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THE IMPACT OF NON-OIL EXPORTS ON DOMESTIC INVESTMENT IN NIGERIA

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Abstract
The study explores the relationship between non-oil export and domestic investment in Nigeria. Relevant data were collected from the Central Bank of Nigeria statistical bulletin between 1980 and 2011. The error correction model was estimated in determining how non-oil export impacts domestic investment and the granger causality test was conducted to determine the causal relationship among the variables. The findings revealed that the impact of non-oil export on domestic investment was positive but insignificant. The insignificance is as a result of the mono-cultural nature of production skewed towards the oil sector, although the positive coefficient shows that a lot of prospects still exist in the sector. Also, the findings show that while domestic investment granger causes non-oil export, non-oil export did not granger cause domestic investment. Hence, the study the recommended that effort must be made at formulating explicit export promotion policies that will encourage the growth of the non-oil sector in order to make them more viable at generating export earnings for the country and also boost their contribution the level of domestic investments in the country.
Keywords: Non-oil Export, Domestic Investment, Export Promotion, Causality, Nigeria.
JEL Classification: C33, C32, F43

1. Introduction
Exportation can be described as very important in a country's quest to enhance its revenue base and move the economy on the path of growth and economic progress. This is what is described in economic literature as export-led growth. As identified by Abou-Strait (2005), Adenugba and Dipo (2013) and Sheridan (2014), export provides an impetus for growth and is thus a necessary catalyst for the overall development of an economy. Being an important participant in foreign trade, developing countries can be able to generate sufficient foreign capital inflow to drive their growth process. As foreign earnings increase due to export expansion, domestic production capacity tends to expand, employment level increases, unemployment falls and aggregate demand is boosted and domestic investment expands further. Export expansion also helps to

maintain a favourable trade balance consequently leading to a favourable balance of payment position especially for a typical developing country.

In Nigeria where the level of domestic investment is very low and coupled with the fact that oil export which has so far provided the main foreign earnings for the economy is presently facing serious short fall due to the on-going fall in crude oil prices in the international market, it is expedient to source alternative means for raising foreign exchange earnings. This can be done the diversification of the export base of the local economy from crude oil export to non-oil exports to ensure that the economy can be self-sustaining without having to resort to huge debt acquisition. The inability of the Nigerian economy to balance the development of the industrial sector and agricultural sector vis-à-vis the oil sector has been identified as the one of the major reasons while it remains a developing country (Anyanwu *et al.,* 1997; Adenugba and Dipo, 2013).

Recent evidence in Nigeria (Soludo, 2007; Aigbokhan, 2008; Olayiwola and Okodua, 2010; Onodugo *et al,* 2013) was able to identify noticeable contribution of the non-oil sector to the country's economic growth over the last decade. The Central Bank of Nigeria (CBN) has specifically attributed the country's GDP growth from 6.9 per cent in third quarter to 7.1 per cent in the fourth-quarter of 2012 to increase in the contribution of the industrial sector. This is so owing to the fact that, while the performance of the oil sector dwindle as crude oil exports fell by 28.19%, non-oil exports improved by 40.72% in 2009. This helped the country to absorb the global financial shock experienced that year. The National Bureau of Statistics (NBS) also reported that in the fourth quarter of 2011, the non-oil sector grew at 9.07%, which is higher than the 8.93% growth recorded in the last quarter of 2010 (Onodugo *et al,* 2013). It thus implies that the export base of the Nigerian economy from oil to non-oil will provide impetus for a sustained growth process which will fast track domestic investment and reduce unemployment.

It is well documented in literature that developing countries heavily rely on primary products exports (e.g. crude oil and agriculture). And empirical studies from Crespo-Cuaresma and Wörz (2005), Hausmann *et al* (2007), Berg *et al* (2012), Jarreau and Poncet (2012) and Sheridan (2014) has shown that countries that place emphasis on manufacturing exports will achieve a faster economic growth rate than those which depend solely on primary exports. The argument is that countries which export products with a relatively high technological content tend to benefit from positive externalities that positively impact their economic expansion beyond the scope of their imagination. Positive externalities may likely originate from economies of scale and knowledge spillovers. Thus, active participation in the international market can enable a country to acquire better and more efficient production techniques, and it can also make the country benefit from increased specialization as well Sheridan (2014).

