THE IMPACT OF NON-OIL EXPORT ON NIGERIA’S ECONOMIC DEVELOPMENT (1981 - 2014)

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Abstract
The study investigates the impact of non-oil export on Nigeria’s economic development. The mono economy nature of Nigeria and the need to diversify the economy form part of the motivation for the study. The study used real gross domestic product as proxy for economic development and expressed it as a function of non-oil export volume, real exchange rate and inflation rate. The study applied ordinary least square estimating technique and the result show that non-oil export exhibits a significant positive relationship with real gross domestic product. This indicates that if non-oil export volume is increased, it is going to lead to a significant improvement in the Nigeria’s level of economic development. However, other variables (real exchange rate and inflation rate) do not have individual significant impact on economic development but jointly they can significantly influence economic development. The study made some recommendation for diversification of the export base, provision of infrastructures and improvement in the local output so as to cope with both the internal and external demands if the positive effects of the non-oil export on economic development is to be achieved. Keywords: Non-oil export, economic development, diversification, ordinary least square, Nigeria.

1.1 Introduction
Obviously, the reason countries engage in export activity is because export is an engine for economic growth and development and thus creates high value employment. Foreign trade creates an avenue for foreign capital to flow into a country. This increases the earnings of the country thereby creating an avenue for growth by raising the national income of the country. Also the level of employment in the economy increases as a higher demand for exports will require more production which will in turn lead to the employment of more people.

Non-oil exports are the products which are produced within the country in the agricultural, manufacturing and industrial sectors that are sent outside the country in order to generate revenue for the growth of the economy excluding oil product. In a developing country like Nigeria, export trade came into focus in 1926 when the economy was being managed by the colonial master. During this period, Nigeria was a major world producer and exporter of primary agricultural products like cocoa, cotton groundnut, timber, palm products and rubber. Agriculture was the mainstay of the Nigerian economy and provided employment to about 75% of the country’s labour force and accounted for about
65% of GDP and 80% of government revenue. The revenue from at these non-oil product were was used for infrastructural and socio economic development in all parts of the country to date as a result of the emergency of oil from the Nigeria Delta region of the country. The mono-cultural economy of Nigeria started at this point resulting from over dependence on crude oil export for her foreign exchange.

This has helped in no small measure in diverging the role of Agriculture in the nation’s development. This situation is worsened by the almost total neglect of the agricultural sector. The contribution of agriculture to GDP therefore declined from 65% to 30% in 1980. Economist suggests revitalizing the economy via agricultural, manufacturing and solid minerals for sustainable development and unity of the country. Soludo (2002) noted that the easiest way to fastening nation’s economic recovery and development is to broaden export base of non-oil export which will invigorate the non-oil sectors of the economy and help place the economy on the sustainable development path. It is for this reason this research is being proposed to review structure and performance of the non-oil sector take a look at the policies that have been embarked upon to promote non-oil export, the problems facing, class of exports and its prospect and contribution in connection with the economic development of Nigeria. In light of this, various past administration have introduced measures and established special institutions to boast non-oil exports and stabilize the economy. In 1975, General Olusegun Obasanjo introduced “Operation feed the Nation” (OFN). This was followed by the establishment of two river basin development authorities in 1977, 1978 and 1979. Also 4,000 hectares of mechanized farms was established in each of the 19 states then by the Federal Government. In 1979, “Green Revolution was launched and various committees was set up its implementation”. In 1986, the Babangnja administration introduces “The structural Adjustment programme” (SAP). However, in 1976, the Federal Government established the Nigerian Export Promotion Council (NEPC) which was charged with the responsibility of administering the various incentive schemes towards promoting export of gods made in Nigeria. In view of the current need for economic transformation in Nigeria, therefore, this study aims at unraveling since 2015, economic growth remains mated growth averaged 1.9% in 2018 and remained stable at 2% in the first half of 2019.

