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## **The Imperatives of Foreign Direct Investment in Nigeria Solid Minerals Development for Sustainable Growth**

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### **ABSTRACT**

In spite of the enormous resources and wealth Nigeria is endowed with; the Country is still in dire need of sustainable growth. Using time series data such as GDP per Capita, domestic interest rate, inflation, foreign exchange for the period 1960-2015, the Linear Growth Regression model indicates that solid minerals positively impact on sustainable growth and is statistically significant. It also indicates that foreign direct investment is significant, but negatively correlated to minerals output as a percentage of GDP, partly as a result of the mega inflow of FDI to the sector. In addition, the contribution of solid minerals to the country's foreign exchange is negatively correlated too, to sustainable growth, which is attributed largely to the illegal migration of mineral commodities across the borders. In view of this, conscious inter-agency collaboration was recommended to help track the volume of mineral resources illegally escaping the shores of the country. Above all, government is advice to focus attention on developing the solid mineral sector to insulate the economy from the vagaries of present economic woes given the rising demand for solid mineral resources globally.

Keywords: Sustainable Growth, Solid Minerals, Foreign Exchange, Foreign Direct Investment

### **INTRODUCTION**

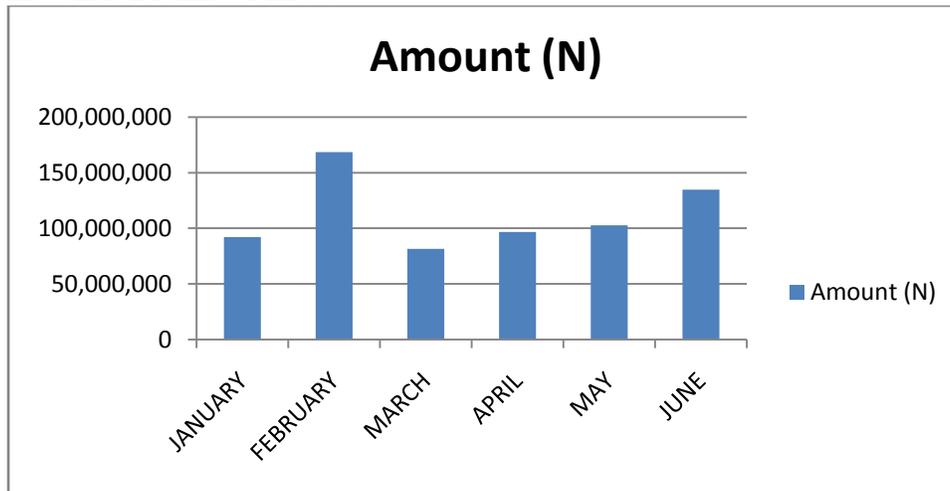
Since independence, Nigeria has been in dire need of sustainable growth. The phenomenal growth in economic indicators over the years was accompanied with increasing poverty, unemployment, armed robbery, kidnapping, insurgency, high infant and child mortality rate, etc an indication that the growth does not benefited majority of the citizens. Thereby having a rather disarticulated economy, with much household unable to acquire the basic necessities of live.

The long dependence of Nigeria on crude oil proceeds to grow the economy has brought nothing rather than misery to the larger proportion of the population. Despite the huge collectible oil revenue amounting to hundreds of billions in foreign, what the country is witnessing is rather a "jobless growth". As a matter of priority, what the country needs is a complete paradigm shift; a purposeful radical change to doing things differently would be a viable option to survive the current environment of global economic uncertainty. The continuous dependence of Nigeria on crude oil offers a bleak future. It is imperative therefore, that the economy diversifies its revenue base by boosting solid minerals which have been identified as one of the key drivers to grow the economy thus placing the fortune of the country on the path of sustainable growth.

The utter neglect of the solid minerals sector, is the microcosm of Nigeria’s present level of economic underdevelopment, astronomically high levels of unemployment and poverty, youth restiveness and militancy, unpleasant rampaging of armed robbery, kidnapping and insurgency, above all a miserable growth with nothing insight for the future and the generations yet unborn. The solid mineral sector alone has the capacity to generate employment and wealth for over five million people (Transformation Agenda, 2014), currently the sector employs about 450,000 people directly and over 2million indirectly. This was evident with the over 12 percent (double digit) recorded in 2012-2013 (TA, 2014) a clear indication that the sector has the capability to insulate the country from the vagaries of other variable shocks and volatility.

