of the results, the model was subjected to some diagnostic tests. The correlogram Q-statistics were deployed to conduct the residual test

for serial correlation. From the Correlogram in Table 5, the Q-statistics are insignificant at all lags, as indicated by their probability values, suggesting no significant serial correlation in the model residuals. That is, there is no presence of serial correlation. To test whether the residuals of the model are normally distributed, we look at the Jarque-Bera normality test statistics (1.642621) in Figure 1, which indicate that the residuals of the model are normally distributed, as the p-value of 0.439855 is greater than the significance level of 5%, i.e., $0.439855 > 0.05$.

Table 5: Correlograms Q-Statistics

<i>Autocorrelation</i>	<i>Partial Correlation</i>		<i>AC</i>	<i>PAC</i>	<i>Q-Stat</i>	<i>Prob*</i>
. .	. * .	1	0.290	0.290	2.8740	0.321
. .	.* .	2	-0.057	-0.154	2.9876	0.225
. .	. .	3	-0.062	0.002	3.1292	0.372
. * .	. * .	4	0.154	0.185	4.0272	0.402
. ** .	. * .	5	0.220	0.119	5.9265	0.313
. .	.* .	6	-0.056	-0.160	6.0568	0.417
.* .	. .	7	-0.087	0.030	6.3779	0.496
.* .	.* .	8	-0.081	-0.088	6.6708	0.573
. .	.* .	9	-0.051	-0.091	6.7928	0.659
. .	. .	10	-0.053	-0.032	6.9276	0.732
.* .	. .	11	-0.076	-0.016	7.2224	0.781
. .	. .	12	-0.061	-0.037	7.4232	0.828
.* .	. .	13	-0.092	-0.049	7.9016	0.850
. .	. .	14	-0.062	-0.007	8.1335	0.882
. .	. .	15	-0.050	-0.038	8.2950	0.911
. .	. .	16	-0.055	-0.045	8.5032	0.932

Source: Author’s computation using Eviews 10

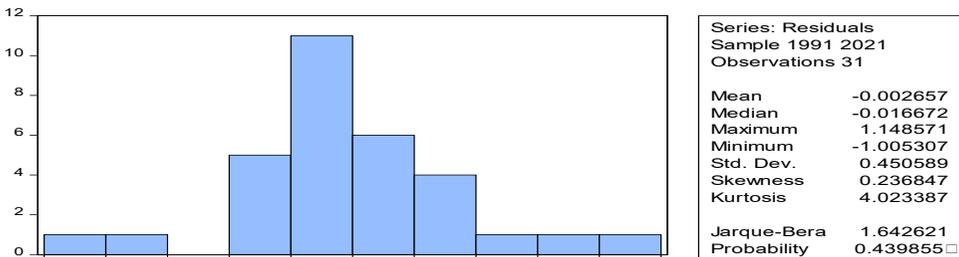


Figure 1: Normality Test

4.3. FMOLS Estimates for Model 2

To examine the relationship between foreign direct investment (FDI) and economic growth in Nigeria, the FMOLS estimation was conducted with constant (level) specification and the findings of the study revealed in Table 6 show that the coefficient value of foreign direct investment (LFDI) is 0.254220 and statistically significant at 1% significance level, implying that a unit increase in LFDI will increase economic growth (LGDP) by the value of 0.254220. This result conforms to Oseghale and Amonkhiehan's (1987) and John's (2016) study, which revealed foreign direct investment in Nigeria has a positive and significant effect on economic growth. Punchng.com (2022) reported that Nigeria requires massive infusions of FDI. The African Development Bank estimated in 2018 that it needs \$3 trillion or \$100 billion annually over the next three decades to close its infrastructure gap (Punchng.com, 2022). Unemployment rate is 33.3% and rising. In the youth segment, it is closer to 55% (Punchng.com, 2022). Unfortunately, data from the National Bureau of Statistics shows that only \$698.7 million came in as Foreign Direct Investment in 2021 – the lowest in 10 years – derailing hopes of a quick recovery for an economy desperately in need of investment to reduce poverty, create jobs and enhance dangerously low public revenues (Punchng.com, 2022).

As can be seen in Table 6, Labour (LLAB) was shown to have an inverse and insignificant relationship with economic growth. One plausible reason for this result could be because of the decrease in the labour force. For instance, according to the Labour Force Statistics report, the number of persons in Nigeria's labour force decreased by 11.3% when compared to the third quarter of 2018. In 2018, Nigeria's labour force accounted for 90.4 million people; a staggering 9.9 million exited, leaving only 80.5 million people. However, the number of persons within the working age increased by about 1.3%. Similarly, the total working age increased from 115.4 million people in 2018 to 116.9 million people in 2020. Yet, only 68.7% of Nigeria's population within working age is in the labour force (Adeyeye, 2020). The result of this study is contrary to Young (2018), whose results revealed that both the short-run and long-run growth impacts of labour force dynamics in Nigeria are significant and positive.