Nigeria is yet to attain the ranks of a developed economy due to lack of structural change. Osuntogun et al (1997) asserts that the factor crucial to this lack of economic progress is the lack of economic diversification which has caused the economy to rely heavily on crude, oil for revenue and as the major export commodity in the economy. Nigeria’s economy after the amalgamation of the country in 1914 was agriculture commodity driven; groundnut and cotton form the North, cocoa from the West and palm oil from the East was the mainstay of the nation’s GDP. Even after independence in 1960, agriculture still retains its position as the biggest contribution to the economy. The discovery of oil and the explosion on the price of crude oil which resulted to a barge receipt of foreign exchange by the country led to the neglect of strong agricultural and manufacturing bases as well as the potential revenues they can generate in favour of an unhealthy dependence on crude oil (Pius, 20112). This mono cultural situation brought untold hardship on the people. Currently, the uncertainty and fluctuation in oil prices in the international market has in no small measure stated the
developmental efforts of the various government. The dominance of oil export also brought about an unprecedented expansion in the volume of import of various categories of goods by both public and private sector.

Agriculture has fasted to keep pace with Nigeria rapid population growth so that a country which once exports food now relies on imports to sustain itself. This sector has continued to perform below its full potential. According to Mrs. Ezekwesiri, the former minister of solid minerals during her acceptance speech in Abuja said that agriculture and the solid material hold the key to Nigeria fortune as if well harnessed, the revenue from these sectors can convert the economy in the near furfures. It is therefore worthy to note that, the inability of both agricultural and manufacturing sectors to attract much foreign exchange revenue and contribute significantly to GDP when compared to oil sector show that all is not well. It is for this reason this research is being proposed to review the structure and performance of the non-oil sector, and the contribution in connection with the economic development in Nigeria

Exports play a vital role in the growth of any economy. Debate on the role of exports on economic growth and development dates back to Robertson (1938) who propose that export is the engine to economic growth. This view has received empirical support as regards the developed countries (Heller and porter, 1978). A study by FOSU (1990) in the sub-Saharan African show that economic growth is stimulated by exports. At the core of the structural adjustment programme being implemented by many African countries is the belief that exports enhance economic growth hence the emphasis on its liberalization.

Looking at Nigeria, Fajana (1979) used the two gap model to show that Nigeria’s economic growth is positively responsive to exports. In light of this, the Nigerian economy left promotion strategies or export-led growth approach. As early as the 1970s, studies were published showing that developing countries that pursued an export – led approach experienced far more rapid economic growth than did countries with protectionist policies. The four tigers (Hong Kong, Taiwan, Singapore and South Korea) were the subject of most of this early research, but the second were of Asia newly industrialized countries or NICS (Indonesia, Thailand, Malaysia and China) has been very successful in pursuing export markets. As a result, these countries have grown rapidly. India, Mexico and Brazil could be added as recent converts to this approach (Dum and Multi, 2004).

Abou-Strait (2005) found out that export of goods and services represent one of the most important sources of foreign exchange income that ease the pressure on the balance of payment and create employment opportunities. Also according to Frankel and Romer (1999), trade increase GDP which ultimately increase the income per person. In other words, trade not only enhances economic growth but also a useful tool in achieving economic development provided there are other structural and institutional changes in the economy and as Morton and Tullock (1976), noted, international trade brings gains to a nation and it acts as a stimulus to growth.

Export trade is an instrument for growth. It increases foreign exchange earning, improves balance of payment position, creates employment and development of export oriented industries in the manufacturing sector and improves government revenue through taxes, levies and tariffs. These
benefits will in turn enhance the process of growth and development in such economy. However, before these benefits can be fully realized, the structure and direction of these export must be carefully tailored such that the economy will not depend on only one sector for the supply of needed foreign exchange (Onayemi and Akintoye, 2009). Hence, there is need for economic diversification in the economy.