According to the NEITI audit report on the solid minerals industry 2007-2010 over ₦2.21 billion was paid as royalty by operating companies, ₦51.4 billion as taxes by some companies/major players in the industry. Ground rents/annual surface rents payments attracted over ₦173.94 million in addition to ₦122.92 million in levies to the government (NEITI, 2013). The Central Bank of Nigeria (CBN) for the period under review as captured in the NEITI audit report, also reported that over 1,618 export transactions were conducted by 86 companies with a total revenue collection of ₦8.91 billion. The sector has a lot to offer if the right attitude and political will is redirected at revamping and developing the sector. Suffice it to said that in the half year report; in area of issuing licenses and renewals, the Mining Cadastre Office had remitted over ₦541,722,600.00 to the federation account (MMSD, 2018) aside other ancillary revenues like royalties, etc.

**Mid-Year Revenue Profile of MCO**



Source: MMSD, 2018

On comparable grounds, empirical evidences revealed that Nigeria compares unfavourably with its sub-Saharan African neighbours in terms of GDP and revenue generated thereof. It ranges from 40 percent of GDP in Botswana to less than 1 percent in Nigeria; over 50 percent were generated in GDP for DR Congo, Namibia, Zambia and 12 other countries gained over 20

percent from solid minerals exports in comparison with Nigeria's 0.4 percent in recent times (Eyre & Agba, 2007), all as a result of the utter neglect the sector suffers from successive government. The success story of Australia, South Africa, Botswana, Namibia, Canada, etc is that of mineral economy especially solid minerals, as its contribution to national development and growth of these economies is monumental and wholesome, as well as an attraction for other favourable human development indicators which ranked such countries high and above Nigeria. Nigeria needs to wake up from its deep slumber and get to serious business to grow the economy on the path of sustainable growth.

The future of Nigeria remains highly uncertain, evident in increased poverty, unemployment, arm robbery, kidnapping, prostitution, persistent and endemic corruption, increase infant mortality, short/falling life expectancy and they like. In view of these, the number of Nigerians who now falls below US\$2 per day poverty threshold had gone up astronomically, especially, with the 2018 World Bank Report, which ranks Nigeria the highest poverty infested economy in world after India. Yet the country is adjudged to be the largest economy in Africa and the 26<sup>th</sup> in the world (Suberu, et'al, 2015). It is an emergency case that Nigeria radically divorce from its dependence on oil and focus on growth drivers like the solid minerals, which has a lot to offer. As opined earlier, these minerals are distributed evenly across the country; therefore, developing them implies even development of the country, increased capital formation and spread of employment thus, creating wealth and poverty reduction.

### **Literature Review**

Foreign Direct Investment (FDI) in its strict sense involves the international transfer of capital, as well as an extension of enterprise from the investor's home country to the host country. This extension involves the flows of capital, technology, entrepreneurial and management skills and practices for improvement and production of goods and services. This ultimately is expected to improve the capital base of the country tremendously and hence, improvement in the quality of the country's industrial products.

The UNCTAD (2007) defines FDI as: "investment involving a long-term relationship reflecting lasting interest and control by a resident entity in one economy (foreign direct investor or parent enterprise) in an enterprise resident in another economy other than that of the foreign direct investor (FDI enterprise or affiliate enterprise or foreign affiliate). This implies that the investors have control or certain level of influence in the day to day management of their investment in the host economy. Myriad of studies shows that FDI triggers technology transfers, assists human capital development/formation, contributes to international trade integration; helps create a competitive and more friendly business environment and promotes enterprise development" (OECD, 2002). FDI acts as a catalyst that stimulates economic growth through competition, cutting edge innovation and improvement to export performance (Ogunkola & Jerome, (2006). Also, Sjöholm's 1999 study agrees that FDI contributes to economic growth.

Nigeria as a country, given her market size and natural resource based is one of the top three leading African countries that consistently received FDI in the past decade. However, not much could be said of solid minerals, as much of FDI inflows goes into the petroleum sector with little or nothing going into solid minerals despite its huge availability in various locations of the country. Therefore, the level of FDI attracted by Nigeria into solid minerals exploration according to Asiedu, (2003) is mediocre compared with the resource base and potentials therein.

Investment in solid minerals requires huge capital and a long time period for the stream of proceeds to begin to flow. This has made the sector less attractive to such investors who would want quick returns on their investments. In this light, government has offered duty free on importation of mining related machines and equipments and 5 years tax holidays to encourage investment into the sector, (MMSD, 2016)

As a booster, government has divested totally from investor-operator to administrator-regulator in its reforms efforts. This singular action has attracted a lot of capital investment into the solid minerals sector. This was evident in the double digit growth rate recorded in 2011-2012 and in the number of operators currently along the value-chain in addition to the number of private operators who have acquired one mineral licence type or the other with the MCO posting over ½ billion between January – June, 2018.

