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DETERMINANTS OF INTERNATIONAL CAPITAL INFLOW IN NIGERIA: A FURTHER EXAMINATION

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ABSTRACT

This study examines the factors that determine the inflow of international capital into the Nigeria economy. Foreign capital flow may become volatile and menacing to the domestic economy if a thorough study and further examination of its determining factors are not carried out. Annual time series data covering the period 1986 to 2019 was used in a dynamic frame work which includes the adoption of co-integration and error correction methodology techniques. Findings from the study reveal that external factors like foreign exchange reserve, foreign interest rate and external debt are significant determinants of international capital flows categorized into foreign portfolio investments and foreign direct investments. In the short-run, domestic macro-economic variables like real gross domestic products, external debts, and inflation are significant determinants of these international capital flows on the long run. The study recommends policy measures aimed at directing long-run foreign capital inflows and changing the short-run patterns of flow into the country.

Keywords: Foreign Direct Investment, Foreign Portfolio Investment, Macroeconomic Variables and Capital Market.
JEL Classification Code: F21, F30, F41.

1. INTRODUCTION

The emergence of integrated financial markets and high capital mobility which was made possible by the increasing globalization of world economies, have predisposed economies, especially developing ones to increasing amounts of capital flows. The importance of capital flows for an economy is well recognized and well documented (World Bank, 2007). Capital flows are generally welcomed in most countries as they assist in the proper allocation of global resources and thereby increase the availability of capital and thus higher investment and growth (Ciccarelli, and Mojon, 2010).

In Nigeria, the abrogation of certain laws and subsequent entrenchment of investment friendly laws as well as the introduction of structural reforms facilitated the substantial flow of capital. Until 1986, Nigeria did not record any figure on portfolio investment (inflow or outflow) in her balance of payment (BOP) accounts. This was attributable to the non-internationalization of the country‘s money and capital markets as well as the non-disclosure of information on the portfolio investments of Nigerian investors in foreign capital/money markets (CBN, 2009). For example, the net portfolio investment (NPI) and net direct investment (NDI) were N151.6 million and N735.8 million in 1986, which rose to N51,079.13 million and N115,952.2 million in 2000, indicating a growth rate of 33,593.36 and 15,658.66 per cent, respectively.

The debate on the factors that attract foreign investment in developing countries remains inconclusive. In economic literature, for instance, Ayomitunde et al. (2020); Aderemi et al. (2018); Arawomo and

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Apanisile (2018); Gui-Diby (2014); Gobna and Abu (2010); Reinhart and Reinhart (2008); Calvo, Leiderman and Reinhart (1993); Ekpo (1997); Obadan (1982); Ajakaiye (1995); have attributed different macroeconomic factors has the major determinants of foreign direct investment. Ayomitunde et al. (2020) identified past FDI inflows, market size and exchange rate are the critical determinants of FDI inflow in Nigeria while inflation rate militates FDI inflows negatively. In Gui-Diby (2014), an inverse relationships between FDI inflows and economic growth was found. In another study, Enoma and Mustafa (2011) attributed the attraction of FDI inflows to Nigeria to the advent of crude oil. Others, like Soludo (1998), have argued that the profitability of investment is the major attraction that lure foreigners to invest in developing countries. In the light of this debate, this paper attempt to provide further evidence in economic literature in support of the determinants of foreign direct investment in Nigeria.

The paper is clearly divided into five sections. Beginning from the introduction, literature review is discuss in section two. Section three presents theoretical framework and methodology as well as data sources. Data analysis and interpretation of empirical results are discuss in section four while section five presents conclusion and recommendations.

2. LITERATURE REVIEW

2.1 Theoretical Literature

The determinants of capital flows have been extensively analyzed in the literature starting from the seminal paper of Calvo, Leiderman and Reinhart (1993). The literature basically examines the determinants of capital flows from developed countries to developing and emerging market economies in the context of push and pull factors as in Mody, Taylor and Kim (2001), Kim (2000) and Dasgupta and Ratha (2000). Push factors refer to external determinants of capital flows from the developed countries to emerging economies such as the interest rates and economic activities and industrial production. Pull factors, on the other hand, refer to domestic determinants of capital inflows in a particular emerging market economy such as domestic interest rates, stock market prices, macroeconomic stability, exchange rate regime, inflation, domestic credit level, creditworthiness and industrial production.

Another strand of theoretical literature on determinants of capital flow borders on the hypothesis drawn heavily on theories of imperfect competition and market failure. These hypotheses are based on Dunning's (1979) "eclectic approach". Essentially, this approach seeks to explain the motives for international production, and thus foreign capital flows; in terms of the ownership advantages of multinational firms, the devise to "internalize" these advantages, and the locational advantages of the host (recipient) country. (Ancharas, 2003).

The Standard portfolio theory has also been used as a theoretical foundation for international capital flows (Bleaney, Mizen and Senatla, 1999; and Devereux, 2006). This theory suggests that agents should distribute their asset holdings according to their preferred trade-off between risk and expected return.