According to Abebefe (1995), Nigeria’s over dependence on crude oil is dangerous for two reasons- one being because crude is a wasting asset with a proven reserve, which would eventually become depleted and secondly, the vagaries of the oil market has resulted in a significant decline in the earnings. Osuntokun and Edordu (2001), investigated on the potentials for diversifying Nigeria’s non-oil export to non-traditional markets and found out that Nigeria could not fully utilize its potential because the implementation of export promotion policies followed key market concentration strategy. That is, concentration on developed countries like Europe or USA, thereby resulting in less attention to gathering trade facilitating information that may further diversity Nigeria’s export market to less developed counties such as the countries in sub-Saharan African. This inter-regional trade, if conducted will require lower transportation costs and enhance the competitiveness of commodities traded and ensure market clearing of export commodities thereby reducing such problems faced by exports to developed countries.

Export diversification is important because it will play an important role in reducing the variability of the export earnings of developing countries and raising the growth rates of both exports and domestic output (Lyakurwa 1991). Osuntogun, Edordu and Oramah (1991) warned that the composition of a diversifying country’s exports has to match the import structure of the target countries.

The world trade organization (2010) posited that diversification of countries export base increase local production, employment, income and economic growth developing countries that export large amounts of a small products have export revenues that are quite volatile. Many OPEC members derive more than 80 percent of their export revenues from oil and gas and as a result of the decline in oil prices from the early `980s to 2010 export receipts reduced. According to Dunn and Mutti (2004), export promotion strategy does enhances economic growth but they also pointed out that the strategy rests upon the diversification and expansion of non-traditional exports. Hence, the four Asian Tigers (South Korea, Singapore, Taiwan and Hong Kong) achieved economic progress through export promotion.

Opare (2010) asserts that exports are the bed-rock of any economic development which is meaningfully centred on non-oil export in most countries of the world. Furthermore promoting non-oil export products will being about a reduction of the nation’s level of dependence on crude oil or what he describes as “Monoculture foreign trade product” Osuntogun, Edordu and Oramah (1997) discovered that the core of the export-led strategy is the diversification of export products and export markets to minimize risks and ensure a more stable and sustainable current account position. Lewis (1980) also found that diversification of exports will help countries achieve and maintain a high level of economic growth.
1.2 Methodology
This explains the methodology of the study which involves data identification and sources, model specification, estimation techniques, evaluation techniques using appropriate statistical tools.

Data identification and sources
Data on non-oil export, real exchange rate, inflation rate and real gross domestic product were collected from the central bank of Nigeria (CBN) statistical bulletin, Vol.25, 2014 edition. The data to be use covered the period of 1981-2014 relationship with one another especially the explained variable and the explanatory variables. The evaluation is based on whether the coefficients conform to economic postulations. The expected relationship is that non-oil export should have significant effect on real gross domestic product.

Model Specification
Based on earlier works done on the subject, a model was drawn up for the purpose of this study. The model will help to verify the impact of non-oil export earning on the economic development of the nation for the period of 1981-2014. According to the model and for the purpose of this study, the RGDP of the nation depends is on the receipts form non-oil commodity export and the exchange rate. The specification in implicit form is

\[ \text{RGDP} = F (\text{NONX, EXR, INF}) \]

Where

\[ \text{RGDP} = \text{Real Gross Domestic Product} \]

Assuring a linear relationship amongst the variables, the models becomes

\[ Y = b_0 + b_1 \text{NONX} + b_2 \text{EXR} + b_3 \text{INF} + U \]

Where

\[ b_0, b_1, b_2, b_3, \] are unknown parameter to be estimated and \( u \) is the error term

Estimating Techniques
The method of analysis follows the procedure adopted by Egbulorw (2005). The analysis is carried out on the basis of economic and econometric criterion (A prior) which is determined by the principle of economic theory and refers to the sign and size of the parameters statistical criterion that looks at the goodness of fit test to validate the goodness of fit of the estimated result will also be adopted. This requires actualizing the proportions of variation in the economic growth. The ordinary least square (OLS) estimating technique will be used to validate the estimated result through the F-test, T-test, condition index and Durbin Weston statistic techniques will indicate whether the parameters are statistically significant or not and if there are multicoll-linearity or not and autocorrelation or not.
1.3 Results and Discussion
This section of the study presents the empirical results and interpretation of the results are also made. The impact of non-oil export on Nigeria’s economic development is carried out using the computer regression result. In order to determine the exact relationship between the variables, the data were fitted into a regression equation using ordinary least square (OLS) technique, particularly multiple regression techniques. The model attempts to determine the relationship between non-oil export (NONX), real exchange rate (EXR), inflation rate (INF) and real gross domestic product (RGDP).