### **Job Creation and Poverty Reduction**

According to Oluwatosin & Abolarin-Egbebi, (2015), poverty is an extreme state of social and economic deprivation. It is a situation where an individual or household fails to attained and maintained a specific level of well-being which is considered as the acceptable minimum standard of living in a given society. Olamajeye, 1994, looks at poverty as a high degree of difficulty encountered in making ends meet. This is the critical, pitiable and precarious situation and condition of living Nigerians found themselves today, with nothing promising for the future. Collaborating, Nemedi, (2001), observe the consequences of poverty to include:

*“severe material deprivation, absence of recreational opportunities, lack of access to economic, political power, inferiority complex, isolation and social degradation. Poverty also breeds hunger, malnutrition, low-life expectancy, human and political rights abuse, diseases, illiteracy, ignorance, hopelessness, uncertainty and all those feelings that negate the resilience of the human spirit and blithe expectation of a better tomorrow.”*

In view of the ravaging effect of poverty and poor condition of severe deprivation in Nigeria, the World Bank observed over time, that poverty is on the increase and has not significantly abated up to date. More so, poverty brings frustration, loss of hope/prospects and value for life and the purpose of living. It also creates disillusionment about morality. Poverty makes people compromise on moral grounds or abandon moral values completely.

Poverty is a multidimensional phenomenon and from whatever angle one viewed it, those who are inflicted by it feel alienated from participating in any competitive venture the society can offer them. This also goes further to say that poverty means the inability of an individual or a family to command sufficient resources to satisfy basic needs. Despite often reported high economic growth rates over the years, with Nigeria acclaimed to be the biggest/largest economy in Africa, yet over 80 percent of its citizens lives far below the poverty line threshold of US\$2 per day. It therefore means that Nigeria as a country richly endowed with abundant human and natural resources is still trapped in the poverty web. The extent of poverty could best be appreciated by looking at the poverty index below

**Table 3.3 Nigeria Poverty Index**

<b>YEAR</b>	<b>PERCENTAGE</b>
2000	74
2001	83
2002	88
2003	54
2004	54
2005	54
2006	54
2007	54
2008	54
2009	54
2010	69
2011	70.2
2012	70.2
2013	70
2014	70
2015	70
2018	80

Source: World Bank Report, 2018

It is evident that of the over US\$600 billion collectible oil revenue for Nigeria (Ngozi, et'al, 2003), the average Nigerian is poorer today than in 1972, when the country was largely driven by the revenues from solid minerals. Poverty is deep and pervasive, with over 80 percent of the 170 million Nigerians wallowing in abject poverty-a state of total deprivation. Nigerians are not only poor; they also suffer from vast inequality in incomes, assets, control over public resources, and in access to essential services, as well as pervasive insecurity. These dimensions of poverty and deprivation are worsening everyday (World Bank, 2000). All these are attributed to the endemic corruption, weak institutions of governance and accountability-a clear evidence of the 'Dutch disease' syndrome. It was on these premise, that diversifying the economy for faster economic growth and poverty reduction anchored on the rich potentials of solid minerals value chain becomes eminent to turn around the fortune/future of Nigeria and Nigerians now and for the generations yet unborn.

Minerals and its ancillary activities occupy a very strategic position in the growth and development process of the Nigerian economy in view of its huge revenue generation potentials to GDP. The development of the solid minerals, apart from attracting foreign exchange, will further enhance the development of other sub-sectors along the value-chain. The enhanced exploration/development of limestone a key ingredient in the cement industry is one clear example of the potentials the sector portends in terms of jobs and wealth creation. Today Nigeria has not only attained 'self-sufficiency' in cement production, but is also a net exporter of the product creating millions of jobs along that value-chain, especially in the building and construction industries (MMSD, 2013). The solid minerals sector will also guarantee the supply of vital raw materials to our domestic industries so as to reduce the pressure on the substantial foreign exchange required to import them e.g. barite and bentonite required in the oil industry. Increase demand for these products implies increase income for the local miners, thus-improvement in their well-being and poverty reduction. The transformation of this sub sector into a potentially viable venture will create more jobs and alleviate poverty.

The solid minerals presently employs an estimated 500,000 youths (Lar, U. A. 2011). Solid minerals will sustain agricultural production if the agro-minerals endowments in the country are harnessed to solve the present lack of fertilizer in the country. The main raw materials for the fertilizer industry (Phosphate, marble and kaolin) are available locally. Coal can be used to generate energy to supplement the gas powered plants and the hydro-electricity power supplies, which are not adequate, very unreliable and expensive. We cannot as a people undermined the importance of power/energy to our growth and development process. It is one key infrastructure that if Nigeria can get it right, the country will be on the sure path of economic prosperity and sustained growth.