Furthermore, the result of the data analysis showed that gross fixed capital formation (LGCFC) has a positive impact on economic growth in Nigeria

within the period under review. This result is contrary to Onyinye et al. (2017), who found a positive, insignificant impact on real gross domestic product (RGDP) by GCFC in Nigeria in both the short and long run.

The coefficient associated with government expenditure (LGOVT) variable is positive and statistically significant. This result aligns with the outcome of the study by Ekpo, Daniel, and Okon (2022), which showed that total government expenditure had a positive impact on economic growth in Nigeria in line with Keynesian theory. Despite this result, the World Bank (2022) is still of the opinion that Nigeria needs to increase its spending from its current very low levels. Despite its vast development needs, Nigeria spends only \$220 per Nigerian per year, and at merely 12% of GDP, this is one of the lowest levels of spending in the world. Unfortunately, low public spending translates into poor development outcomes. The country is among the eight economies with the lowest human capital in the world, ranked 167th out of 174 countries on the World Bank's Human Capital Index.

Lastly, balance of trade (LBOT) and economic growth (LGDPC) have a significant negative relationship. A unit change in LBOT leads to 0.036985% decline in economic growth (LGDPC) in Nigeria. The reason for this outcome could be because the value of the country's imports has been growing at a speed not seen in the history of the country, while exports revolve around a constant figure. In economic theory, imports are considered leakages while exports are injections. The latter increases local capacity utilisation, including jobs, while the former fritters away or creates jobs for other economies (Iyatse, 2022).

The findings showed that the regression performed well in terms of goodness of fit and overall significance with an Adjusted R-squared of 0.948517, as shown in Table 6. The coefficient of determination (Adjusted R-squared) indicates that the variables considered in the model explain 94.85% of the variation in GDP (proxy for economic growth) in Nigeria.

4.4 Diagnostic Analysis

In order for the results to be reliable for policy purposes, the assumption of the model must be validated. This was done through diagnostic checks conducted in this work. The correlogram Q-statistics were deployed to conduct the residual test for serial correlation. From the Correlogram in Table 7, the Q-statistics are insignificant at all lags, as indicated by their probability values, suggesting no

Table 6: FMOLS Estimates for Model 2

<i>Variable</i>	<i>Coefficient</i>	<i>Std. Error</i>	<i>t-Statistic</i>	<i>Prob.</i>
LFDI	0.254220	0.044099	5.764753	0.0000*
LLAB	-0.260102	0.624356	-0.416592	0.6805
LGCFC	0.811985	0.167061	4.860403	0.0001*
LGOVT	0.103726	0.049281	2.104778	0.0455**
LBOT	-0.036985	0.020546	-1.800072	0.0839**
C	-14.27472	7.697219	-1.854530	0.0755**
R-squared	0.957098	Mean dependent var		7.034106
Adjusted R-squared	0.948517	S.D. dependent var		0.782289
S.E. of regression	0.177500	Sum squared resid		0.787654
Long-run variance	0.033240			

Note: *, ** and *** imply statistical significance at 1%, 5% and 10% levels, respectively.

Source: Author's computation using Eviews 10

significant serial correlation in the model residuals. That is, there is no presence of serial correlation. To test whether the residual of the model is normally distributed, the Jarque-Bera normality test statistics (0.471063) in Figure 2 indicates that the residual of the model is normally distributed since the p-value of 0.790151 is greater than the significance level of 5% i.e. $0.790151 > 0.05$.

Table 7: Correlograms Q-Statistics

<i>Autocorrelation</i>	<i>Partial Correlation</i>		<i>AC</i>	<i>PAC</i>	<i>Q-Stat</i>	<i>Prob*</i>
. **	. **	1	0.304	0.304	3.1477	0.076
. .	. *	2	-0.047	-0.154	3.2266	0.199
. .	. .	3	-0.040	0.026	3.2862	0.350
. *	. *	4	-0.073	-0.084	3.4904	0.479
. *	. .	5	-0.103	-0.063	3.9072	0.563
. .	. .	6	-0.014	0.031	3.9152	0.688
. **	. **	7	-0.276	-0.344	7.1689	0.412
. **	. *	8	-0.279	-0.098	10.635	0.223
. **	. **	9	-0.207	-0.208	12.632	0.180
. *	. .	10	-0.088	-0.054	13.007	0.223
. .	. *	11	-0.025	-0.096	13.037	0.291
. *	. .	12	0.094	-0.002	13.518	0.333
. .	. *	13	-0.058	-0.203	13.709	0.395
. .	. .	14	0.019	-0.035	13.731	0.470
. **	. *	15	0.226	0.101	17.005	0.319
. *	. .	16	0.209	-0.049	19.980	0.221