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2.2 Empirical Literature

The factors that influence the flow of foreign capital in emerging economies are quite large and there may be commonalities involved in these measures. The first measure is real per capital GDP growth in advanced economies (Reinhart & Reinhart, 2008). A slowdown in growth in advanced economies leads to an expansion of capital flows to emerging market economies, to take advantage of higher yields. The second global determinant is an index of real non-oil commodity prices. Reinhart and Reinhart (2008) present evidence of a statistically significant and positive (negative) relationship between commodity prices (economic growth) and capital inflows between 1967 and 2006. Frankel (2008) illustrates a potential link between strong commodity prices and low real interest rates. Finally, Reinhart and Reinhart (2008) consider the direct impact of short term real interest rates on capital flows, following the proposal of Calvo, Leiderman and Reinhart (1993). A fall in real rates of return in industrial countries leads to an increase in capital flows to emerging market economies, as investors search for higher rates of return. They measure capital inflows using current accounts and we go beyond this in our analysis by using actual capital inflow data. In a recent study, Ayomitunde et al. (2020) argued that economic growth is a critical determinant of FDI inflows.

Ayomitunde et al. (2020) identified past FDI inflows, market size and exchange rate are the critical determinants of FDI inflow in Nigeria while inflation rate militates FDI inflows negatively. In Gui-Diby (2014), an inverse relationships between FDI inflows and economic growth was found. In another study, Enoma and Mustafa (2011) attributed the attraction of FDI inflows to Nigeria to the advent of crude oil.

Bleaney et al, (1999) applied panel data econometrics to a model of portfolio capital flows for a long time-span and distinguished between the expected inflation and real interest rate components of nominal interest rate effects. They also investigated possible interactions between global and domestic factors that determine capital flows to emerging economies. The results from their empirical study suggest that domestic factors (changes in the investment climate in developing countries as measured by the inflation-adjusted share price index) have been more important than indicated by previous research, particularly in Latin America. Falls in real interest rates in developed countries have had only a very minor impact in driving capital flows to emerging markets, but lower nominal interest rates associated with lower expected inflation have played a significant role by improving creditworthiness. Interaction effects are important: interest rate movements have little impact when the investment climate is poor.

Culha (2006) examined the determinants of capital flows into Turkey in the traditional ‘push-pull’ factors approach. To this end, a structural vector autoregression (SVAR) model has been employed and impulse response and variance decomposition functions have been produced covering the period from 1992:01 to 2005:12. The same analysis has also been carried out for the two sub-periods 1992:01-2001:12 and 2002:01-2005:12 to inspect if there exists a

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change in the roles of push and pull factors before and after the 2001 economic crisis. The empirical evidence suggests that the relative roles of some of the factors have changed considerably in the post crisis period and pull factors are in general dominant over push factors in determining capital flows into Turkey.

In Nigeria, Ekpo (1997) examined the relationship(s) between FDI and some macroeconomic variables for the period 1970-1994. The author's results showed that the political regime, real income per capita, rate of inflation, world interest rate, credit rating, and debt service explained the variance of FDI inflows to Nigeria. Obadan (1982) in his study argued that market size, trade policies and raw materials are very important determinants of FDI in Nigeria.

Furthermore, Anyanwu (1998, 2011) maintained that domestic investment, openness and indigenization policy are very important determinants of FDI in Nigeria. According to Ajakaiye (1995), the high bank lending rate that existed during the early days of deregulation (1987-1990) has affected internal rate of return (IRR) on investment negatively, thereby boosting investment inflows. However Aremu (1997) opined that the host country's FDI make credit available to investors in a form of subsidized loans, loan guarantees as well as guaranteed export credits. He noted that these credits are provided directly to foreign investors for their operations particularly to defray some inevitable costs which invariably have an immediate impact on cash flow and liquidity.

Olatunji (2001) in another development argued that despite government efforts to provide incentives to many investors, many investors are still adamant to come to Nigeria. He noted that this might not be unconnected with the lingering problems that still persist on ground. For example, poor infrastructure, general insecurity, sectarian violence, the arm revolt in the Delta region and the pervasive indiscipline that is becoming the order of the day in the Nigerian economy.

Apart from the issues mentioned above, one important issue that deters many investors to come to Nigeria is the issue of the stock exchange market, how developed is the market in terms of its structure, duties, methods and its personnel. On his part, Soludo (1998) maintained that it is not profitability of investment today that attracts investors to invest, but how long will the profit remain fairly stable overtime. Whenever the socio-political and economic environment is highly volatile, an investor is better off exercising his option to wait. On the other hand, he might decide to invest on those projects whose cycles are very short and can be easily undone. He also asserted that while the maintenance of the macroeconomic stability, avoidance of over-valued exchange rates and export orientation are critical for the resurgence of investment they are necessary but not sufficient conditions.