### Methodology

The model for this study draws from the Solow Growth model and the Linear-Growth-Regression model adopted by Capolupo (2008). The motivation for the choice of this model is that it clearly sets how variables correlate with growth. Accordingly, the relationship between endogenous and exogenous variables and economic growth can be stated in the form:

$$g_i = \beta_0 + \beta_1 y_i + \beta_2 x_i + \mu_i \quad (1)$$

Here  $g_i$  denotes growth rate of real GDP per capita,  $y_i$  denotes the initial level of real GDP per capita,  $x_i$  is a vector of explanatory variables considered proximate determinants of economic growth and  $\mu_i$  is the stochastic error term.

Following equation (1) and in line with the variables under consideration, the functional form of our model is specified below.

$$g_i = \alpha_0 + \alpha_1 y_i + \alpha_2 X_i + \mu_i \quad (2)$$

where  $g_t$  denotes sustainable growth,  $y_i$  is solid minerals,  $X_i$  is a vector of other intervening variables considered important determinants of sustainable growth.

To determine the effect of solid minerals on Nigeria’s sustainable growth, the functional form of equation of the model is given as:

$$g_t = \varphi_0 + \varphi_1 \ln Min_t + \varphi_2 inf_t + \varphi_3 \ln Gsa_t + \varphi_4 Dmrt + \mu_t \quad (3)$$

where  $g_t$  = Sustainable growth,  $Min_t$  = Minerals output as percentage of GDP,  $Inf_t$  = Inflation rate,  $Gsa_t$  = Gross saving as percentage of GDP,  $Dmr_t$  = Domestic interest rate.

To ascertain the impact of solid minerals on foreign exchange earnings in Nigeria, the functional form of the model is given as:

$$\ln Min_t = \alpha_0 + \alpha_1 \ln Fdm_t + \alpha_2 Rfm_t + \alpha_3 Dmrt + \varepsilon_t \quad (4)$$

where  $\ln Min_t$  = minerals output as percentage of GDP,  $Fdm_t$  = foreign direct investment in mining,  $Rfm_t$  = dummy variable proxy by reforms in the solid minerals sector indicating favourable investment climate,  $Dmr_t$  = cost of investment.

**Presentation and Discussion of Results**

The result of the impact of solid minerals on sustainable growth in Nigeria is presented in Table 1

Table 1: Result of Impact of Solid Minerals on Sustainable Growth

Dependent Variable: logGDPPC

Variables	Coefficient	Std. Error	t-Statistic	Prob
$\Delta(\log Min)$	0.7188	0.3194	2.2506	0.0335
<b>Inf</b>	0.0018	0.0026	0.6792	0.5033
$\Delta(\log Gsa)$	0.1412	0.0902	1.5656	0.1300
$\Delta(\log Dmr)$	-0.2086	0.1572	-1.3269	0.1965
<b>Constant</b>	0.0012	0.0702	0.0171	0.9865
<b>f-statistics</b>	4.0774			0.0111

Source: Authors Computation

The above result shows that solid minerals have significant and positive impact on sustainable growth. It accounts for about 72 percentage change in GDP per capita. Specifically, a 1 unit increase in minerals output will accentuate about 0.72 percentage increase in sustainable growth in Nigeria. The result further shows that if the solid mineral sector is given the required attention, it would significantly change the present economic woes of the country. Other variables like inflation and gross domestic savings also show a positive impact on sustainable growth with the exception of domestic trade, but they are not statistically significant.

The result of the impact of foreign direct investment on solid minerals is presented in table 2:

Table 2: Result of the Impact of foreign direct investment on Solid Minerals in Nigeria

Dependent Variable: LogMin

Variables	Coefficient	Std. Error	t-Statistic	Prob
logFdm	-4.85E-06	2.11E-06	-2.2910	0.028
Δ(Dmr)	-0.6213	0.1934	-3.2127	0.003
Rfm	0.4568	0.1630	2.8022	0.0009
Constant	4.9627	0.4953	10.0198	0.0000
f-statistic	9.6639			0.0000

Source: Authors Computation

From the above result, the impact of foreign direct investment on solid minerals output is -4.85 percent approximately, with a t-value of -2.29 even though, it is statistically significant. In specific terms, a unit reduction in FDI will reduce solid minerals output by -4.85 percent. This clearly, buttresses the need for government conscious effort in evolving policies and programmes that would minerals ecosystem conducive and attractive for investment. Inter-agency collaboration for the effective implementation of the reforms is also advocated. However, it is imperative to note that the long neglect the solid mineral sector suffers, the illegal migration of solid mineral resources through the porous borders are responsible for the paltry investments in the sector.

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