Source: Author's computation using Eviews 10

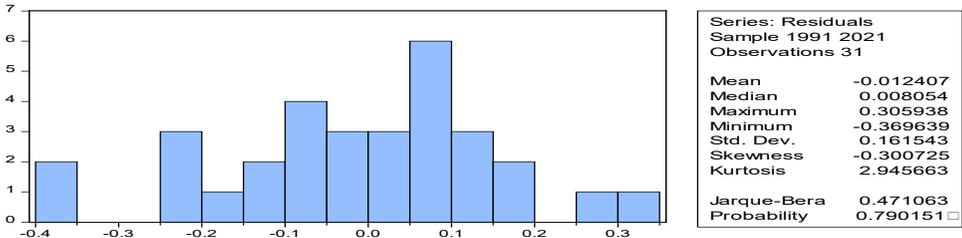


Figure 2: Normality Test

Source: Extracted from Eviews 10

5. SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1. Summary

Many experts have argued that foreign direct investment (FDI) is capable of accelerating the process of economic growth of a developing country. Also, many researchers have attempted to show that most developing countries, including Nigeria, have not appreciably exploited foreign direct investment (FDI) as a source of external financing of the economy due to a non-conducive investment climate and the attitude of the host nations.

The objectives of this study were to evaluate the effect of risk factors on FDI inflows to Nigeria as well as examine the relationship between the volume of FDI and the level of economic growth in Nigeria. The data employed is purely time series (secondary) data, covering 1990 to 2021. They were obtained from the World Development Indicators, theglobaleconomy.com, indexmundi.com, tradingeconomics.com, countryeconomy.com and the Statistical Bulletin of the Central Bank of Nigeria (CBN). The variables used are GDP per capita, Gross fixed capital formation, Labour force, total, Political stability index, Corruption Index, Inflation rate, Real effective exchange rate, Interest rate, Government Expenditure, and Trade Balance.

Using ADF unit root test, ARDL bounds test to cointegration and FMOLS technique to establish the long run relationships between some risk factors and inflows of FDI into Nigeria, the results show that market size (LGDPC) exerts positive influence on FDI inflows into Nigeria economy in the long-run, political instability (LPS) has a positive relationship with FDI inflows, exchange rate is insignificant in explaining changes in FDI in Nigeria, inflation positively impact on FDI inflow in Nigeria, the effect of corruption

is positive on FDI inflow into Nigeria, and finally, interest rate is negative and insignificant on FDI inflow into Nigeria.

Similarly, in examining the long run relationship between FDI and economic growth in Nigeria, FMOLS results showed that the coefficient value of foreign direct investment (LFDI) was positive and statistically significant on economic growth, labour was shown to have an inverse and insignificant relationship with economic growth, gross fixed capital formation (LGCFC) has a positive impact on economic growth, government expenditure (LGOVT) variable is positive and statistically significant, and balance of trade (LBOT) and economic growth (LGDPC) have a significant negative relationship.

5.2. Conclusion

In conclusion, the empirical results show a positive and significant relationship between FDI and economic growth in Nigeria and inflows of FDI to the country are significantly influenced by some socio-political and economic risk variables, including market size, political instability, inflation, and corruption. Nevertheless, an increase in foreign investment is an integral part of an open and effective international economic system that promotes the transfer of technology, creates and improves the purchasing power of Nigerians through job creation by foreigners, and consequently contributes to an overall boost in targeted industries and the economy as a whole. As such, the government of Nigeria has to halt the trend of the persistent fall in the flow of foreign direct investment to Nigeria by putting in place the long-awaited catalysts.

5.3. Recommendation

Based on the empirical evidence emanating from the study, the following are recommended:

Nigeria is the biggest market in Africa and also has with biggest challenges. The federal government needs to fix the country's infrastructure gap to enable Nigeria to attract and maintain foreign investment. As such, the government needs to improve on road construction and rehabilitation, while also improving electricity to ensure businesses optimise their potential while getting a return on investments. This will enhance economic growth over the long term.

Corruption is a serious obstacle to Nigeria's economic growth and is often cited by domestic and foreign investors as a significant barrier to doing business.

The fight against corruption by the Nigerian government through its various anti-graft agencies should be strengthened via technology that would enable the country to build electronic platforms to manage government finances and provide transparency. This will encourage the inflow of FDI over the long term.

To ensure political stability in the country, the focus of the government in Nigeria should be on ensuring good governance, since good governance will promote social justice, equality and even distribution of resources to the citizens. This will promote peace and stability in the country, and with a peaceful atmosphere prevailing in the country, there will not be any need for any citizen to be deceived or enticed into thuggery or any situation that would lead to political instability. In the same vein, the federal government must make every effort to resolve the security challenges in the country, such as violence and insecurity problems that arise as a result of political instability, so that Nigeria can go back to the position of being the preferred investment destination.

Government expenditure must be made more efficient, and the scope increased for the government to be able to spend more on delivery of quality public goods and services that will enhance economic growth in the long run.

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