Efforts to boost the productivity of the non-oil sector is bound to increase domestic investment in developing countries generally (Fosu, 1996; Alguacil *et al*, 2002; Berg *et al*, 2012; Onodugo *et al*, 2013; Sheridan, 2014) and this is bound to enhance their growth potential in the long run. However, cases of inappropriate policies, misplacement of economic priorities ravaging developing countries, including Nigeria, misdirected credit policies, overvalued exchange rates, inefficient agricultural infrastructure investments, economic mismanagement, inadequate

infrastructural base and poor producer support policies mean that the non-oil sector like manufacturing and agriculture remains weak and inefficient in stimulating domestic investment in Nigeria. To this end, this study answers salient questions such as: to what extent has the non-oil sector influence domestic investment in Nigeria? Is there a causal relationship between non-oil export and domestic investment in Nigeria? What factors can be attributed to the narrow export base in Nigeria? There exists a gap in literature as most of the previous studies only focused on non-oil export and economic growth thereby leaving out the link between non-oil export and domestic investment. This study will not only focus on this link but will also extend the data focusing on Nigerian economy to fill this noticeable gap in literature.

2. Literature Review
2.1 Theoretical Review
Neoclassical Growth Theory
The neoclassical growth came into existence with the work of Robert Solow in 1956. According to the theory, a sustained increase in capital investments will only bring about an increase in the growth rate temporarily, owing to the fact that capital labour ratio increases. As this happens, it forces the marginal product of additional units to its long term growth path and the real gross domestic product rising at the same rate as the labour growth rate and factor to reflect an improvement in productivity. Economists of the Neo-classical doctrine affirmed that there must exists sustained increase in the supply of labour and a higher level of productivity of capital and labour to be able to raise the long term trend rate of growth of an economy. Disparities between countries in terms of their rate of technological change were sighted by the neoclassical economists as being responsible for the variations in their growth rates. The neoclassical theorists also treat improvements in productivity as exogenous variable in their model. This implies that productivity improvements were assumed independent of the amount of capital invested.

Harrod – Domar Growth Model
According to this theory, higher economic growth can be achieved through the expansion of investment. These theorists see investment as an endogeneous variable in the growth model. It is based on a linear production function where output is given by the amount of capital stock (K) multiplied by a constant. In the model, investment generates income and it also through an increase in capital stock augments the economy's productive capacity. In the same vein, the real income and real output will continue to rise as long as there is net investment. To be able to maintain a full employment output and employment level, the real income and real output levels are expected to increase at the same rate with the productivity of capital stock. Therefore, to guarantee long run full employment, net investment vis-à-vis real income growth must continuously increase sufficiently enough to be able to accommodate a full capacity use of a rising capital stock. The implication of this is that a net addition to stock of capital (new investment) goes a long way to expand national income flow of the economy. It is assumed that national savings ratio is a fixed proportion of output and total savings level determines total investment (i.e. $S = SY$ which is also equal to net investment).

The equation of the net investment is $I = \Delta K = K\Delta Y$. Since K has a direct relationship with output, then $SY = K\Delta Y$ meaning that $\Delta Y/Y$ is the GDP growth rate determined by the net

savings ratio (s) and the national capital (K). Where we assumed that government is absent, the national savings ratio will positively intensify national output growth rate. This implies that higher national savings and investment out of a given GDP will generate greater growth rate of national income and lesser growth rate of capital output ratio.

Keynes Theory of Investment
This was put forward by Maynard Keynes in 1936. A key feature of the Keynesian investment analysis centers on the affirmation that even though savings and investment are equal ex-post, both must not necessarily be equal ex-ante. This is because both savings and investment decisions can be taken separately by different decision makers and if this happens, there will be no reason for ex-ante savings to be equal to ex-ante investment in the economy. The theory of investment led to the formation of the accelerator theory. The accelerator theory makes investment a linear proportion output changes. In the theory, it is assumed that profitability, capital costs and expectations do not play any role in the model. Keynesian economists often favoured the accelerator theory of investment while also ignoring the role played by factor costs which has being at the fore front of the establishment of developments in investment theories. According to the proponents of this theory, marginal efficiency of capital (MEC) is defined as the discount rate at which annual returns on investment that is expected from a given capital asset during its entire life time just equal to its cost of supply.

