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EFFECT OF FOREIGN DIRECT INVESTMENT ON EXTERNAL SECTOR IN NIGERIA: (1990 – 2022)

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ABSTRACT
The inflow of foreign direct investment to developing countries has continued to be on the increase but empirical findings suggest mixed evidences. This study investigates the effects of FDI on the external sector in Nigeria between 1990 and 2022. The research developed a structural macroeconometric model consisting of external sector block. The model deploys a structural equation to capture the required proxies. The research developed a three-stage least squares (3SLS) technique and macroeconometric model of simultaneous equations to capture the disaggregated impact of FDI on the external sector of the economy. The study found that FDI has positive effect on components of external sector like total imports, exports, imports of raw materials and exports of oil and gas. The finding shows that FDI has a significant impact on the components of the external sector but that the growth effects of FDI differ across variables. The study advocates trade openness and recommends that government should as a matter of urgency provide favourable environment for the inflow of FDI, especially the external sector of the economy which has exports of oil and gas as one of the variables. This is because the country possesses high comparative advantage in this sector, thereby making the economy to grow.

Keywords: Economic Growth, Export Sector, Foreign Direct Investment, Import, Export. JEL CODE: GH10: ML20: NL30

INTRODUCTION
The need to fast track economic growth has motivated the Nigerian policy makers to make deliberate efforts to attract foreign direct investment (FDI). This is

because the Nigerian economy is characterized by low savings and fiscal deficit (Saibu and Keke, 2014). The policy makers believe that external capital is required to finance current account deficits and to accelerate the pace of economic growth through larger production of goods and services. In this regard, foreign direct investment can be used to augment domestic savings in bringing the savings – investment gap. Foreign direct investment (FDI) is a measure of foreign ownership of productive assets, factories, mines and land. It is direct investment into production or business in a country by a company in another country or by expanding operations of an existing business in that country. Foreign direct investment is different from portfolio investment which is a passive investment in the securities of another country such as stocks and bonds. It can take on many forms and sometimes the term is used to refer to different kinds of investment activity. Commonly foreign direct investment includes "mergers and acquisitions", building new facilities, reinvesting profits earned from overseas operations and intra-company loans. It usually involves participation in management, joint-venture, transfer of technology and expertise. FDI is one example of international factor movements. It arises when a firm duplicates its home country-based activities at the same value chain stage in a host country through FDI. It also takes place when a firm through FDI moves upstream in different value chains. It becomes international trade as their product is usually aimed at host country (Solomon, 2018).

Nigeria is in the forefront of African nations who depend fully on foreign goods and services. According to information gathered from corporate Nigeria, the business, trade and investment guide 2019/2020 reveal that FDI in Nigeria has been growing over the years from USD 1.14 billion in 2019 and USD2 1 billion in 2020 to USD1 1 billion in 2019 making Nigeria the nineteenth greatest recipient of FDI in the world. The Central Bank of Nigeria (2019) showed that FDI in Nigeria averaged US$1184.0 Million per year in the period 2009 – 2018. Zenith Economic Quarterly Report (2019) recorded Nigeria to have US$ 2040 Million FDI in flow US$172 Million inflow as at 2018. In 2020, FDI inflow increased to US$3403 Million and outflow US$2000 Million. Most of these FDI came from United States of America, Chevron, Texaco and United Kingdom, other major stakeholders includes China, Brazil, Italy, France and South Africa. The Nigerian government adopts several policies to attract FDI in this globalization era. Especially, the government implemented IMF monitored sector. The nation's economic policies that helped in attracting the foreign investment and foreign entrepreneurs to invest their resources in Nigeria includes tariff concession on

the imported goods, especially on imported raw and input material for industrial use, policies on reduction of corporate tax, tax relief for research and development and policies on joint venture business.

Through the market size of African countries keep growing in terms of purchasing power in the region with its vast population, political instability, internal conflict, poor governance, insecurity of life and property and corrupt practices still pose significant problems to many countries in Africa. Nigeria's inability to attract the desired level of FDI is as a result of political, economic and social instability evidenced in pre and post election crises as well as social unrest in different parts of the country. Odiaka (2018) observed that the power of distribution to the industrial sector in Nigeria remain abysmally irregular. Okafor (2019) observed that the country consistently suffers from energy shortage, a major impediment to industrial, technological growth of the external sector of the economy. In Nigeria it is one of the many unresolved problems (Ayobolu, 2016), that have cortically hobbled and skewed development.

