FOREIGN DIRECT INVESTMENT, PORTFOLIO FLOWS AND ECONOMIC GROWTH IN NIGER (1980 – 2014)

Ozigbo A. Sylvester

Department of Accountancy
Delta State Polytechnic, Ozoro.
Email: Ozigbosylvester@gmail.Com

ABSTRACT

This research focused on the impact of Foreign Direct Investment and Portfolio Flows on Economic growth in Nigeria. The research covers the period between 1980 and 2014. Secondary data were collected from the Central Bank of Nigeria statistical bulletin and various issues of World Bank Publications. The period being understudy encompasses the period of massive government efforts to attract foreign investors into the country as well as period of turbulent macroeconomic indicators such as high unemployment and low level of per capital income in Nigeria. The parsimonious Error Correction Modelling (ECM) result shows the Foreign Direct Investment, Foreign Portfolio Investment, Labour force and Gross Fixed Capital Formation have a positive and significant impact on the level of Economic Growth in Nigeria. The Johanson cointegration test result shows a long-run relationship among Foreign Direct Investment, Foreign Portfolio Investment, Labour Force, Gross Fixed Capital Formation in Nigeria. The result from the variance decomposition reveals that shocks to Foreign Direct Investment, Foreign Portfolio Investment, Labour Force and Gross Fixed Capital formation did not explain a significant proportion of the changes in economic growth in Nigeria within the period of the study. It was recommended that government should put in place policies to encourage Foreign investors to go into the agricultural and manufacturing sectors which are key to job creation and for sustainable economic growth.

Keywords: Economic Growth, Capital Flight, Non-stationary variables**,** Co-integrating relationship**,** Parsimonious Model**.**

INTRODUCTION

With the end of oil boom in 1980, Nigeria found herself in an economic quagmire. In the external sector, the problems included unsustained balance of payment deficit, rapidly escalating debt stock and a crushing debt service burden (crowding out effect). Internally, the economic problems included annual fiscal deficit, rising unemployment and galloping inflation (Iyoha, 1998). To address these challenges, the country embarked on various economic stabilization measures as reflected in the Economic stabilization Act of 1981. The economic stabilization measures were highly unsuccessful because of poor policy mix to the extent that the growth rate of GDP was negative in 1984. The aggregated investment income ratio which achieved a peak of 31.5% in 1976 collapsed to less than 9% in 1985 (Iyoha 1998). It is amazing to know that thirty-seven years after the oil glut of 1980, Nigeria is still in search of solutions to address the challenges thrown up by the fall in revenue accruing to the country. Even with the opening of the economy to give room for foreign investment in flow, most Nigerians still continue to wallow in abject poverty.

Inflation and unemployment is still tearing he citizens apart. This has motivated the researcher to carryout this study with a view to finding out if there is any impact of foreign direct investment and portfolio inflow on economic growth in Nigeria. From literatures available many studies have been carried out in this subject matter, but none has combined foreign direct investment and foreign portfolio investment in a single model to investigate their impact on the economy, this is the gap this study seeks to fill. The problem identified here is that portfolio investment inflow does not necessarily create direct jobs. Also foreign direct investment inflow are not made in sectors with the highest job creating potentials such as agricultural and manufacturing (Emmanuel, 2015). The foreign, capital inflow are mainly in the oil and gas sector with very high return on investment but high technical skill for which there is deficit in local manpower output (Oji-Okoro and Huang, 2012).

OBJECTIVES

The main objective of the study is to empirically investigate (the impact of Foreign Direct Investment and Portfolio investment on Economic Growth in Nigeria. The specific objectives include: To:

Investigate the impact of the main objective of the study is to empirically investigate the impact of Foreign Direct Investment and Foreign Portfolio Investment on Economic Growth in Nigeria. The specific objectives include: To:

i. Investigate the impact of Foreign Direct Investment on Economic Growth in Nigeria.
ii. Examine the effect of Foreign Portfolio Investment on Economic Growth in Nigeria.
iii. Ascertain the impact of Labour Force on Economic Growth in Nigeria
iv. Evaluate the impact of Gross fixed Capital Formation on Economic Growth in Nigeria.

HYPOTHESES OF THE STUDY

The following hypotheses were tested. They are stated in the null form below:

(Ho_1) There is no significant Positive relationship between Foreign Direct Investment and Economic Growth in Nigeria.

(Ho_2) There is no significant Positive relationship between Foreign Portfolio Investment and Economic Growth in Nigeria.

(Ho_3) There is no significant Positive relationship between Labour Force and Economic Growth in Nigeria.

(Ho_4) There is no significant Positive relationship between Gross Fixed Capital Formation and Economic Growth in Nigeria.