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R-square</th>
<th>Adjusted R-Square</th>
<th>Durbin Waston</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.963</td>
<td>0.928</td>
<td>0.920</td>
<td>0.783</td>
</tr>
</tbody>
</table>

Dependent variable (RGDP)
Source: Author’s computation

(b) Coefficients

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>Standard error</th>
<th>T</th>
<th>Significant</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>187771.817</td>
<td>23037.736</td>
<td>8.151</td>
<td>0.000</td>
<td>123.966</td>
</tr>
<tr>
<td>NONX</td>
<td>0.536</td>
<td>0.081</td>
<td>6.629</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>EXR</td>
<td>2110.533</td>
<td>252.982</td>
<td>8.343</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>INF</td>
<td>565.557</td>
<td>660.739</td>
<td>0.856</td>
<td>0.399</td>
<td></td>
</tr>
</tbody>
</table>

Source: Author’s computation

(c) Collinearity Diagnosis

<table>
<thead>
<tr>
<th></th>
<th>Eigen value</th>
<th>Condition index (C.I)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>2.683</td>
<td>1.000</td>
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<tr>
<td>NONX</td>
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<td>1.678</td>
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<tr>
<td>EXR</td>
<td>0.247</td>
<td>3.297</td>
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<tr>
<td>INF</td>
<td>0.117</td>
<td>4.797</td>
</tr>
</tbody>
</table>

Source: Author’s computation

From the computer regression result above, the regression line is given as RGDP = B₀ + B₁ NONX + B₂ EXR + B₃ INF + U₁

RGDO = 187771.817 + 0.536 NONX + 2110.533

EXR + 565.557 INF.

From the regression line above;
Apriori Test
The intercept $B_0 = 187771.817$ show that RGDP has a positive sign. The RGDP will be 187771.817 when Non-oil export (NONX), real exchange rate (EXR) and inflation rate (INF) are zero(0). This implies that in the absence of non-oil exports, real exchange rate and inflation increase by 187771.817 million. $B_1 = 0.536$, this result shows that there is a direct relationship between RGDP and non-oil export trade (NONX). This implies that a unit increase in Non-oil export trade will lead to a 0.536 unit increase in RGDP. It shows that Nigeria government needs to improve no the level of non-oil export trade currently experienced in the country if the development of the economy is to be accelerated $B_2 = 2110.533$, the result shows that real exchange rate is positive meaning that a positive relationship exist between RGDP and real exchange rate (EXR). The result is not in line with apriori. This implies that a unit increase in real exchange rate will being about a 2011.533 units increase in RGDP. $B_3 = 566.557$, The result shows that inflation rate is positive and that there is a positive relationship between RGDP and inflation rate (INF). The result is not in line with apriori. This implies that an increase in inflation rate (INF) will being about a 565.557 unit increases in RGDP.

Test for Goodness of Fit
The correlation coefficient ($R^2$) = 0.928 or 92.8% shows that there is a very strong relationship between real gross domestic product and non-oil export trade, real exchange rate and inflation rate. The adjusted coefficient of determination ($R^2$) = 0.920 or 92% indicates that 92% of the changes in the dependent variable (RGDP) is well explained by the explanatory variables (Non-oil export trade, real exchange rate and inflation rate). This leaves a total of 8% of the variation in RGDP unexplained which account for the error term form the above, we can say that the model is a good fat since 92% of the variation in the dependent variable are explained by the independent variable.

Joint Test( F-Test)
$H_0$: There is no significant impact of Non-oil export on the development of Nigeria economy
$H_1$: There is significant impact of Non-oil export on the development of Nigeria economy.