The main objective of this study is to assess the effects of FDI on the external sector of the Nigerian economy. The specific objectives of the study are to examine: the trend and structure of FDI on the external sector of the economy in Nigeria over the period of study analysis of external sector of the Nigerian economy is measured by the overall balance of payments revealed instability since 1960 due to persistent high demand for foreign goods and services in the face of dwindling foreign exchange earnings, structurally, the sector which had been dominated largely by crude oil export remain unaltered for over three decades, the sector was dominated largely with export of crude oil, for instance, crude oil exports accounted for 93.8, 95.8 and 96.6 percent of the total exports in 1999, 2009, and 2019 respectively (CBN, 2021) for the same periods, the volume of imports has been consistently on the increase, dependence on oil export, exposed Nigerian economy to the vagaries of the international crude oil market.

Nigeria's external sector reflects the economic transactions between the residents of Nigeria and the rest of the world, the sector can be in equilibrium or disequilibrium (Surplus or Deficit) despite the strategic role of the external sector on the overall performance of the Nigerian economy, (Kinto and Yinusa, 2017). The desire to have a better understanding of the workings of the external actor and its impact on the Nigerian economy motivates this study.

REVIEW OF RELATED LITERATURE

Conceptual Review

Foreign direct investments consists of external resources, including technology, management and marketing expertise and capital. All these generate a considerable impact on host nation production capabilities. Kumar (2018) described FDI in several ways, first and most likely it may involve parent enterprise injecting equity capital by purchasing shares in foreign affiliates. According to World Trade Organization News (WTON, 2019), foreign direct investment occurs when an investor based in one country, home country, acquire an asset in another country the host country with the intent to manage the asset. Foreign direct investment is described as investment made to acquire a lasting interest (usually at voting stock) and acquiring at least 10% of equity share in an enterprise operating in a country other the home country of investors (Mwilima, 2015). According to (Ayanwale, 2019), that ownership of at least 10% of the ordinary shares or voting stock is the criterion for the existence of a direct investment relationship. The United Nations defined FDI as investment in enterprise located in one country but effectively controlled by residents of another country. This definition not only considers foreign direct investment from an investment point of view, but also defines the status of corporate control. Economic growth is the increase in the amount of goods and services produced by an economy over time. It is conventionally measured as the parent rate of increase in real gross domestic product, or real GDP. Growth is usually calculated in real terms, that is, inflation adjusted terms, in order to net out the effect of inflation on the price of the goods and services produce. FDI comprises not only merger and acquisition and new investment, but also reinvested earnings and loans and similar capital transfer between parent companies and their affiliates. FDI flows have grown in importance relatives to other firms of international capital flows, and the resulting production has increased as a share of world output, but it was still only about 8% at the end of the 20th century. Lipsey and Chrystal (2017) noted that FDI is always undertaken by domestic firms which have accumulated some benefits in the local market such benefits includes patents and know-how that bestowed on them when they enter into foreign markets. Foreign direct investment generates investments that may not be possible with the local resources only. Working with large firms linked to the global markets, FDI promotes workers and management training; provide advanced technology that is not easily transferable outside the firm and already in use by foreign firms. Finally, it generates higher paying jobs and links the recipient economy into the world economy in a way that would be difficult to achieve by new firms of a local origin. (Lipsey & Chrystal, 2017).

The interest in analyzing the effect of FDI on the external sector leading to economic growth is growing in the literature. Some of such recent studies are reviewed here. While examining the implication of FDI on the external sector growth, Bailliu (2019) used panel data from 40 developing countries from 1975 – 1995. He specified a model which accounted for potential endogeneity of the explanatory variables and the result shows that FDI inflows foster higher economic growth, above and beyond any effects on the investment rate, but only for economies where the banking sector has reached a certain level of development. Also, Caudros and Alguacil (2016) examine the nature of the causal relationship between output levels, inward foreign direct investment and external trade in Latin America countries; Argentina, Brazil and Mexico from the middle seventies to 1997. Utilizing a vector auto-regressive (VAR) model the result of the study suggests a significant impact of foreign direct investment on economic growth and external trade in the analyzed countries.

Using cross-section data relating to a sample of 66 developing countries over three decades Makki and Somwani (2020) analyze the role of foreign direct investment and external trade in economic growth of developing countries within the endogenous growth-theory framework. The study shows that foreign direct investment and external trade contribute toward advancing economic growth in developing countries and that foreign direct investment is often the main channel through which advanced technology is transferred to developing countries. The study further believed that sound macroeconomic policies, better stock of human capital and institutional stability are necessary preconditions for foreign direct investment – driven growth to materialize and stimulate domestic growth.