Endogenous Growth Theory
Endogeneous growth proponents assert that productivity improvements are directly attributable to a fast pace in innovative activities and human capital investment. Endogeneous growth theorists believe that innovation should be encouraged by both government and private sectors and should also provide invention incentives for individual and business firms. It is also believed that accumulation of knowledge is a strong determinant of economic growth. It implies that knowledge industries like telecommunication, software, electronics, or biotechnology are important in the developing strides of developed countries. Endogenous growth theory also affirms the existence of positive externalities which are to be exploited from developing a high value added knowledge economy capable of developing and maintaining a competitive advantageous growth within the global economy. The theory also posit that technological progress should not be taken as a constant in a growth model and that government policies can be utilized to permanently raise the growth rate only if they lead to more competition in the market place and in the process, helps to stimulate both product and process innovations simultaneously. They assume increasing returns to scale from the new investment in capital. They called for an increase in private sector investment as it will provide the needed impetus for technical progress, and that the key ingredient of long term growth is investment in human capital.

2.2 Empirical Review
In this section, we present a plethora of literature that has focused on the subject matter of non-oil export and economic growth. Feder (1983) argues for export as the engine of growth by calling for efforts to be intensified towards enhancing production for export. This proposition inspired Lim (2006) which argues that it was found in historical data for thirty-one years that exports propelled the Sri-Lankan economic growth. However, the study noted with sadness that

although export boosted economic growth in Sri-Lanka over the period, but did not provide adequate employment for fast growing population. In the same vein, several studies have been able to establish that a positive relationship exist between exports and economic growth in developing countries (Balassa, 1978; Edwards, 1993; Mookerjee, 2006; Sheridan, 2014).

Tyler (1981) provided some evidence on demand for money in some developing economies. The study aligned successes that have been recorded in Taiwan, Singapore, Korea, and Hong Kong with export promotion strategies. It asserts that countries focused on promoting export oriented diversification policies were observed to grow at a faster pace than others which do not diversify their export base. Egerue (2006) which focused on the role of banking in the early stage of industrialization maintained that due to the unpredictability of oil market, there is the need for Nigeria to diversify its economy through non-oil export. This is in line with Tyler (1981) proposition that export diversification will enhance economic growth.

Maizels (1968) researched into the relationship between exports and economic growth in some sixteen developing economies and observed that the study found no strong relationship between export and the economic growth of the various countries probably due to the small sample size or the relative importance of exports in national income in each country was not taken into cognisance. Massel and Fitch (2002) extended the study to about eleven countries in Latin America by employing a simple equation model. The study found that export earnings had a remarkable impact on the growth of GDP in the various countries considered.

Michaely (2007) adopted a single equation model to carry out an analysis on international statistical comparison of export performance and economic growth. It was observed that the correspondence between growth in per capita income and the ratio of export to GNP was significantly positive for a sample of forty less developed countries. Bela (2008) provided a comprehensive study of eleven countries with strong industrial base. It found a significant and positive relationship between export promotion and economic growth for less developed countries. It therefore suggested that countries which neglect their export sector through discriminatory economic policies are likely to settle for lower economic growth rates.

Ilegbinosa *et al* (2012) investigated the impact of macroeconomic variables on Nigeria's economic performance. The study incorporated non-oil export, agricultural sector, manufacturing sub-sector and gross domestic product as the dependent variables that exchange rate, government capital expenditure and government recurrent expenditure positively influenced non-oil export, agricultural sector, manufacturing sub-sector and gross domestic product, while interest rate negatively influenced the dependent variables. They therefore called for more investment in non-oil exports to boost the performance of the Nigerian economy.

Adenugba and Dipo (2013) studied non-oil exports in economic growth of Nigeria. The study which looked at the performance of Nigeria's export promotion strategies revealed that non–oil exports have performed below expectations in Nigeria therefore doubting the effectiveness of export promotion strategies that the Nigerian economy had adopted. It however concluded that the country is far from diversifying its export base away from crude oil thereby calling for the expansion commodities market in the country.

Sheridan (2014) explored manufacturing exports and economic growth in some developing countries. The study enquired into the reasons why developing countries still rely on primary goods as their main source of export earnings when there are evidence suggesting that they could earn higher foreign earnings from exporting manufactured products. The cross-section study found that although increasing manufacturing exports is important for sustained growth, the relationship only holds for a threshold level of development and that such threshold cannot be reached until a country achieves a minimum level of human capital. This is when it will be beneficial to transit from primary export reliance to manufactured exports.

3. Theoretical Framework and Methodology
3.1 Keynesian Investment Theory
According to Keynes analysis of investment, the investment function gives a summary of variables that influence the levels of aggregate investment. This can be expressed in a simplified form as:

$$I = I_0 + I_r \tag{1}$$

Where, I is aggregate investment, I_0 is a constant and I_r is the interest rate. Interest rate is negatively related to aggregate investment since interest rate increases the cost of capital for investment spending. However, this has further been expanded to include national income. Hence the function is now being expressed as

$$I = f(Y, r) \tag{2}$$

Where Y is national income (which includes everything that affects economic growth) and can be further extended to include non-oil export and other macroeconomic variables that can affect investment.