MATERIAL AND METHODS

Soludo (1998) defined Foreign Direct Investment as the accumulation of external real capital goods i.e. those which will yield future flow of goods and services. FDI consist of external resources in including capital, technology, managerial and market expertise received by a country to

assist in production of goods and services. This is a major source of investment into developed and even developing countries. But owing to the inconsistency in government policies, FDI to Nigeria had been ups and down averaging 771.5 Million dollars in the manufacturing sector and 151.6 million dollars in the trade and business services subsector respectively for the period between 2001 and 2014. Foreign Portfolio Investment (FPI) is a clustery financial investment instruments. These financial instruments are easy to trade and though they may not be long term interest. These investments give the investors dividend payment, voting rights and part ownership of the company. These financial assets are highly volatile and liquid in nature hence it can easily be converted into cash anytime. The growth of FPI in Nigeria has been unstable. As a percentage of GDP the net average of FPI to GDP stood at 1.53% between 1980 and 1990. This rose to 14.23% average in the period 1991 – 2000. The position has increased substantially with an average of 37.28% of FPI to GDP in the period 20901 to 2014. During the past decades a large number of hypotheses have been offered regarding the interaction of capital account liberalization and economic growth. Hong (2008) in his work "Addressing Casuality in the effect of capital Account Liberalisation" using co integration technique concluded that capital account liberation has a positive effect on economic growth and increases the well being of the citizens.

According to him, the advantages of mobility of capital are clear; a better efficient allowance of savings, new additional sources for the financing of the domestic projects, new opportunities for diversification of risks and promotion of financial development. Also, Quinn (1997) in his study "The correlates of change in international financial Liberalization" using correlation analysis affirms that capital account opening is positively related to economic growth using similar methodology. According to Bussierer and Fratzscher (2008), in their work "Financial openness and Growth" using Regression analysis concluded that the benefits of liberalization come from access to the external funding sources but like first stage, the country in question must

eradicate all the domestic restriction. Those authors made an application on 45 countries, including 12 of Asia and 8 of Latin America.

Over the period 1980 – 2002 and they concluded that capital account openness increases the economic growth in right of 1.5% during the first five years. Bekaert et al (2005) in their work "Financial openness, International trade and Economic Growth" using cointegration technique showed through an empirical study on 95 countries that capital market liberalization offers the opportunity to foreign investors of investing in domestic equities. A study worked out by the Bank for international settlements in 2006 showed that portfolio investments flows passed for 6.2 billion dollars in 1987 to 37.2 billion dollars in 1992, then 211.6 billion dollars during the period 2000 – 2006. The design adopted in this study is the archival documentary review design because the study mainly utilized historical data. This study made use of secondary data sourced from the Central Bank of Nigeria Statistical Bulletin, the National Bureau of Statistics as well as World Bank indicators for Nigeria from World Bank Website. The researcher made use of an econometric soft ware known as E-Views to analyze the time series data using the Johansen technique. The test statistics adopted was the multiple regression approach which is compatible with co-integration analysis of this study. The Johanson technique allows us to estimate a dynamic error correction specification which provides estimates of both the short and long run dynamics.

Model Specification

To generate an equation linking FDI and economic growth, we follow Akinlo (2003), Balasubramanyam et al (2006) and de Mello (1997) and make use of a modified production function which incorporate FDI as an input. The augmented production function is written as:

$$Y = f(k_d, K_f, L)$$

Where Y is output, K_d is domestically-owned capital stock, kf is foreign-owned capital stock (or the stock of FDI) and L is

labour. The model extracted from the above theoretical framework is thus stated below:

$GDP = \beta_0 + \beta_1 GFCF + \beta_2 FDI + \beta_3 LF + Vt$ ……. (5)

This study however differs from the one adopted from the theoretical frame work since it decomposes foreign investment into foreign Direct investment and foreign portfolio investment. The model to be estimated is thus stated below:

$RGDP = \beta_o + \beta_1 GFCF + \beta_2 FDI + \beta_3 FPI + \beta_4 LF + Vt$ …… (6)

$\beta_1, \beta_2, \beta_3, \beta_4 > 0$

where:

RGDP = Real Gross Domestic product
GFCF = Gross Fixed Capital formation
FDI = Foreign Direct Investment
FPI = Foreign Portfolio Investment
LF = Labour force
Vt = Error term.

Unit Root Test

The Augmented Dickey Fuller (ADF) unit root test was used to test whether the variables are stationary and their order of integration.