3. THEORETICAL FRAMEWORK AND MODEL SPECIFICATION

The determinants of international capital flows have been one of the most important issues in the international macroeconomics literature. In order to attain a desirable level

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ISSN: 2786-9695
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of investment that would ensure sustainable development, developing country needs some foreign savings to bridge the savings-investment gap. The gap when financed through foreign savings comes in form of capital flows. Capital flows is transmitted through foreign direct investment (FDI), foreign portfolio investment (FPI), draw-down on foreign reserves, foreign loans and credits etc (Obadan, 2004). Theoretical literature has provided evidences of the benefits of capital flows, ironically, empirical evidence had established that they are not randomly available globally (Aremu, 2003). There are several theories of international capital flow in literature, this include the internationalization theory and the market size theory. Dima (2010) conceptualized the internationalization theory as the way by which a firm moves its economic activities outside borders of the indigenous country. This include the acquisition, networking and the utilization of information about the operations of international markets. The market size theory was popularized by Asiedu (2006), and Mughal and Akram (2011) in their studies. The debate advanced by them was that the motivation behind efficiency seeking FDI was the size of the market which they considered as the firm's sales or GDP. Thus, the increase in GDP gives rise to increase per capita GDP and the overall welfare of the economy.

3.1 Model Specification

The determinants of global capital flows are dependent upon whether we examine aggregates and disaggregate flows and the type of disaggregate flows that we consider. This disaggregation depends on whether we examine the short term flows or the long term flows. In the model in equation (1) below, foreign capital flows is proposed to depend on the factors selected in the model. Because of the nature of foreign capital flows, which are either short term or long term, the study has divided the flows into FDI (to represent the long term capital) and FPI (to represent the short term capital).

Based on the theoretical framework developed in the previous chapters, our basic functional form of the model is given as:

$$Cap\ flows = f\ (LIB, INF, EXDT, RGDP, HC, FXR, OPN) \ldots\ldots\ldots\ldots\ldots\ 1$$

(1) Cap flows: Capital Flows which have been categorized into foreign direct investment (FDI) and foreign portfolio investment (FPI).

LIB = London Inter-bank Offered Rate (%) to measure the foreign interest rate

INF = Rate of Inflation (%)

EXDT = Total External Debt

RGDP =: Market Size of the economy captured by real Gross Domestic Product

FXR = Gross Foreign Exchange Reserves

OPN = Degree of openness of the economy = (Exports + Imports)/GDP at current market prices

HC = human capital (measured as secondary school enrolment)

In econometric form, equation 1 is presented as:

$$Cap\ flows = \beta_0 + \beta_1 LIB + \beta_2 INF + \beta_3 EXDT + \beta_4 RGDP + \beta_5 HC_t + \beta_6 FX\ R + \beta_7 OPN + u \ldots\ldots 2$$

A priori signs are: $\beta_1, \beta_2, \beta_3, < 0$; $\beta_4, \beta_5, \beta_6, \beta_7 > 0$

The independent variables in the model include the London interbank offered rate (LIB) which is expected to have a negative

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DOI: https://10.57233/gujeds.v3i1.14 **Vol. 3(1) July 2023**

impact on both FDI and FPI. As international interest rates rise, capital will be less willing to flow to the domestic economy and vice versa. Inflation rate is a domestic market factor that has a negative impact on international capital flows since inflation creates uncertainty in the domestic market. External debt tends to dampen investors' confidence on the domestic market and so it has a negative impact on capital flows. In the case of real GDP, the impact on capital flows is expected to be positive. Rising income levels indicate improved domestic market conditions which will attract more investors. Both foreign reserves and openness levels are also expected to have positive impacts on international capital flows.

3.2 Method of Estimation and Data

A dynamic framework is devised for the empirical analysis in this study. Hence, the method used in this study is the Cointegration and Error Correction Mechanism (ECM) which provides a dynamic structure for the analysis. In this methodology, we examine the time series as well as long run properties of the data used in the analysis in order to provide a background for the study. Both the short run and the long run behaviour of the relationships are provided based on this estimation method.

Based on the method used, the estimated models in the study are re-specified as follows:

$$FPI_t = \beta_0+\beta_1 LIB_t+\beta_2 INF_t +\beta_3 EXDT_t+\beta_4 RGDP_t+\beta_5 HC_t +\beta_6 FXR_t+\beta_7 OPN_t+\delta ECM_{t-1} + \varepsilon_{1t} \ldots 3$$

and

$$FDI_t = \beta_0+\beta_1 LIB_t+\beta_2 INF_t +\beta_3 EXDT_t+\beta_4 RGDP_t+\beta_5 HC_t +\beta_6 FXR_t+\beta_7 OPN_t+\delta ECM_{t-1} + \varepsilon_{2t} \ldots\ldots 4$$

Where δ is the error correction term.

Data used in this study was obtained from the Central Bank of Nigeria Statistical Bulletin as well as the World Bank World Development Indicators. The data is annual and covers the period from 1986 to 2019.