The theory above can be described as most appropriate for the study because the Keynesian theory of investment happens to be the only theory that specifically established a link on how investment in an economy can be determined by national income and interest rate. Moreover, the national income is dependent on other macroeconomic variables that tend to also affect investment in an economy such as non-oil export, inflation rate, exchange rate and total labour force. Thus, the theory helps to establish a link on how non-oil exports can actually affect the investment in an economy. Based on this theory, the empirical model is specified

$$Y = f(nonoil, inf, exch, tlf) \tag{3}$$

Where, nonoil = non-oil export, inf = inflation rate, exch = exchange rate and tlf = total labour force. The national income of an economy can be affected positively by the level of export, negatively by high levels of inflation rate, while the impact of exchange rate on the national income can be positive or negative. However, total labour force is expected to have a positive impact on national income. Hence, aggregate investment *(I)* will then be expressed as:

$$I = f(nonoil, inf, exch, tlf, r) \tag{4}$$
$$GCF = f(nonoil, inf, exch, tlf, int) \tag{5}$$

Where GCF is Gross capital formation is the proxy for aggregate domestic investment, int is the interest rate. The econometric form of the model is as shown in equation (5) above:

$$GCF = \beta_0 + \beta_1 Nonoil_t + \beta_2 Inf_t + \beta_3 Int_t + \beta_4 Exch_t + \beta_5 Tlf_t + \mu_t \tag{6}$$

Transforming into natural logarithm form, we have,

$$LnGCF = \beta_0 + \beta_1 LnNonoil_t + \beta_2 LnInf_t + \beta_3 LnInt_t + \beta_4 LnExch_t + \beta_5 LnTlf_t + \mu_t \qquad (7)$$

The a priori expectation patterns of the behaviour of the independent variables in terms of their parameters to be estimated are: $b_1 > 0$, $b_2 < 0$, $b_3 > /< 0$, $b_4 > /< 0$, $b_5 > 0$

3.2 Estimation Techniques

The estimation technique that is adopted for the study is the Ordinary Least Square (OLS) method. The OLS estimating techniques will be used because it possesses a unique property of Best Linear Unbiased Estimator (BLUE) when compared to other estimating techniques. The OLS method also possesses the desirable properties of un-biasness, consistency, minimum variance and efficiency. It is also simple and easy to understand (Koutsoyannis: 1971; Gujarati: 2004). In demonstrating the application of the OLS method, the preliminary estimates of the variables is first converted into their natural logarithm form to match the small values of inflation rate. Hence we now have them as; log of gross capital formation (domestic investment), log of non-oil export, inflation rate, log of exchange rate and log of real interest rate.

These variables in their natural logarithm form will now be tested for stationary by making use of Augmented Dickey-Fuller (ADF) unit root test in order to correct the presence of seasonal variation. If any of the variables are proven to contain unit root, that variable will be made stationary by appropriate differencing. It is expected that the series do not contain unit root in order to find relationship among the variables in the long run. This will then be followed by the Johansen's co-integration test in order to test for the long run co-movement among the economic variables. Before any useful conclusion could be made regarding relationships between the series it is of importance that co-integration first exists.

Moreover, if the estimates happen to show the existence of co-integration their differenced form shall be adjusted back to their long run form by making use of error correction mechanism (ECM). The model shall also employ the granger causality analysis in order to test if there exist a bidirectional relationship between non-oil export and domestic investment. Descriptive analysis, will in this research work also be adopted in analyzing the trend and statistics of the different variables mentioned above over the time period specified.

Data used will majorly be sourced from secondary sources. All the data were collected from Central Bank of Nigeria, Annual Statistical Bulletin (2013) covering a period of 1980-2011 and this data are measured on an annual basis.