De Gregorio (2016) in his contribution to the debate on the importance of FDI notes that FDI may allow a country to bring in technologies and knowledge that are not readily available to domestic investors and in this way increase productivity growth in the economy. In his study, he finds that increasing aggregate domestic investment by 1 percent point of GDP increases economic growth of Latin American countries by 0.1 to 0.2 percent, but increasing FDI by the same amount increases growth by approximately 0.6 percent a year during the periods 1980 – 85, thus indicating that FDI is three times more efficient than domestic investment. Ledyaeva and Linden (2018) determine the FDI impact on per capital growth in 74 Russian regions during the periods 1985 – 2020. Their framework related real per capital growth rate to initial levels of state variables such as the stock of physical capital and the stock of human capital and control

variables viewed as important factors in the Russian economy's regional development in the analyzed period. Their results imply that in general FDI (or related investment components) do not contribute significantly to economic growth during the period but that some evidence of positive aggregate FDI effects in higher income regions.

Theoretical Review

Jhingan (2002) defines economic growth "as the process whereby the real capital income for a country increases over a long period of time, he states that economic growth is measured by increase in the amount of goods and services in each successive time period, thus, growth occurs when an economy's productive capacity increases which in turn is used to produce more goods and services, it is in view of this that Foreign Direct Investment (FDI) has been seen as being potent for growth (Feenstra and Markusen, 2019).

Foreign Direct Investment (FDI) is therefore defined as an increase in the book value of the networth of investment in one country held by investors of another country where the investment are under the managerial control of the investors (Graham, 2015) the rationale for encouraging or attracting foreign investors to invest in developing countries is to fill the Domestic capital formation gap to speed up economic growth which requires certain minimum level of foreign capital (Brener, 2011) inspite of the encouragement, the flow of Foreign Direct Investment (FDI) to developing countries is subject to controls exercised by the host country over the condition of entry of foreign capital, regulations of the operations of foreign capital restrictions placed on the remittance of profits and the repatriation of capital.

According to Carkovic and Levine (2003), Miwie (1964) Todaro and Smith (2003) FDI now account for over sixty percent (60%) of private capital flower, the flow of Foreign Direct Investment (FDI) from organization for economic co-operation and developed countries has been extremely rapid with an average of about $45 billion in 1996, up from an average of us $38 billion in 1991-1995 (World Bank, 1997).

The flow of Foreign Direct Investment (FDI) into Nigerian from 1985-2020 shows that nominal FDI fluctuated from ₦212.5 million in 1985 to ₦184 million in 1980, to ₦404.1 million in 1990, to ₦434.1 million in 2000, to ₦4686 million in 2010, to ₦75940.6 million in 2015, and ₦573,835.0 million in 2020. The flow of FDI in real terms also decline due to abandonment of restrictive measures

which to indigenization that fovours more foreign participation in the economy, (CBN Statistical Bulletin 2019 and 2020).

Interms of the contribution of FDI to a national economy, two schools of thought emerged; the pro-foreign investment advocate, this group believe that FDI is beneficial to host countries and the world through the transmission of technology, idea, designs, taste and better management (Anyanwu, 1998, Oloyede and Obamuyi, 2000). The benefits from FDI also include filling saving resource gap, foreign exchange gap and balance of payment on the other hand, the anti-foreign investment approach associate themselves with the cost of FDI to host countries and assert that FDI damages host countries economies by suppressing domestic entrepreneurship introduction of unsuitable products and technology, subjecting host countries to exploitation and stimulating class conflict leaching to negative contribution (Anyanwu, 1998, Oloyede and Obamuyi, 2000).

In reconciling the pros and cons of the role of FDI on economic growth, Todaro (1985) and, Todaro and Smith (2003) averts that while the above list provides a range of conflicting arguments, the real debate ultimately centers an different ideological and value judgements about the nature and meaning of economic growth and development and the principal sources from which it springs, However, the only valid conclusion is that foreign private investment may be an important stimulus to economic growth and social development as large as the interest of the host countries and government concede and provide FDI capital adapt a long-run perspective by adapting their technologies of production to the resource of developing nations.