The result of the ADF unit root test is shown on table 4.3

Table 4.3: Summary ADF Unit Root Test Result:

Variable	Level Data	First difference	1% Critical Value	5% Critical Value	10% Critical Value	Order of Integration
RGDP	2.04	-3.04**	-3.65*	-2.90	-2.62	1(1)
LF	0.51	-4.30*	-3.65	-2.96	-2.62	1(1)
GFCF	0.25	-3.25**	-3.65	-2.96	-2.62	1(1)
FPI	1.40	-4.41*	-3.65	-2.96	-2.62	1(1)
FDI	-.18	-4.40*	-3.65	-2.96*	-2.66	1(1)

Note: * and *** indicates statistical significance of the 1%, 5% levels.

***Source**: Researcher's Computation using Software*

The result shows that all the variables were originally non-stationary which is a common characteristic of

macroeconomic variables. They however became stationary after the first difference was taken. Thus, all the variables are integrated of order I. That is they are 1(1). This permits us to test for the long run relationship using the co integration test.

Co integration Test

The Johansen co integration test was used to test for the existence of a long run relationship among the variables. The result of the Johansen co integration test is show below:

Table 4.4: Summary of Co integration Test Result

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	5 Percent Critical Value	1 Percent Critical Value
None **	0.763104	93.70415	68.52	76.07
At most 1 *	0.582739	49.05995	47.21	54.46
At most 2	0.340873	21.96458	29.68	35.65
At most 3	0.227326	9.042568	15.41	20.04
At most 4	0.033233	1.047723	3.76	6.65

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	5 Percent Critical Value	1 Percent Critical Value
None **	0.763104	44.64420	33.46	38.77
At most 1 *	0.582739	27.09537	27.07	32.24
At most 2	0.340873	12.92201	20.97	25.52
At most 3	0.227326	7.994845	14.07	18.63
At most 4	0.033233	1.047723	3.76	6.65

***Source**: Researcher's Computation using Software*

The result of the Johansen co integration test using the trace statistic and Max-Eigen statistic indicates two co integrating equation in each case. This is because the calculated value of the Trace statistic and the max-Eigen Statistics are greater than the critical value, at 5 percent or 1 percent or both. This suggests the existence of a long run relationship among the variables.

Parsimonious ECM Model

The result of the parsimonious ECM result is shown below:

Table 4.6: Summary of Parsimonius ECM Result Dependent Variable: DLRGDP

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DLFPI	0.046777	0.017156	2.726589	0.0118
DLFPI(-2)	0.174436	0.086412	2.018652	0.0559
DLFDI(-1)	0.525107	0.155080	3.386038	0.0025
DLGFCF(-2)	0.181737	0.076316	2.381369	0.0221
DLLF	0.243388	0.060003	4.056269	0.0002
ECM(-1)	-0.301613	0.097367	-3.097701	0.0049
C	0.063515	0.014679	4.326827	0.0002

$R^2 = 0.70$, $\bar{R}^2 = 0.62$, AIC = 3.48, SC = 3.16, DW = 2.13

***Source**: Researcher's Computation using Software*

The t statistic in the parsimonious ECM result will be used in testing the various hypothesis. The decision rule is to reject the null hypothesis if the t calculated > t critical and the reverse is true if the t calculated < t critical.

Test of hypothesis 1 – 4

The test of hypothesis 1- 4 shows that there is no significant relationship between all the independent variables and dependent variables. The implication of this is that the no hypothesis are rejected while the alternative are accepted.

RESULTS AND DISCUSSION

Adams (2009) analyzed the impact of FDI growth in sub-Saharan African for the period 1990 – 2003 and found that FDI is positively and significantly related to output growth. On their part, Bussiere and Fratzcher (2008) analyzed the impact of FDI and FPI on economic growth with different models and concluded that FDI and FPI are positively and significantly correlated with economic growth when using the ordinary least square estimation, but not with long-run dynamics. The implication of the above discovery by Bussiere and Fratzcher (2008) is that the result obtained above (test of hypotheses 1–4) are good at least to the extent of short-run analysis. Hence a further analysis was explored in order to track the behavior of the variables in the long-run. One tool under Johansen technique which we have employed to do this work is the cholesky variance decomposition.

CONCLUSION

We can imply from the results above that labour as one of the active factors of production has not played a supportive role for the Foreign Direct Investment that have been flowing into the country to have a long-run impact on the well being of Nigerians. For example from the variance decomposition analysis it only explained 21% of changes in GDP in second period and 25% in the last period. Also shocks to gross fixed capital formation explained 31% changes in GDP in the first period and 54% in the last period. Therefore gross fixed capital formation which in our model represents a country investment in capital goods which by extension lead to better infrastructural facilities has been grossly inadequate over the years. We therefore hold low human capital which is the productive segment of labour force and inadequate gross fixed capital formation as the reason why inspite of constant flow of FDI into the country not much impact has been felt by Nigerians in terms of value addition to production of goods and services and standard of living.