4. Stylised Facts

FIG 1: Trend of domestic investment and exchange rate
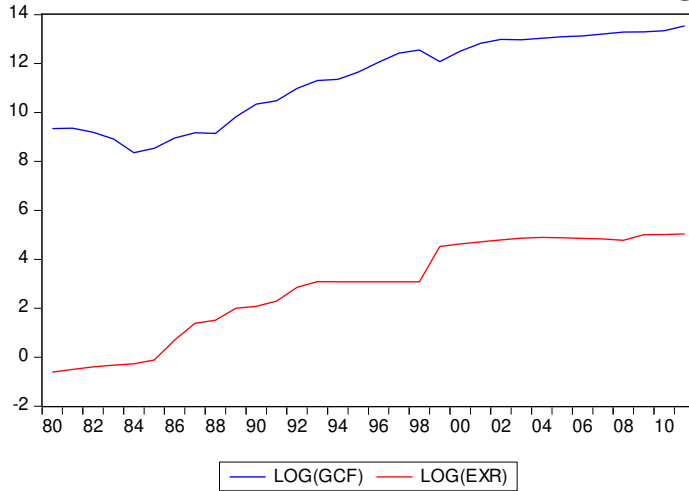

As a result of government increase in public expenditure over the years, the gross capital formation has been rising. The increase in 2000 after a sharp decline in 1999 is an indication of increase in government spending which could have been as a result of the positive terms of trade shock following rising oil prices; the income effect of this shock enabled an expansion in government expenditure, which together with the buoyant oil sector boosted growth. However, recent increases in domestic investment in 2010 and 2011 have been significantly contributed by increment in the level of export as a result of diversification policies supported by devaluation of the naira through higher exchange rates. Hence, recent trend of exchange rate in Nigeria has been rising. Although, as a result of the tightening monetary policy at the beginning of 2001, there were nascent signs that the naira had strengthened; the naira appreciated toN111.94 but however, depreciated the following year to about N120.97 and has continue to depreciate since then through higher exchange rates in order to favour higher export growth and so boost domestic investment.

**FIG 2: Trend of domestic investment and non-oil export**
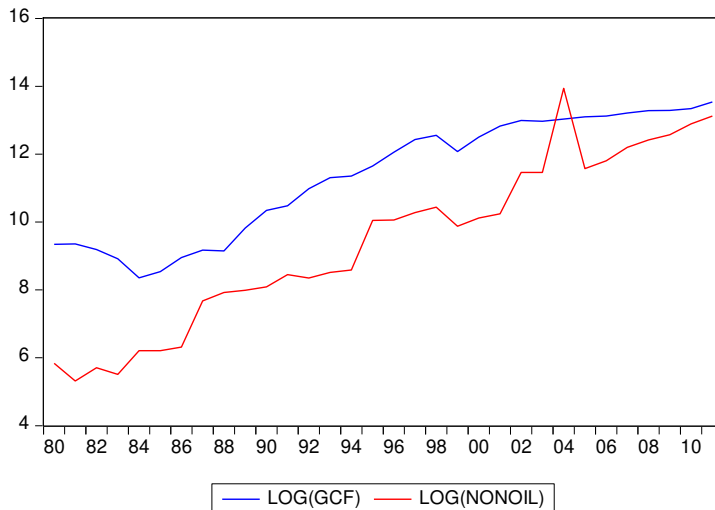
The trend above shows that non-oil export throughout the 80s and 90s was relatively low which is as a result of the dominance of the oil sector, and this resulted in the low trend also observed in domestic investment during the same period. Hence, due to lack of diversification of production, a larger share of the export has been concentrated in the oil sector; leading to low overall investment. However, the performance of the Nigerian non-oil sector has been relatively impressive in recent times. For example, the International Monetary Fund (IMF) 2008 is of the view that the robust non-oil sector growth in the 2007 fiscal year had offset the drag from a decline in oil production in the Nigerian economy. As a result, of this increase in non-oil export, we also observed an increase in the overall domestic investment of Nigeria; which goes to show that domestic has a strong influence in bringing about higher growth in investment.

FIG 3: Trend of domestic investment and real interest rate
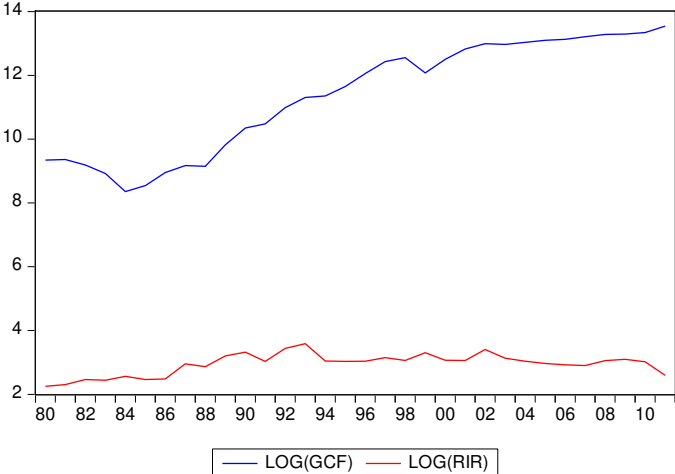
Available data indicate that interest rates declined generally in 2000, reflecting the liquidity overhang in the financial system. Since early 2001, the Central Bank of Nigeria (CBN) has tightened the monetary policy stance. This has been accompanied by increases in interest rate in order to contain the inflationary pressure that resulted from rising public expenditure on domestic investment.