Empirical Review

Asiedu (2014) suggests that macroeconomic instability, investment restrictions, corruption and political instability have a negative impact on foreign direct investment (FDI) to Africa. Another study Lumbila (2015) examined a panel analysis of the effects of foreign direct investment (FDI) on GDP and other macroeconomic variables from 47 African countries over two decades (1980 – 2000). Utilizing a Seemingly Unrelated Regressions (SUR) technique of analysis the study revealed that foreign direct investment exerts a positive impact on growth in Africa. While contributing to the debate on the joint effect of aid, external trade and FDI in economic development estimated a panel data for countries in the Southern Africa region, Benzuidenhout (2009) found a negative relationship between external trade and growth, but no relationship between aid

and growth. In another similar study Ndabendia and Njoupougnigni (2010) established that there was a long run association between FDI and economic growth in 36 sub-Saharan Africa countries, and also found that FDI exerts positive effect on economic growth.

In Nigeria, Ayashagba and Abachi (2014) carried empirical investigation on the effects of foreign direct investment on external sector and economic growth from 1985 – 2017. The result showed that foreign direct investment had significant impact on both external sector and economic growth in Nigeria. However, the study concludes that the presence of foreign direct investment in the LDCs particularly in Nigeria is not totally useful. Examining the impacts of foreign direct investment in oil sector in Nigeria and its attendant impact on economic growth, Salami, Kari, Chukwu and Mand David (2012) used co-integration analysis to show that foreign direct investment at current year is negatively associated with GDP possibly due to the fact that such investment needed to be allowed some time lag to translate to any significant impact. The impact of domestic capital formation is relatively small compared with the impact of foreign direct investment in the oil sector. Investigating the relationship between foreign direct investment and economic growth in Nigeria between 1970 and 2008. Umoh, Jacob and Chukwu (2012), argued that there is endogeneity i.e., bi-directional relationship between FDI and economic growth in Nigeria. The paper then adopted both single and simultaneous equation systems to examine if there is any sort of feed-back relationship between FDI and economic growth in Nigeria. The results jointly determined in Nigeria and there is positive feedback from FDI to growth and from growth to FDI.

Mello (2019), surveys the developments in the literature on impact of Foreign Direct Investment (FDI) on growth in developing countires, he asserts that FDI is thought of as a composite bundles of capital stocks, know-how and technology, and that it's impact on growth is manifold and very a great deal between technologically advanced and developing countires, he concluded that the ultimate impact of FDI on growth in recipient economy depends on the scope of efficiency spillover the domestic firms.

Lahiri and Ono (2021) in their investigation on Foreign Direct Investment (FDI), Local content requirement and profit taxation in developing countries posited host countries must strike a balance between costs and benefits of FDI in formulating appropriate policies, the efficiency level of domestic firms must play a role and that a host country should make use of non-tax instruments such as specification on local content of inputs to enhance benefits from FDI.

Chete (2020) and Anyanwu (2020) separately examined the determinants of FDI in Nigeria using error correction model, Chete concluded that the growth of the economy. Proxied by GDP growth rate exerts positive effect on FDI but became significant only at the third lag while Anyanwu Identified the size of the domestic market, openness of the economy and exchange rate as the core determinants of FDI flows into Nigeria, he concluded that there is a positive relationship between the growth of the Nigerian economy and foreign direct investment.

However, the criteria for Judging the success of FDI by host governments have changed over the years and these have led to a less confrontational and a more cooperative stance between host countries and foreign investors more particularly emphasis in evaluating foreign sector over the past decades has switched from the direct contribution of foreign affiliates to economic growth and development to their wider impact on the upgrading of the competitiveness of host countries' indigenous capabilities and the promotion of their dynamic comparative advantage (Anyanwu, 2021, World Bank, 2021).

METHODOLOGY

The estimation method adopted in this study is the Three Stage Least Square (3SLS). Because is the best fit for a set of data points by minimizing the sum of the offsets or residuals of points from the plotted curve and it is use to predict the behaviour of dependent variables. Time series data over the period 1981 to 2016 were used. The data used were secondary in nature sourced from CBN statistical bulletin, CBN annual report and statement of accounts.