4. EMPIRICAL ANALYSIS OF EMPIRICAL RESULTS

4.1 Unit Root Analysis

The Augmented Dickey Fuller (ADF) test is employed in order to analyze unit roots in this study. The results are presented in levels and first difference. This enables us determine in, comparative terms, the unit root among the time series and also to obtain more robust results. Table 4.1 presents results of ADF test in levels without taking into consideration the trend in variables. The reason for this is that an explicit test of the trending pattern of the time series has not been carried out.

In the result, the ADF test statistic for each of the variables is shown in the second column, while the 95 percent critical ADF value is shown in the third column. The result indicates that (apart from FPI and RGDP) all the variables possess ADF values that are less than the 95 percent critical ADF value (in absolute values). The implication of this is that the time series are non-stationary in their levels. However, the variables FPI and RGDP are stationary in levels, indicating that these variables are not time-dependent.

GUSAU JOURNAL OF ECONOMICS AND DEVELOPMENT STUDIES (GUJEDS)
ISSN: 2786-9695
DOI: https://10.57233/gujeds.v3i1.14 **Vol. 3(1) July 2023**

Table 4.1 Unit Root Test for Variables in Levels

Variable	ADF Test Statistic	95% Critical ADF Value	Remark
FDI	**0.419**	**-2.960**	**Non-Stationary**
FPI	**-6.635**	**-2.960**	**Stationary**
FXR	**2.422**	**-2.960**	**Non-Stationary**
INFL	**-2.802**	**-2.960**	**Non-stationary**
HC	**-1.684**	**-2.960**	**Non-Stationary**
EXDT	**-1.892**	**-2.960**	**Non-stationary**
RGDP	**3.715**	**-2.960**	**Stationary**
LIBOR	**-2.573**	**-2.960**	**Non-stationary**
OPN	**-1.521**	**-2.960**	**Non-stationary**

Result extracted from the Eviews 7.0 output

The result of the unit root test on these variables in first differences is reported in table 4.2 below. From the result, it is seen that the ADF test statistic for each of the variables is greater than the 95 percent critical ADF values (in absolute values). With these result, these variables are adjudged to be stationary. This implies that the variables that were initially nonstationary are actually difference-stationary, attaining stationarity after the first differences of the variables. Thus, we would accept the hypothesis that the variables possess unit roots.

Indeed, the variables are integrated of order one (i.e. I[1]).

Table 4.2 Unit Root Test for Variables in First Difference

Variable	ADF Test Statistic	95% Critical ADF Value	Remark
ΔFDI	**-8.287**	**-2.960**	**Stationary**
ΔFPI	**-8.656**	**-2.960**	**Stationary**
ΔFXR	**-4.561**	**-2.960**	**Stationary**
ΔINFL	**-5.586**	**-2.960**	**Stationary**
ΔHC	**-3.131**	**-2.960**	**Stationary**

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DOI: https://10.57233/gujeds.v3i1.14 **Vol. 3(1) July 2023**

ΔEXDT	**-4.129**	**-2.960**	**Stationary**
ΔRGDP	**-3.640**	**-2.960**	**Stationary**
ΔLIBOR	**-3.648**	**-2.960**	**Stationary**
ΔOPN	**-3.089**	**-2.960**	**Stationary**

Result extracted from the Eviews 7.0 output.

4.2 Co-integration Test

Having established that the series in the analysis are not stationary in their levels, we move on to determine if they are co-integrated. According to Engle and Granger (1987), if two time series variables, p_t and q_t, are both non-statioeènary in levels but stationary in first-differences, i.e., both are *I(1)*, then there could be a linear combination of p_t and q_t, which is stationary, i.e., the linear combination of the two variables is *I(0)*. The two time series variables that satisfy this requirement are deemed to be cointegrated. The existence of cointegration implies that the two cointegrated time series variables must be drifting together at roughly the same rate (i.e., they are linked in a common long-run equilibrium). A necessary condition for cointegration is that they are integrated of the same order (Granger 1986; Engle and Granger 1987).

The Engle and Granger two-step method is employed for the test of cointegration. This method follows a simple procedure. The dependent variable is regressed on all the independent variables and the residuals are obtained. If the variables are cointegrated, then, the residual from the cointegrating equation must be integrated to order zero (stationary). In this analysis, the cointegration tests are performed on the basis of the individual models that were specified in chapter three. The result of the cointegration tests are summarized in Table 4.3 below.

Table 4.3: Results of Engle and Granger Residual Based Cointegration Tests

Model	ADF Lag	ADF Test Statistic	95% Critical ADF Value	Remark
1	**1**	**-7.249**	**-2.957**	**Stationary**
2	**1**	**-5.817**	**-2.986**	**Stationary**

Output extracted from Eview 7.0

From Table 4.3 using the Engle and Granger co-integration procedure, both

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models have ADF test statistic values that are greater than the 95 percent critical ADF value (in absolute terms). Thus, the null hypothesis of no co-integration among the variables at the 5 percent level cannot be accepted for both equations. This implies that the residuals are stationary and indicates that the time series for each of the banks is co-integrated. Therefore, long run relationships exist between the particular dependent variable and the selected independent variables. An intertemporal model can therefore be estimated for the relationships.