FIG 4: Trend of domestic investment and inflation rate

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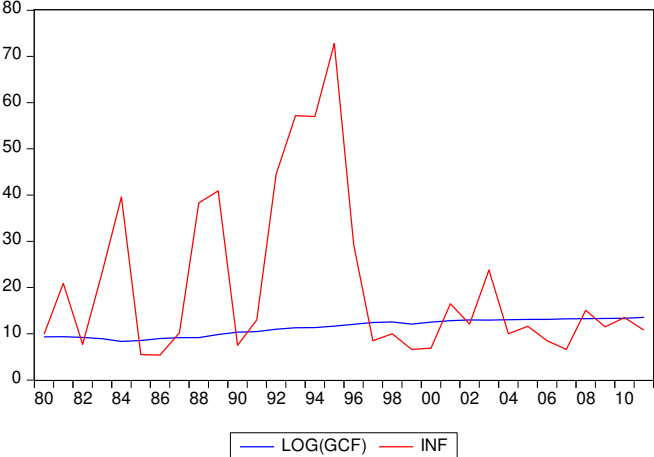
Inflation rate has been a disturbing factor to domestic investment for most of Nigeria's history. It has followed a fluctuating trend reaching its highest in 1995. The large government expenditure provided for in the 2001 budget further aggravated inflationary pressures.

However, following the Central Bank of Nigeria's tightening monetary policy it was able to contain inflation at 10.3% in December 2011, it moreover jumped to 12.6% in January 2012 mainly as a result of the partial removal of the fuel subsidy(CBN, 2012).

FIG 5: Trend of domestic investment and labour force
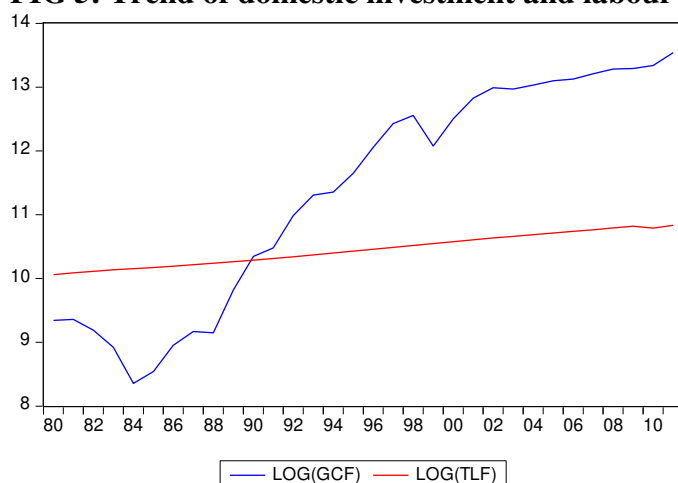
The trend above shows that even though total labour force has been rising slowly, it has been able to help propagate the increase in gross capital formation. This shows that the level of manpower available has a positive influence on the growth of domestic investment.

Table 1:   Summary Statistics of the Variables

	GCF	EXR	NONOIL	RIR	INF	TLF
Mean	232579.4	57.42902	106559.0	20.04969	20.46562	35578.00
Median	143659.5	21.88610	21294.50	20.81000	11.85000	34312.41
Maximum	758254.1	153.8616	1133309.	36.09000	72.80000	50734.61
Minimum	4257.000	0.546400	203.2000	9.500000	5.400000	23354.74
Std. Dev.	237276.5	59.83352	224654.1	6.331297	17.72863	8740.708
Skewness	0.616638	0.443975	3.342740	0.308397	1.451602	0.273719
Kurtosis	1.964750	1.380964	14.98070	3.005654	4.125516	1.727857
Jarque-Bera	3.456948	4.546310	250.9772	0.507289	12.92718	2.557380
Probability	0.177555	0.102987	0.000000	0.775967	0.001559	0.278402
Observations	32	32	32	32	32	32