Model Specification

Within macroeconomic models, different techniques have been employed in the modeling of the external sector arising from theoretical underpinnings, accounting systems and definition of variables (Matlanyane, 2015). In principle, the estimation of the external sector should reflect trade flows, services flows, transfers as well as direct and portfolio capital flows (Pauly, 2000). In Nigeria, exports were categorized into oil and non-oil exports. The former represented up to 95 percent of exports. While this presently helped the government to maintain a ready source of revenue, the aim of government was to restructure exports to give advantage and priority to non-oil exports. So even though non-oil exports still continued a small proportion of total exports, it was nonetheless modeled. Oil exports depended on oil production and as in the supply block, production was in turn determined by quota allowances from OPEC. But in addition to these

standard determinants of oil export, it was regularly acknowledged that since most of Nigeria's oil exports were to the OECD, output of those countries critically determined its oil exports. The majority of Nigeria's export until recently went to the United States. Modeling non-oil exports was a bit less straightforward. Nigeria's non-oil exports items consisted mainly of natural resources and primary products from agriculture; industrial and processed commodities remained insignificant minority. Changes in the exchange rate impacted returns to exports and could create a positive incentive for exporting. So non-oil exports (EXPT) were determined by production in the agriculture sector, the nominal exchange rate (EXCHR) and credit to the private sector (LOANS)

Imports constituted a significant share of inputs for both domestic production and final consumption. Import demand was traditionally a function of output and price. Income remained relevant whether in relation to imports of capital/intermediate product for further production or in relation to importation of products for final consumption. However, given that a number of importers relied on commercial bank loans and guarantees for their operating capital, the domestic lending rates became an important factor. Trade policy effects were captured using implicit tariff; in the present model though, the variable played an additional role in representing other prices. In addition to the exchange rate, it showed the prices of imports and defines capacity to pay for imported products. The stock of reserves was important in defining ability of the economy to fund imports. So on the whole, imports (IMPT) were determined by gross domestic product (GDP), nominal exchange rate (EXCHR), domestic maximum lending rate (INTR), implicit tariff rate (TRFF) and reserves FRXRES.

More so, the connections between the external sector and other sectors of the economy ensures that the growth of external sector is accompanied by increase in investment, an increase in greater utilization or productive capacity, an increase in employment, economies of scale, and technological advancement (Krueger (1978) and Balassa, (1978). These are the direct effects of export expansion and the rate of output growth. Therefore, greater export

$$NX = EXPT - IMPT \quad \ldots\ldots 1$$

$$EXPT = XNOIL + XOIL \quad \ldots\ldots 2$$

$$IMPT = MKG + MRG + MMG \quad \ldots\ldots 3$$

Where NX is net exports, EXPT is exports, and XOIL is oil export, MKG is import of capital goods, MRG is import of raw material, MMG is import of manufactured goods. Based on the above discussions, the sectoral output of the external sector is as follows:

$QTOTAL = QIMPT + QEXPT + XOIL$……..4

$logIMPT = \log A + {}_1 logFDINV + {}_2 logQOIL + {}_3 logEXCHR + {}_4 logFRXRES + {}_5 logTRFF + {}_6 logBOP + {}_7 logGDP_t$……..5

$logEXPT = \log A + {}_1 logFDINV + {}_2 logQOIL + {}_3 logEXCHR + {}_4 logGFCF + {}_5 logTRFF + {}_6 logBOP + {}_7 logGDP_t$……..6

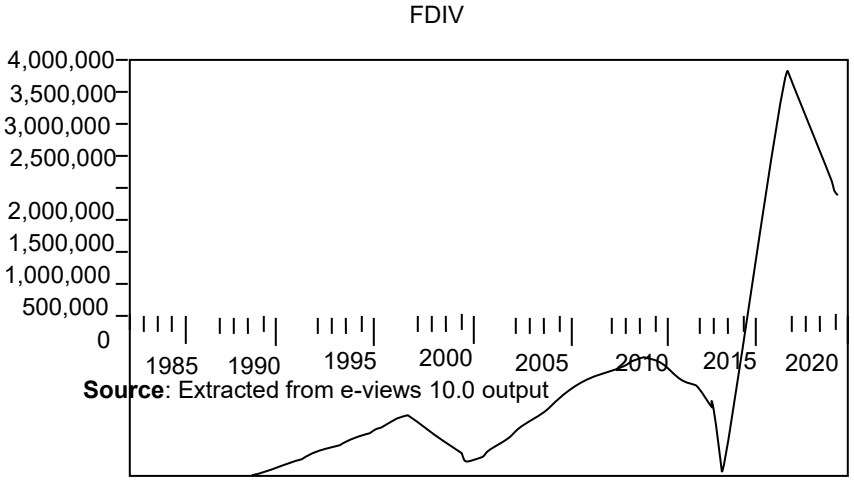
$logMRG = \log A + {}_1 logFDINV + {}_2 logQOIL + {}_3 logCAPUTL + {}_4 logEXCHR + {}_5 logQIND + {}_6 logBOP + {}_t$……..7