4.3 The Long Run Results

The long run steady state result of the market development function is shown in Table 4.4 below. The estimation of the long run determinants of international capital flows in Nigeria is based on the outcome of the OLS estimation of the models. The justification of this method is the fact that long run relationship was shown to exist for the variables from the cointegration tests. The FPI model has a very weak fit as shown by the coefficient of determination (R squared) value of 0.369. This result indicates that long run FPI determination is quite extraneous from the factors in the short run. This result tends to confirm theoretical analysis that shows that FPI is a short term capital rather than a long run factor. Perhaps, factors that determine FPI flows in the long run are quite exogenous. For instance, changes in source country financial factors have been shown to be very strong in affecting FPI flows across the globe (see Egly, Johnst and Liston, 2010; and Chuhan, Claessens and Mamingi, 1998).

For the FDI result, the R squared value is high and shows that the determinants explain over 93 percent of the systematic behavior of FDI in the long run. The F value at 47.9 is also quite high and shows that a strong relationship exists between long run FDI inflows and all the determinant variables combined.

In spite of the weak overall performance of the FPI model, the results still indicate that FXR, EXDT and RGDP are significant in the result, indicating that foreign reserves and external debt have a perpetual effect on FPI flows in Nigeria. However, in the long run, the performance of the economy becomes a strong factor for portfolio investment to consider in its flows. This is actually the expected result.

For the FDI result, inflation, external debts and real GDP are the significant variables. Indeed, the result suggests that domestic factors are very essential in the determination of FDI in the long in Nigeria. Both inflation and level of economic performance exert strong impacts on the performance of FDI inflows in the long run. Thus, in order for Nigeria to ensure sustainable and perpetual inflow of FDI, focus must be placed on the economic conditions in the country.

Table 4.4: The Long Run Relationship

Variables	FPI	FDI

ISSN: 2786-9695
DOI: https://10.57233/gujeds.v3i1.14 Vol. 3(1) July 2023

C	9479.7	35926.5
FXR	-0.154***	-0.005
INFL	-7.401	16.17*
HC	69.80	80.52
EXDT	-0.109**	-0.074*
RGDP	0.037*	0.053***
LIBOR	150.4	92.05
OPN	-176.3	-693.2
	R^2 = 0.369 F = 1.59	R^2 = 0.931 F = 47.9

* indicates significance at 10 percent level; ** indicates significance at 5 percent level;

*** indicates significance at 1 percent level.

Output extracted from Eview 7.0

4.4 Dynamic Analysis

The dynamics of the behaviour of capital flows within the context of short term movements in its determinants in Nigeria is captured within an error correction model (ECM). We now turn to this analysis. The autoregressive distributed lags (ARDL) approach is used for the ECM. The error correction representation for the selected ARDL model is presented in Table 4.5 below. The R-Bar squared criterion was used for the selection of the parsimonious equation.

The error correction mechanism result for the FPI model, as reported in the second column of Table 4.5 below, indicates that the model has highly impressive diagnostic statistics.

The goodness of fit of the model is relatively high. The R-squared value of 0.756 indicates that over 75 percent of the systematic variation in FPI inflows at any given time is explained by the explanatory variables and the ECM term. The R squared value for the FDI model is also very high and shows that the model explains over 82 percent of the systematic variations in FDI flows in Nigeria. The overall performance of the models is also high. The F-statistic values of 6.35 for the FPI model and 31.1 for the FDI model pass the significance test at the 1 percent level, since this values are greater than the 1 percent critical F-value of 5.01. Thus, we cannot reject the hypothesis of a significant linear relationship between

GUSAU JOURNAL OF ECONOMICS AND DEVELOPMENT STUDIES (GUJEDS)
ISSN: 2786-9695
DOI: https://10.57233/gujeds.v3i1.14 **Vol. 3(1) July 2023**

international capital and all the independent variables combined in the short run.

Table 4.5: Short run Model for Determinants International Capital Market

Variables	FPI	FDI
C	-51.16	111.2
FDI(-1)		0.282*
ΔFXR	-0.138***	-0.075**
ΔINFL	4.497	6.703
ΔHC	-94.31	174.6**
ΔEXDT	-0.111**	-0.022
ΔRGDP	0.051	0.026
ΔLIB	117.7	116.6*
ΔOPN	298.9	-204.0
ECMt-1	-0.198***	-0.869***
	R^2 = 0.756 F = 6.58	R^2 = 0.827 F = 31.14

* indicates significance at 10 percent level; ** indicates significance at 5 percent level;
*** indicates significance at 1 percent level.
Output extracted from Eview 7.0.