The summary statistics of the variables: GCF (gross capital formation), EXR (exchange rate), NONOIL (nonoil export), RIR (real interest rate) and INF (inflation rate) are as shown in Table 4.0 above. The average values for all the variables were positive, however, the mean value for GCF which is 232579.4 units was the highest for the period. This is followed by non-oil export at 106559.0 units. The maximum and minimum indicates the highest points and lowest points of the variables throughout the study period. The highest value for non-oil export was N1133309 which occurred in 2004 which must have come as a result of recent diversification of production to more sectors of the economy while its lowest value was N203.2 in the year 1981 which is a result of recession coupled with a mono-cultural system of production. Volatility measured by standard deviation indicates that GCF also had the highest level of volatility at 237276.5 while real interest rate was the least volatile at 6.33 units. The values of all the variables, confirms that they positively skewed slightly away from the normal distribution. The values of non-oil export and inflation rate which are all above the kurtosis of 3, the normal distribution point, all indicates that they are leptokurtic. The Jarque-Bera probability of zero for NONOIL and 0.0015 for INFLATION which are less than the 1% level of significance ($P < 0.01$) further reveals a statistically significant deviation of the data from normality.

5. Empirical Result

Table 2: Unit root Test Result

	ADF	1%	5%	Remark	Order
D(LOG(GCF),2)	-3.960941	-3.670170	-2.963972	Stationary	I (1)
D(LOG(NONOIL),2)	-8.659592	-3.670170	-2.963972	Stationary	I (1)
D(EXR,2)	-4.787272	-3.670170	-2.963972	Stationary	I (1)
D(RIR,2)	-6.291104	-3.670170	-2.963972	Stationary	I (1)
D(INF,2)	-5.526632	-3.670170	-2.963972	Stationary	I (1)
D(TLF,2)	-6.614922	-3.670170	-2.963972	Stationary	I (1)

Source: Authors' Computation

In table 2, we present the unit root test result. All the variables employed in the study are stationary at first difference. Thus, we can proceed to estimate the error correction model.

Table 3: Co-Integration Test

EIGEN VALUE	TRACE STATISTICS	5% CRITICAL VALUE	PROB.**	HYPOTHESISED NO. OF CE$_S$
0.856466	151.0647	95.75366	0.0000	None *
0.686277	92.82918	69.81889	0.0003	At most 1 *
0.648535	58.05185	47.85613	0.0041	At most 2 *
0.402668	26.68251	29.79707	0.1096	At most 3
0.311953	11.22403	15.49471	0.1981	At most 4
0.000237	0.007097	3.841466	0.9323	At most 5

Table 3 above indicates that there are three cointegrating equations at 5% level of significance. Hence, we reject the null hypothesis of no cointegration among the variables. We then conclude that long run relationship exist among the variables employed in the model at 5% significance level.

Table 4: Error Correction Model

DEPENDENT VARIABLE: D(LOG(GCF)

Variable	Coefficient	Standard Error	T-statistic	Prob.
C	0.034278	0.041074	0.834538	0.4149
D(LOG(GCF(-2))	-0.861907	0.155128	-5.556118	0.0000
D(LOG(EXR(-1))	0.426327	0.108578	3.926443	0.0010
D(LOG(EXR(-3))	0.482088	0.138395	3.483411	0.0027
D(LOG(NONOIL(-1))	0.061509	0.039594	1.553511	0.1377
D(LOG(RIR(-3))	-0.193290	0.178350	-1.083768	0.2928
D(INF(-3),2)	0.006539	0.001886	3.466494	0.0028
D(LOG(TLF(-3))	-45.02596	16.82650	-2.675896	0.0154
ECM(-1)	-0.363800	0.152195	-2.390362	0.0280

R-squared	0.729320		**F-statistic**	6.062414
Adjusted R-squared	0.609018		**Prob (F-statistic)**	0.000745
Durbin-Watson stat	1.733350			