$logXOIL = \log A + {}_1 logFDINV + {}_2 logGDP + {}_3 logGFCF + {}_4 logEXCHR + {}_5 logBOP + {}_t$ ……..8

where FDINV is foreign direct investment, EXCHR is exchange rate, FRXRES is foreign reserve, BOP is balance of payments, GDP is gross domestic product, GFCF is gross fixed capital formation, LOAN is commercial bank credits and advance CAPUTL is capacity utilization, QIND is output of industry, TRFF is tariff and all other variables are as previously defined. The imports of capital goods (IMPT), imports (EXPT), and import of raw material (MRG), are individually and severally determined by output of oil and gas, output of oil and gas, output of the manufacturing sector, gross fixed capital formation, gross domestic product, capacity utilization, exchange rate, external reserves, balance of payments, foreign direct investment, lagged imports of capital goods and lagged imports of manufactured goods, etc. Lastly, in equation 3.8, exports of crude oil and natural gas (XOIL) is determined by foreign direct investment, total gross domestic product, gross fixed capital formation, exchange rate, balance of payments. The $_1$……. $_N$ are the parameters with a priori expectation that they are all positive.

DATA PRESENTATION AND DISCUSSION OF FINDINGS

Figure 1.1: Trend of foreign direct investment (FDIV) in Nigeria from 1985 – 2020



Source: Extracted from e-views 10.0 output

The figure 1.1 above shows the trend of FDIV in Nigeria over the study period. The result indicates that FDIV inflow to Nigeria was very low from 1980 to 1990 but rises marginally in 1995 and continues into 2020 without significant fluctuation. One factor that may account for low FDIV in the 1980s and 1990s is military regimes of the periods and the indigenization policy introduced and sustained by them. Also, the undemocratic style of governance that characterizes military dispensation does not make the country an investment friendly economy. From the year 2005, FDIV trended upward and increases sharply until the year 2020 when it, again, dropped drastically. The reason for the sharp increase could be attributed to the investment enabling environment created by the democratic government, of President Olusegun Obasanjo and his successors, President Umaru Musa Yar'adua and Goodluck Jonathan. During President Olusegun Obasanjo for example, some enterprises, including telecommunication, were privatized and this attracted investors into the economy. In the mid 2020, FDIV shows a downward trend by decreasing sharply. This was due partly to the drastic fall in the value of Nigeria's domestic currency relative to dollar and partly to some economic policies of the current government which many investors considered too harsh.

EFFECTS OF FDI ON EXTERNAL SECTOR IN NIGERIA

In analyzing FDI the effect on external sector, the sector was disaggregated four subsectors: QIMPT, QEXPT, QMRG and XOIL. A macroeconometric model was specified for the sector using three stage least squares (3SLS) as method of estimation.

b. Estimated Result for External Sector

Variables	FDIV	QOIL	EXCR	FEXR	BOP	GDP	GFCF	CAPU	R^2, R^{-2} (D-W)
LnIMPT	0.260* (2.280) (0.024)	0.155* (12.59) (0.000)	0.1702 (0.866) (0.388)	0.146 (1.033) (0.000)	0.181* (6.048) (0.000)	0.035* (2.977) (0.003)	0.22** (1.737) (0.084*)	-------- -	0.550 0.550 (1.09)
LnEXPT	0.252* (2.186) (0.003)	0.013 (1.082) (0.281)	0.175 (0.866) (0.387)	-------- -	0.393* (2.104) (0.023)	0.036* (2.897) (0.004)	-0.110 (.136) (0.004)		0.886 0.886 (2.33)
LnIMPR	0.260* (2.280) (0.024)	0.115* (9.402) (0.000)	0.170 (0.866) (0.388)	-------- ---	0.181 (0.648) (0.518)	-------- -	--------- -	0.102 (6.08) (0.000)	0.520 0.519 (2.78)

LnXOIL	0.258* (2.186) (0.030)		0.175 (0.866) (0.388)	-------- -	0.284* (1.639) (0.052)	0.035* (2.89) 0.002)	-0.110 (0.136) (0.892)		0.577 0.577 (2.19)

*means significant at 5%

**means significant at 10%

Figures in parenthesis () are t-values while figures in square [] are probability values

Source: Extracted from e-views 9 output

Table 1.2 shows the estimated results for the equations QIMPT, QEXPT, IMPR and QOIL of the external sector block. FDIV has positive impact on imports (IMPT), exports (EXPT), imports of raw materials (IMPR) and oil exports (XOIL). Also, all the estimates are statistically significant. A unit increase in FDIV increase the elasticity of IMPT by about 26 percent. This result confirms the data on the performance of imports within the period under investigation as shown in table 4.2.2 below; in 1981, the value import was ₦12.8 billion, while in 1990, it increased to ₦45.7 billion and in the year 2000 I was ₦985 billion. By the year 2010, it further increased to ₦10.9 trillion, however, in 2020, it reduced to ₦6.5 billion. There was steady increase in the value of imports to the economy within the period of study.