The particular contribution of each of the variables to short term movements in international capital is determined by observing the individual coefficients of the explanatory variables in terms of sign and significance. A close investigation of the individual coefficients of the variables in the FPI model reveals that the coefficients of foreign reserves and human capital do not have the expected positive sign. However, the very high significance of the foreign reserves variable indicates that reserves position of the country has a very strong negative impact on FPI flows. Rising reserves level tends to discourage short term capital inflow to Nigeria. The coefficient of external debt also passes the significance at the 5 percent level and shows that rising external debts in Nigeria limit the amount of FPI inflows to Nigeria in the short run. All the other variables fail the significance test at the 10 percent level. These results suggest that external factors rather than domestic factors are the strongest determinants of FPI flows in Nigeria in the short run.

For the FDI model, the coefficient of FXR also has an unexpected negative sign and again passes the significance test. This

ISSN: 2786-9695
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result suggests that external reserves accumulation in

Nigeria plays an essential role in the short run behaviour of international capital in Nigeria. Thus, it is advisable for the authorities to focus on appropriate management of the massive external reserves of the country in order to obtain short term stability of international capital flows. The coefficient of human capital (HC) is significant at the 5 percent level and is positive. Thus, strong human capital base is a major factor in determination of FDI flows in the short run. Foreign direct investment seems to consider the level of human capital development that will be able to ensure cheap and effective in the sectors in which they flow in Nigeria. International interest rate also has a strong positive impact on FDI flows in Nigeria, suggesting that changes in the international market rates tend to affect the inflow of FDI into Nigeria. All the other variables in the model fail the significance test at the 5 percent level. A very strong issue from the results is the failure of the real GDP and openness coefficients in both the FPI and FDI results. This outcome indicates that the size of market or the level of the exposure of the external sector do not play very strong roles in determining the level of FDI inflows to Nigeria in the short run. Thus, adjusting macroeconomic factors is not a very strong option to take in influencing short term inflows of foreign capital into Nigeria.

The error correction terms in both equations have the correct negative sign, less than one and also pass the significance test at the 5 percent level. This goes to show that any short-term deviation of international capital from equilibrium in the short-run will be restored in the long run. The speed of adjustment in both results are quite fast.

4.5 Policy Implications of Results

The results obtained from the empirical analysis are quite interesting and apt for policy implications. First, it shows that international market factors tend to have perpetual effects on capital flows in Nigeria. These results were also obtained in studies by Hau and rey 2006) and Mody and Murshid (2005). The effects of factors like external reserves and external debt on foreign direct and portfolio investments are quite profound. Thus, the correct channel of input from policy perspective is to focus on stringent management of the external sector through appropriate reserves policy and debt management.

Macroeconomic variables are not significant in the short run but are significant in the long run as shown in the ECM and long run estimates. This implies that domestic macroeconomic factors and their management do not necessarily attract foreign investment, especially the portfolio investment which are more short-lived. Rather improving economic conditions will generate the appropriate environment for attracting foreign capital in Nigeria in the long run [see also Baek (2006); and Warnock and Cleaver (2003)].

Human capital development is one of the main domestic factors that influence short run and long run capital flows in Nigeria. Thus, if government embark on training and the general educational system is put in place, the inflows of foreign capital will likely improve in Nigeria.

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DOI: https://10.57233/gujeds.v3i1.14 Vol. 3(1) July 2023

The findings above strongly indicate that a veritable difference exists between short run and long run determinants of foreign capital inflows to Nigeria. The implication of this is that policy measures aimed at directing long run capital inflows should not be the same as those aimed at changing the short run patterns of flow. For instance, while macroeconomic adjustments are quite essential for improving long run capital flows, they will not guarantee improved inflows of capital in the short run. Thus, policy makers must develop policy directions to suit the time horizon of capital flows.

5. SUMMARY, RECOMMENDATIONS AND CONCLUSION

5.1 Summary of Findings

This Study set out to investigate the factors that determine the inflows of international capital in the Nigerian economy. The relevance of external capital to development efforts in a domestically starved economy like Nigeria was well established in literature. The findings of this paper show that the perceived benefits to determinants of international capital in Nigeria are more external than internal. Specifically, the following findings were made:

a. External factors are more important in the determination of international capital inflows to Nigeria in the short run.
b. Domestic factors exert greater influence on the determination of international capital in the long run,
c. Portfolio investment is better explained in the short run than in the long run. The results show that exogenous factors may exert more impact on FPI flows in the long run, judging from the respective R-squared, values of 0.76 and 0.37, which shows that exogenous factors may exert more impact on FPI flows in the long run
d. The level of economic performance, is essential for the long run growth of international capital in Nigeria following the significance of macro-economic variables like RGDP,
EXDT and FDI; and significance of RGDP, EXDT and FXR and FPI

5.2 Recommendations

The findings made in the study give impetus for the following recommendations.