Source Authors' Computation

The result above revealed that all the independent variables except for non-oil export and real interest rate were statistically significant, at 5% level of significance. On the basis of "apriori" expectation, while the coefficients of non-oil export, real interest rate and exchange rate are consistent, however, the coefficients of inflation rate and total labour force did not conform. Also, gross capital formation of past two years which is supposed to have a positive impact on current year's gross capital formation was however negative. The coefficients of these variables explained that, at 5% level of significance a unit (increase) in gross capital formation of past two years brought a 0.861907 units change (decrease) in the current year gross capital formation. Also, a unit change (increase) in total labour force of past three years brought about a 45.02596 units (decrease) in current domestic investment represented by gross capital formation. However, the coefficients of past year's and past three year's exchange rate both had positive impacts on gross capital formation. More so, the coefficient of inflation rate indicates that a unit increase in the variable had a 0.006539 units increase in gross capital formation. Although, the coefficients of non-oil export of previous year and real interest of past three years in consonance with the "a priori" expectation were respectively positive and negative, their impact on domestic investment were however insignificant at the 5% significance level. The R^2 (coefficient of determination) shows that 72% of the total variation in the dependent variable (gross capital formation) can be explained by the explanatory variables and this drops to about 60% after adjusting for degree of freedom which is still significant. The Durbin-Watson statistic of 1.73 shows the absence of serial autocorrelation meaning that there is independence of observation in the error terms. The F-statistic reported in the lower panel of the table gives the goodness of fit of the model. The F-statistic is approximately 6.062 with a Probability of0.000745. The significance of this value implies that the data used in the estimation fitted well into the regression equation, hence the model is adequate in explaining the impact of non-oil export on domestic investment in Nigeria. That is the independent variables jointly have a significant influence on the dependent variable. In the model, the error correction term ECM(-1) is well specified and correctly signed. The coefficient of the ECM(-1) is approximately -0.36. It also means that about 36 percent departure from long run equilibrium is corrected in the short run. The negative sign in the ECM(-1) confirms the existence of co-integrating relationship.

The implication of the regression result above is a confirmation of the dominance of the oil sector in Nigeria; the mono-cultural nature of the production in Nigeria has made the allocation of resources to be skewed in favour of the oil sector at the expense of the non-oil sector. Hence, the neglect of the non-oil export over the years has led to its insignificant contribution to the domestic investment in Nigeria even though it has the potential as indicated by its positive value. The negative value of real interest rate is as a result of the CBN's tight monetary policy which is primarily aimed at inflation reduction; by increasing the interest rate, inflation caused by rising investment spending will be contained. Also, the positive coefficients of past year's exchange rate and past two year's exchange rate is evidence of naira depreciation over the years in Nigeria which has helped to make exports cheaper and the increase in export has led to more investment in the country.

Table 5: Granger Causality Test

Null Hypothesis	F-Values	P-Values	Inferences
NONOIL does not Granger Cause GCF	0.10158	0.9038	Accepted
GCF does not Granger Cause NONOIL	8.85055	0.0012	Rejected
NONOIL(-1) does not Granger Cause GCF	0.12658	0.8817	Accepted
GCF does not Granger Cause NONOIL(-1)	5.04003	0.0149	Rejected
NONOIL(-2) does not Granger Cause GCF	0.06318	0.9389	Accepted
GCF does not Granger Cause NONOIL(-2)	3.81188	0.0372	Rejected
NONOIL does not Granger Cause GCF(-1)	0.00277	0.9972	Accepted
GCF(-1) does not Granger Cause NONOIL	7.53074	0.0029	Rejected
NONOIL does not Granger Cause GCF(-2)	0.49910	0.6135	Accepted
GCF(-2) does not Granger Cause NONOIL	7.84811	0.0025	Rejected

Source Authors' Computation

6. Conclusion and Recommendation

With the result from the findings, we can infer that owing to lack of diversification of the Nigerian economy from oil to non-oil, non-oil export was found to have an insignificant impact on domestic investment. Also result obtained from the causality tests indicated that there exist a one-way causality between non-oil export and domestic investment in Nigeria. That means while domestic investment represented by gross capital formation has a significant influence on non-oil export, however, non-oil export impact on domestic investment is however not significant. The study reveals that the impact of non-oil export has the potential to bring about economic growth as indicated by its positive value, however, as a result of macroeconomic mismanagement in the Nigerian economy over the years; this effect is still yet to be substantially or significantly felt. Hence the non-oil export sector remains one of the mainstreams in the Nigerian economy that has the power to influence or impact on economic growth and therefore it is important for the government and other policy stakeholders to consider some package of recommendations on ways to revitalize the sector and consolidate its gains.

In view of the importance of the non-oil export as part of her current transformation agenda the government must formulate an explicit export promotion programme based on principles of comparative advantage in order to encourage the growth of sectors such as the agriculture. Also the encouragement of production and exportation of value added commodities should be

propagated because of its relatively high price and income elasticity of demand, storability and adaptability over primary products such as processed agricultural products or foods and manufactured goods. The government should encourage private investment, both local and foreign, through adequate provision of infrastructures, and encouragement of macroeconomic stability such as low inflation rate and stable exchange rate and political stability such reduction in dispute and terrorism. The export base should be diversified in favour of non-oil commodities not only to increase their contribution to GDP but also to help cushion the effect of price shocks in the international oil market and finally, the Nigerian Export Promotion Council (NEPC) should make efforts to expand the export capacity of non-oil firms.

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