DIAGNOSTIC TEST

(a) Unit Root Test

Since the data for the analysis are time series, there is the need for data to undergo a unit root test to ascertain statement of the data to avoid obtaining a spurious results by regressing non-stationary series, and also to scrutinize the integrating level of the variables which is to ensure that the variables are not of order 1(2), the Augmented Dickey Fuller (ADF) was employed to test the stationary and the order of integration of variable. The result of the ADF unit root test for checking for stationary of the data and the determined order of integration as show in the table below:-

Table 1.3

Variables	Level	First Differences	Order of Integration
EXCHR	0.119374	-6.500832***	I(1)
INTR	-3.213098**	-4.828566***	I(1) and I(0)
TRFF	-5.134881**	-6.661490***	I(1)

FRXRES	-4.494951***	-4.4684422***	I(I) and I(O)
RGDP	0.0956096	-33.77720***	I(I)

Where ***, **, * implies significance at 1%, 5% and 10% respectively
Sources: Authors Analysis

(b) Co-integration Test

Since the data is subjected to unit root analysis and found that if a linear combination of the data is stationary, then it implies that although they are individually 1(1), that is they have stochastic trends, their linear combination is stationary, in this case the variables are co-integrated two or more variables are co-integrated if they have along-term or equilibrium term (Gujarati and Sangetha, 2007) a regression such as equation 1 is known as co-integrating regression and the parameters $\propto_1$, $\propto_2$, $\propto_3$ and $\propto_4$ are known as the co-integrating parameters.

The result of the co-integration indicate that the model of of IMPT a function of EXCHR, INTR, TRFF and FRXRES has co-integrating equations at 5% level of significance with the assumption of linear deterministic trend in the data this is shown by the value of the co-integrating likelihood the co-integrating result is shown below:

Table 1.4 Johsnsen Co-Integration Test Results

No of CE(s)	Eigen value	Trace Value	5% Critical Value	Remark
None	0.9542	80.33	15.21	Accepted
	0.7507	31.00	18.68	Accepted
$\propto \leq 2$	0.4094	8.78	15.41	Accepted
$\propto \leq 3$	0.0218	0.38	3.76	Accepted

*Donates rejection of the CE(s) at 5% significance level. The trace test indicate 2 co-integrating equation at 5% significance level.

Table 1.5: External Sectoral FDI Inflow to Nigeria: 1990 – 2022 (M ₦)

YEAR	IMPT	EXPT	IMPR	XOIL
1990	12,800	11,000	218.9	10,650.80
1995	7,100	11,700	350.5	11,223.70
2000	45,700	109,000	1,417.20	106,629.50
2005	755,100	950,700	5,046.50	927,565.30
2010	985,000	1,945,700	38,808.70	1,920,500.20

2015	2,800,900	7,246,500	101,970.40	7,140,578.90
2020	10,995,900	12,011,500	77,181.11	11,136,167.80
2022	6,245,271.58	7,545,371.30	234,800.89	10,456,786.34

Source: CBN Statistical Bulletin, Various Issues. 2022

However, this does not satisfy a priori expectation. An increase in FDIV is expected to decrease imports and accelerate export. Excessive dependent on imports could hamper the progress of an economy as it may suggest selling domestic labour abroad. However, the finding corroborates Babatunde (2019). A unit increase in FDIV increases elasticity of EXPT by about 25 percent while a unit increases and that of IMPR and XOIL by about 26 percent and 26 percent respectively. The values of these variables as recorded in table 4.2.2 confirm these results. For example, in 1985, the values of these variables are ₦11 billion, ₦218.9 million and ₦10.6 billion respectively. Also, in the year 2000, the values of EXPT, IMPR and XOIL are as follows, ₦950.7 billion, ₦101.7 billion, ₦7.1 trillion respectively, and in 2010, the values increase to ₦12 billion, ₦77 million, ₦11.1 trillion respectively. In 2020, the values are as follows, ₦7.5 trillion, ₦234.8 million and ₦10.4 trillion respectively. These results conform to the *a priori* expectation.