Test Statistics
From the computer regression result, $F_{cal} = 123.966$
Using 5% level of significant to calculate the critical values $F_{0.05}(3,29) = 2.93$
Decision: since $F_{cal}(123.996) > F_{tabl}(2.93)$ we reject the null hypothesis ($H_0$) and accept the alternative ($H_A$). therefore, we conclude that non-oil export has impacted significantly to the development of the Nigeria economy .

Hypothesis One
$H_0$: There is no significant relationship between non-oil export and real gross domestic product in Nigeria.
$H_1$: There is significant relationship between non-oil export and real gross domestic product in Nigeria.
Test Statistic:
From the computer regression result presented in Table 1.1.
$T_{cal} = 6.629$
Using 5% level of significance to calculate the critical values $t_{0.025}(29) = \pm 2.045$
Decision: since $t_{cal}(6.625) > t(2.054)$ we reject the null hypothesis ($H_0$) and accept the alternative ($H_A$). we conclude that at 5% level of significance, non-oil export (NONX) is statistically significant on real gross domestic product. The implication of this result is that the diversification of the export base of the
country has yielded significant result in terms of non-oil export trade which has impacted positively on the economic development of Nigeria.

**Hypothesis Two**

H$_0^2$: There is no significant relationship between real exchange rate and real gross domestic product in Nigeria.

H$_a^2$: There is significant relationship between real exchange rate and real gross domestic product in Nigeria.

**Test Statistic:**

From the computer regression result presented in Table 1.1.

T$_{cal} = 8.343$

Using 5% level of significance to calculate the critical values to 0.025 (29) = ± 2.045

Decision: since t$_{cal}(6.625) > t(8.348) > t_{tab}$ (2.045), we reject the null hypothesis (H$_0$) and accept the alternative hypothesis (H$_a$). We conclude that at 5% level of significance, there is a significant relationship between real exchange rate and real gross domestic product in Nigeria. This result is reflecting the period under review, the real exchange rate of the Naria vis-a-vee the US(≠)Dollar was statistically significant and has positive influence on real GDP.

**Hypothesis three**

H$_0^3$: There is no significant relationship between inflation rate and real gross domestic product

H$_a^3$: There is significant relationship between inflation rate and real gross domestic product

**Test Statistic:**

From the computer regression result presented in Table 1.1.

T$_{cal} = 0.856$

Using 5% level of significance to calculate the critical values to 0.025 (29) = ± 2.045

Decision: since t$_{cal}(0.056) > t_{tab}$ (2.045), we accept the null hypothesis (H$_0$) and reject the alternative hypothesis (H$_a$) and conclude that at 5% level of significance, inflation rate has no significant relationship on real gross domestic product in Nigeria. The implication of the result is that inflation rate devours the economy. It is expected to exhibit an inverse relationship with the RGDP, but the positive relationship it maintain with RGDP might come indirectly from the policy embarked upon by the government in form of the increase in the volume of money in circulation which in turns boost the investment activities that serve as the engine of growth.

**Test for multicollinearity**

To test for multicollinearity, condition index (CI) is used

From the computer regression result, the condition index (CI) for no-oil export trade is less than 10 (this shows that there is no strong multicollinearity in the data).

**Test for Autocorrelation**

From the computer regression result presented in Table 1.1, Durbin Watsons is 0.783. This means that there is presence of autocorrelation in the model since the DW calculated is less than 1.5 or less than 2
1.4 Conclusion
The study has investigated the impact of non-oil export on Nigeria’s economic development between 1981-2014. From the research, it was revealed that a lot of menaces has contributed to the non-performance of the non-oil sectors in Nigeria under the period studied. So based on the above revelations, it is expected that non-oil exports should boost real gross domestic product (RGDP) through foreign exchange earnings. The industrial, agricultural and manufacturing sectors therefore, have been indentified as necessary engines that would stimulate growth and development in non-oil production for export. Given the poor performance of these sectors (that is industrial, agricultural and manufacturing) in Nigeria, it is therefore expedient that the government create an enabling environment that will ensure the survival and functioning of them. Doing this will boost the productivity of the economy.

Reference


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