This is in line with earlier findings by (Borensztein et al (1998) in a study involving sixty-nine developing countries where they found that countries with more skilled workforce are better equipped to take advantages of the advanced technologies that might be gained as a result of receipt of FDI. Also according to the World Bank report (2014), human capital development provides a measure of Human Development Index. The latest ranking by the World Bank in 2015 shows that Nigeria is ranked 156th among 187 countries around the world. The findings of the study is also in line with Blomstrom et al (2004) which discovered that FDI has a significant effect on growth in higher-income and developed countries, implying that countries have to pass a certain development threshold in order to benefit from FDI. From the foregoing therefore, we can conclude that Nigeria is yet to achieve the development threshold that can enable her take full advantage of FDI over the years.

Also, the performance of FDI in the variance decomposition was very insignificant. It accounted for 1.13% of changes in economic growth in the second period and marginally

increased to 1.14% in the last period. This goes to confirm that even though FDI has been flowing into the country the quantity has not been significant enough to make the desired impact on the economy. The performance of the last explanatory variable which is FPI was not better than the others. Shocks to foreign portfolio investment explained 5% changes in economic growth in the second period and marginally increased to 6% in the last period. This performance was not significant enough to make its impact felt by Nigerians within the period of the study. In conclusion we say that even though there has been inflow of FDI and FPI, such flow has not been adequate or significant enough to make the desired impact on economic growth in the long-run, so as to improve the standard of living of Nigerians.

RECOMMENDATIONS

1. Foreign investors should be encourage to go into Agricultural and Manufacturing sectors which are still grossly under developed.
2. Emphasis should be place on acquisition of practical vocational and entrepreneurial skills which are not only relevant for employment and job creation but also for technical transfers.
3. Nigerian Stock Exchange should become more proactive in its operation and put in place measures that can attract and retain foreign capital.
4. The government should provide the enabling environment for foreigners to increase their investments and sustain such increase for a long time.

REFERENCES

Adams, S. 2009. "Foreign Direct Investment, Domestic Investment, and Economic Growth in Sub-Saharan Africa", *Journal of Policy Modeling*, 31, 39 – 49.

Adelegan, J.O. (2000). "Foreign Direct Investment and Economic Growth in Nigeria: A seemingly unrelated model." *Africa Review of Money, Finance and Banking,* 2 (3) 48 - 61

Adeleke, K.M., Olowe, S.O. & Fasesin, O.O. (2014). "Impact of Foreign Direct Investment on Nigeria Economic Growth"*. International Journal of Academic Research in Business and Social Science, 4(8). 62 - 81*

Agarwal, D.R. & Shanhani, R. (2005). "Foreign Direct Investment in India: Issues and Implications for Globalization, in Chakraborty, C. and Nunnenkump, (eds). Economic Reforms, foreign Direct Investment and its Effect in India." *Kiel Working paper, 1272*

Ajayi, S.I. (1996). "An Overview of Nigeria macroeconomic Environment*", CBN Economic and Financial Review*, 34 (4). December. 20 - 28

Akinlo E. (2003). "Foreign Direct Investment & Economic Growth in Sub-Saharan Africa." RISEC: *International Review of Economics and Business* 50(4) 569 -580.

Anyanwu, J.C. (1997). *The Structure of the Nigerian Economy* Onitsha: Hyporid Publisher Ltd.

Anyanwu, J.C., Oyefusi, A. Oikhenan, H. & Dimowo, F.A. (1997). *Structure of the Nigerian Economy (1960-1997)*, Onitsha: Joane Educational Publishers Ltd.

Anyanwu, J.C. (1998). "An Econometric Investigation of the Determinants of Foreign Direct Investment in Nigeria". *Annual Conference, Nigerian Economic Society.*

Arellano, M. & Bond, O. (1991). "Some Tests of Specification for Panel Data:" *Monte carlo Evidence and an Application to Employment Equations, Review of Economic Studies* 58, 277 – 297.

Aremu, J.A. (2001). "Industrial Development Coordinating committee (IDCC) and Foreign Private Investment (FPI) in Nigeria," *CBN, Economic and Financial Review*. 29 (4) 2 - 4.

Ayodele, F.O. (2003*). Foreign Investment and Development of the Nigeria Economy.* In Iyoha, M.A. and Itsede, C.O. eds Nigerian economy, structure, growth and development. Benin City: Mindex Press.