i. First, uncoordinated inflow of portfolio investment should be minimized. Due to the thinness of the capital market (and its susceptibility to manipulation) large portfolio flows may cause equity bubbles. The use of guided capital controls may be advisable at this point.
ii. Authorities should put in place structures that will make the domestic capital market more attractive to foreign investors.
iii. In the same vein, appropriate portfolio management policies concerning the currency composition, choice of investment instruments, and acceptable duration of the reserves portfolio, and which reflect a country's specific policy settings and circumstances, serve to ensure that assets are safeguarded, readily

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available and support market confidence.

iv. Sound reserve management policies and practices can support, but not substitute for, sound macroeconomic management.

v. Finally, a healthy macroeconomic and financial system is critical if any emerging economy is to attract quality foreign investment.

5.3 Conclusion

The management of capital inflows has been observed as a complex process encompassing a spectrum of policy choices, which inter alia include: the appropriate level of reserves, monetary policy objectives related to liquidity management and maintenance of healthy financial market conditions with financial stability (Kapur, 2007). Large capital inflows often are associated with inflationary pressures, a real exchange rate appreciation, and deterioration in the current account. In addition, as observed in Ogunleye (2008), the history of Latin America provides ample evidence that massive capital inflows also may contribute to stock market bubbles and lead to an excessive expansion in domestic credit, jeopardizing the financial system's stability.

Short term capital inflows intensify these problems as the probability of an abrupt and sudden reversal increases. Not surprisingly, therefore, effective buttressing of these capital inflows is a key economic policy issue today. Countries with sound macroeconomic policies and well-functioning institutions are in the best position to reap the benefits of capital flows and minimize the risks.

In this study, it was shown that international capital inflow in Nigeria is well differentiated along the lines of short term and long term. Portfolio capital is more of short term than direct investment capital, indeed, FPI tends to generate unpredictable and a typical influences on short term financial market development in Nigeria. Like the Latin American cases, rapid and uncontrolled inflows of FPI into the capital market could vitiate the sustainable development drive of the market in the long term. Combination of FPI with its direct investment counterpart is one way of ensuring more worthwhile administration of international capital inflows into the Nigerian economy.

REFERENCES

Aderemi, T.A., Olayemi, H.O., Ebere, C.E. and Adeniran, A.A. (2018). Security Spending and Foreign Direct Investment Inflows: Evidence from the Nigerian Economy. *IOSR Journal of Humanities and Social Sciences (IOSR-JHSS)*. 23(11): 29-35.

Ajakaiye, D.O. (1995). Foreign Direct Investment in Nigeria's services sector. In: Nnanna, O.J., Okafor, C.M. and Odoko, F.O. (eds), Foreign Direct Investment in Nigeria. *Proceedings of the 12th Annual Conference of the Regional Research Units of the Central Bank of Nigeria, September 1–5, 2003. Pp. 227 – 236.*

Ancharas V.D. (2003), "The determinants of foreign direct investment in a comparative perspective; is there bias against sub Saharan Africa?"

ISSN: 2786-9695
DOI: https://10.57233/gujeds.v3i1.14 **Vol. 3(1) July 2023**

University of Mauritius, Research Journal.

Anyanwu, J.C. (2011). Determinants of Foreign direct Investment Inflows to Africa, 1980-2007. Working Paper Series No. 136, African Developemnt Bank, Tunis.

Anyanwu, J.C. (1998). An econometric Investigation of the determinants of foreign Investment for Economic Development in Nigeria by *Nigerian Economic society*, Ibadan: 219-241

Arawomo, O. and Apanisile, F.J. (2018). Determinants of Foreign Direct Investment in Nigerian Telecommunication Sector. *Modern Economy*, 9, 907-923.

Aremu, J.A. (1997). Foreign Private Investment: Issues, Determinants and Performance. *Paper Presented at a Workshop on Foreign Investment Policy and Practice, Nigeria Institute of Advanced Legal Studies, Lagos*.

Aremu, J.A. (2003). An Overview of Foreign Private Investment in Nigeria‖ paper presented at the CBN Twelfth Annual Conference of the Regional Research Units on ―Foreign Private Investment in Nigeria‖ organized by Research Department, CBN. 1st-5th September.

Asiedu, E. (2006). Foreign Direct Investment in Africa: Role of Government Policy, Institutions and Political Instability. *World Economy*, 29(1): 63-77.

Ayomitunde, T. A., Ganiyu, A. B., Matthew, G. S., and Adebola, Y. B. (2020). The Determinants of Foreign Direct Investment Inflows in Nigeria: An Empirical Investigation. *AUDOE*, 16(3): 131-142.

Baek, I., (2006), Portfolio Investment Flows to Asia and Latin America: Pull, Push Or Market Sentiment? *Journal of Asian Economics*, 17, pp. 363-373.

Bleaney, M., Mizen, P. and Senatla, L. (1999). "Portfolio Capital Flows to Emerging Markets" CREDIT *Research Paper No. 99/12, November*.