Parameters Estimate

Using the three stage least squares (3SLS) econometric technique to estimate the parameters the empirical result is as follows:

IMPT = 89.1614 – 8.7318 EXCHR – 0.3941 INTR – 0.42612 TRFF + 0.4101 FRXRES.

SEE (5.0805) (0.4810) (0.1177) (0.2116) (0.1759)

T (17.5496) (-18.1540) (-3.3477) (-2.6814) (2.3306)

R^2 = 0.98 F* = 268.20 DW = 1.08

T – tabulated = T 0.05(21) = 2.080

F0.05 (2.18) = 3.55

Akaike Info Criterion = -0.1717

Schwarz Criterion = 0.0262

DISCUSSION OF FINDINGS

The model above shows that EXCHR and INTR have the appropriate sign and are statistically significant, using both the standard error and the t-statistics test at 5 percent level of significant, this is shown by their law standards error values

compared to half of the parameters value [0.4810 < ½ 8.7318] = 5.3659] and 0.1177 < ½ (0.3941) = 0.1971] respectively, the t-statistic test also confirms the statistical significance of TRFF and FRXREs. The values of their t-ratios in the model are greater than the theoretical t-value 18.1540 ∝ 3.3477 > 2.080 respectively). However the coefficient of EXCHR does not have the appropriate sign through statistically significant using the aforementioned tests. This implies that changes in nominal exchange rate and Domestic Maximum lending rate all things being equal will lead to Gross Domestic Product GDP. The value of R^2 = 0.98 also known as the coefficient of determination, shows that 98 percent variation in Exchange rate, and foreign resource is caused by the joint variation in the independent variable. This is an indication of a high goodness of fit of the regression model. The F-statistics test which explain the overall significance of the model also supported the coefficient of determination on the significance of the model because the F-statistic value = 268.20 > F- tabulated value = 3.55. Therefore, the model on the overall statistically reliable for the serial correlation of the residuals in the model, the result is inconclusive because the Durbin Watson statistic falls in between the lower and the upper bound value i.e d_L < Dw < du (1.026 < 1.081< 1.669) however, the presence of first order positive serial correlation, if at all it exists, can be corrected by taking the first difference of the variables. The low values of Akaike into (= -0.1717) and Schwarz (= 0.0261) Criteria showed that the models is correctly specified.

CONCLUSIONS AND POLICY RECOMMENDATIONS

The effect of foreign direct investment (FDIV) on external sector growth of the host country has been long debated in the literature. One major focus of the debate has been whether or not FDIV has been potentials to contribute to the economic growth of the host country through the external sector.

While the proponent of modernization approach see FDIV as capable of accelerating economic growth, the dependency theorists argued that FDIV may hamper short-term economic growth and will eventually generate and accelerate internal distortions that will ultimately depress or retard host country's economic growth through the external sector. This study makes contribution to this ongoing debate by examining the effect of foreign direct investment on the economy in Nigeria through the external sector. Based on the findings of this study, conclusions are that FDIV has the potentials of contributing significantly to economic growth in Nigeria through the external sector. This is supported by the results of 3SLS estimations. This outcome is a pointer to the relevance of the

modernization view on FDIV, that it is capable of accelerating economic growth if properly used by the host country. However, FDIV alone cannot lead to economic growth without influences of other macroeconomic variables such as gross fixed capital formation (GFCF), exports of oil (XOIL) and government expenditure, among others. In the light of the above, attention should be paid by policy maker on policies that can make Nigeria harness the economic gains of FDI. Given the finding of the study, the following recommendations are made:

1. It is imperative that the government frame policies that will eliminate the barriers to capital flows, gross fixed capital formation and import of capital goods as these variables have positive relationship with the growth of the external sector.
2. In addition these would be effective in boosting and increasing the FDI, when FDI increases, employment, income and output would promote the long-term growth of the Nigerian economy.
3. Finally, there is the need to remove all kinds of impediments that make returns on investment uncertain; these impediments include inadequate power supply, exchange rate volatility, insecurity, corruption, poor infrastructure, unstable regulatory environment and unreliable dispute resolution mechanisms. When all these are removed, foreign investors will be more willing to invest in Nigeria and this will increase FDIV inflows and lead to economic growth in Nigeria.

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