Azman-Sanini, W.N. Zubaidi B. A. & Law, S.H., (2010). "Foreign Direct Investment, Economic Freedom and Economic Growth," *International Evidence, Economic Modelling* 27, 1079 1089.

Balasubamanyam et al (2006). "Money, Government Debt and Investment", *Journal of Macroeconomics*, 7(1), 19 – 37.

Balassa (1978). "The Pattern of Foreign Direct Investment and Economic growth," *World Development*, 25(11): 1925 – 1936.

Bandiera, O., Caprio, G.J., Honohan, P. & Schiantarelli, F., (2000). "Does financial reform raise or reduce savings", *Review of Economics and statistics* 82, 239 – 263.

Bang V. T. & IlanNoy, 1, (2009). "Sectoral Analysis of Foreign Direct Investment and Growth in the Developed Countries," *International Financial Markets, and Institutions* 19, 402 – 413.

Baro K. (1991). "Modeling Multiple Regimes in the Business Cycle", *Macroeconomic Dynamics,* 3(3), 311 – 340.

Barro, R.J. (1991). "Economic Growth in a Cross-Section of Countries," *Quarterly Journal Economics*, 106. 35 - 43

Mosley (2000). *Multinational Enterprise and Economic Analysis*. 2nd ed. Cambridge: Cambridge University Press.

Mortiel & Sharma (1997), "Foreign Portfolio Investment and its effect in Sub-Saharan African" *Journal of Development Economics (48) 32, 61- 70*

NEPAD.(2001). *The New Partnership for Africa's Development (NEPAD),* Abuja: NEPAD.

Nikbalht (1984). "Economic growth in Latin America," *Journal of Development Economics*, 39 (July), 59 – 84.

Nunnenkamp, P., & J. Spatz.(2003). "Foreign Direct Investment and Economic Growth in Developing Countries: How Relevant are Host-country and Industry Characteristics?" *Kiel Institute for World Economics. 12(3) 40 - 61*

Ojo S.A. & Oshikoya P.O. (1995). *Foreign Direct Investment: Theory, Evidence and Practice,* Palgrave: Macmillan.

Okon J.O., Augustine, O.J. & Chukwu, A.C. (2012). "Foreign Direct Investment and Economic Growth in Nigeria: An Analysis of the Endogenous Effects". *Current Research Journal of Economic Theory, 4(3) 31 - 60*

Oniovoduokit etal (1999). "Capital Flows to Nigeria Issues and Determinants", *Proceedings of the CBN's 8th Annual Zonal Research Unit Conference*.

Quinn, D., (1997). "The Correlates of Change in International Financial Regulation", *American Political Science Review* 91, 531 – 551.

Quinn, D.P. & Toyoda, A.M., (2008). "Does Capital Account Liberalization Lead to Growth"? *Review of Financial Studies* 21, 1404 – 1449.

Ram J. (2005). "Manufacturing, FDI and Economic growth: Evidence from South East Asian Countries". *Working Paper No. 250. The Monetary Institute: South Korea.*

Rodrik, D., (1998). "Who Needs Capital-account Convertibility"? *Essays in International Finance 207, Princeton University*.

Sancak, C., (2002). Financial Liberalization and Real Investment Evidence from Turkish firms, IMF WP $N^0$100.,

Sachs T.U & Warner G.O. (1997). "Does foreign direct investment accelerate economic growth"? *Journal of International Economics,* 40, 115 – 120.

Shaw, E.S., (1973). *Financial Deepening in Economic Development,* New York: Oxford University Press.

Seddighi, H.R., Lawler, K.A. & Katos, A.V. (2000). *Econometrics: A practical approach*. London: Routledge.

Solow, R. M. (1956). "A Contribution to the Theory of Economic Growth." *Quarterly Journal of Economics* 70 5-94.

Temple N.K. (1998). *Multinational Enterprise and Economic Growth.* Cambridge: Cambridge University Press.

Thomas, R.L. (1997). *Modern Econometrics: An Introduction*. London: Addison-Wesley.

Urzua, C.M., (1997). "Omnibus Tests for Multivariate Normality Based on a Class of Maximum Entropy Distributions". *Econometrics.* 48: 817 – 838.

Viovadas G. (2004). "Foreign Direct Investment and Productivity Spillovers in the Chinnese Manufacturing Sector," *Economic Systems*, 25, 315 – 321.

White, H. (1980). "A hetetroskedasticity-consistent covariance matrix and a direct test for heteroskedasticity". *Econometrica*.48:817 – 838.

World Bank (2012). World Development Indicators online, available from http://data.worldbank.org/Washington. Accessed February 2014.

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