Calvo, G.A., Leiderman, L. and Reinhart, C.M (1993). Capital inflows and real exchange rate appreciation in Latin America, *IMF Staff Papers* 40 (1), 108-51.

Central Bank of Nigeria (2009). Perspectives on Foreign Direct Investment in Nigeria. *Annual Report and Statement of Account*, December.

Ciccarelli, M. and Mojon, B. (2010). Global inflation. *The Review of Economics and Statistics* 92 (3), 524-535.

Çulha, A.A. (2006). "A Structural VAR Analysis of the Determinants of Capital Flows into Turkey" *Central Bank Review*, Central Bank of the Republic of Turkey. http://www.tcmb.gov.tr/research/review/

Dasgupta, D. and Ratha, D. (2000). What Factors Appear to Drive Private Capital Flows to Developing Countries? And How Does Official

ISSN: 2786-9695
DOI: https://10.57233/gujeds.v3i1.14 **Vol. 3(1) July 2023**

Lending Respond? *The World Bank, Policy Research Working Papers*, No. 2392.

Devereux, M.B. (2006). "A Portfolio Theory of International Capital Flows." IIIS *Discussion Paper* No. 24, March.

Dima, S.C. (2010). From International Trade to Firm Internationalization. *European Journal of Interdisciplinary Studies*, 2(2): 59-66.

Dunning, D. (1979). Multinational Enterprises and the Global Economy. (Harslork: Addison Wesley)

Ekpo, A.H. (1997). Determinants of Foreign Direct Investment in Nigeria: evidence from time series data. *CBN Economic and Financial Review*, .35 (1): 59-78.

Engle, R.F., and Granger, C.W.J. (1987) "Co-integration and Error Correction: Representation, Estimation and Testing", *Econometrica*, 1987, Vol.55, Pp.251-276.

Enoma, A. and Mustafa, I. (2011). The impact of Financial Sector Reforms on Non-oil Export in Nigeria. *Journal of Economics*, 2(2): 115-120.

Gobna, O.W. and Abu, N. (2010). Determinants of Foreign Direct Investment in Nigeria: An Empirical Analysis. *GJHSS*, 10(1): 26-34.

Gui-Diby, S.L. (2014). Impact of Foreign Direct Investment on Economic Growth in africa: Evidence from three Decades of Panel Data Analyses. *Research in Economics*, 68: 248-256.

Hau, H. and Rey, H. (2006), Exchange Rates, Equity Prices and Capital Flows. *Review of Financial Studies*, 19 (1), pp. 273-317.

Jeffrey, C. (2008). The procyclicality of capital flows to developing countries. *Harvard University*. Harvard

Kim, Y. (2000). Causes of Capital Flows in Developing Countries. *Journal of International Money and Finance*: 19.

Mody A. and Murshid, A. (2005). Growing up with Capital Flows. *Journal of International Economics*, 65, pp. 249-266.

Mody A, Taylor, A & Kim, Y. (2001). Increasing Private Capital Flows to Developing Countries: 'the role of Physical and Financial Infrastructure in 58 Countries. *Journal of Applied Econometrics and International Development* Vol.10-2 (2010) pp. 57-72.

Mughal, M.M. and Akram, M. (2011). Does Market Size Affect FDI? The Case of Pakistan. *Interdisciplinary Journal of Contemporary Research in Business*, 2(9): 237-247.

Obadan, M.l. (2004) Foreign Capital Flows and External Debt: Perspective on Nigeria and the LDCs Groups. Lagos, Broadway press Ltd .

Obadan M.I. (1982). Direct Foreign Investment in Nigeria: An Empirical Analysis, *African Studies Review* 30 (1), March.

Ogunleye, E.K. (2008). Exchange Rate Volatility and Foreign Direct

ISSN: 2786-9695
DOI: https://10.57233/gujeds.v3i1.14 **Vol. 3(1) July 2023**

Investment Inflows in Selected Sub-Saharan Countries. University of Ibadan, 7th Dissertation.

Olatunji, D (2001). ‘‘At Home Abroad When Titles Get In The way’’ The Nation Newspapers, Tuesday, September, 25.

Reinhart, C. and Reinhart, V. (2008). Capital Flow Bonanzas: An Encompassing View of the Past and Present, *CEPR Discussion Papers* No. 6996.

Soludo, C. C. (1998). “Investment in the Growth Process: A Measure of Economists‟ Ignorance in Africa” Nigerian Economic Society Annual Conference

Soludo, C.C. (2007) ―Nigeria‘s Financial System Strategy 2020 Plan‖ Paper by the Governor, Central Bank of Nigeria at the FSS International Conference, Abuja-Nigeria, June.

Warnock, F and Cleaver, C. (2003). Financial Centers and the Geography of Capital Flows.

International Finance, 6, pp. 27-59.

World Bank (2007) World Development Report, Washington, D. C: The World Bank.