

THE IMPACT OF FOREIGN DIRECT INVESTMENT ON POWER SECTOR IN NIGERIA

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ABSTRACT

The paper appraises Foreign direct investment its increasing importance in the global economy. Analysis was carried out using the OLS and it was found that foreign direct investment was significantly related to the power sector output of the country. The result has an important implication in terms of policies that will attract foreign direct investment to the power sector of the country. Having seen that there is a long run relationship between foreign direct investment (FDI) inflow and power sector output. There is need to encourage FDI in Nigeria power sector.

Keywords: Power Sector, Foreign Direct Investment, Global Economy, and Policies.

Introduction

Many empirical studies have been carried out on foreign direct investment but this research paper focuses on the impact of foreign direct investment in increasing in importance in the global economy my due to the additional resource they pooled for development n the country.

They have also attracted great controversy concerning the positive or negative contributions to economic development of the host country.

In recent years foreign direct investment (FDI) play a major role in the global business FDI can provide a new market for firms and a cheaper product marketing demand facilities access to a new technology products skills and financing for a host country which receive the investment it can provide a source of new technologies and managerial skills. (Raul,2012)

The most widely accepted definition of FDI is known as the IMF/OED (2011) Binchmak definition ^w which states that foreign direct investment (FDI) is an International venture in which an international venture in the home economy acquire a long term influence ^w in the management of an affiliate firm in the host economy. The definition is accepted because it was providing standard to national statistics. Based on the definition, the existence of such long term influence.

Should be assumed when voting shares or right controlled by multinational firm amount to at least 10 percent of total voting shares of right of the foreign firm.

Aggregate FDI flows are the sum of the equity capital reinstated earnings and other direct investment capital hence aggregate FDI flows and the stock include loans, and financing of cross-boarder mergers and acquisition FDI flows observed from the perspective of the host economy which record them as an outward FDI a category of asset .FDI may take many firms such as a direct acquisition by the foreign firm, construction of a facility ,or technology ,licensing of intellectual property etc.

In Nigeria and other countries in sub-saharan africa, the provision of low cost /affordable and regular electricity supply is critical to employment generation, poverty alleviation and industrial development especially in small scale industry.

Nigeria is energy surplus in theory not in practice, given the range of energy option in the country. It has been unable to translate its energy abundance into socio-economic development due to largely to the policy environment ,the low performance of the electricity(power sector) of Nigeria and other west African countries created the inevitable need for collaboration under the west African power pool (WAPPP) (Gnaso nuou,2008). Nigerian's success in attracting FDI into the power sector will have importance beyond reducing shortage and enhancing productivity in the country power generation.

STATEMENT OF THE PROBLEM

The result of the studies carried out on the growth of FDI on power sector of Nigeria are not unanimous in their submission. The current installed capacity of grid electricity is about 6000rny,of which about 67 percent is thermal and the balance is hydro-based.

Between 1990 and 1999 ,there was no new power plant built and the same period witnessed substantial government under funding of the utility of both capital projects and routine maintenance operations. Generating plant availability is low and the demand supply gap is crippling.

Poor services have forced most industrial customers' to install their own power generators at high cost to themselves and the Nigerian economy, the chronic shortage of available generating capacity has negatively affected the industrial and manufacturing sectors with self-prevalence in the industrial /commercial and domestic sector of the Nigerian economy.

ii. access to the electricity services is low about 60 percent of the population over 80 million people are not served with electricity per capita consumption of electricity is approximately 100KWH in south Africa, brazil and china, respectively.

Under a business as usual scenario, the proportion of Nigerians without access to electricity services will continue to increase over time.

The rural electrification program began in 1981 focuses extensively on grid extension cost per connection remain high and annual rate of connection is low with the chronic shortage of available generating capacity and low tariffs for rural areas there is little incentive for PHCN to champion an expansion programme.

In all, rural electricity capital assets continue to deteriorate as a result of neglect, vandalism and theft. However, the situation in rural electrification is expected to change with the presence of the rural electrification agency.(REA).

iii. in line with its power sector reform objectives, the government has made commitments with regards to modifying the structure and level of tariffs adjustment mechanism future tariff level will be determined to ensure that PHCN and its successor companies are well positioned to meet up with its challenges;

a. Meet their debt services obligation from 2002, which cannot be met under present tariff level.

b. Pay for the power agreed purchase cost of EPP/IPPS (except for agreed contribution from Lagos state for AEs supply to Lagos until privation of Lagos zone distribution.

c. Finance from own resources a reasonable proportion of investment needs.

d. Provide adequate return to private shareholders after privatization. Also the Nigerian electricity regulatory authority (NERC) has finalized the adoption of a multi-year tariff order, in order to encourage investors and power producers. Promoting competition and facilitate more rapid provision of service throughout the country and also to reconstruct and privatize the national electric power authority (NEPA).

Industrialization Theory on FDI and spillover effect.

Hymer's (1976) pioneering study on multinational companies (MNCS) drew attention to neglected aspects of MNCS' role as global industrial organization. Hymer's view was a major departure, from the orthodox theoretical economic literature. The standard neoclassical trade theory of Heckscher and Ohlin, for example carried restrictive assumptions about the immobility of factor of production and identical production function across national boundaries. It postulated that no international difference existed at the scientific and technology levels not to mention technology transfer and spillover. In the neoclassical financial theory of portfolio flow from countries where it is higher to earn arbitrage rents this theory did not distinguish between the role played in a country's development by portfolio and FDI capital inflows. Hymer's major contribution was to shift attention

away from neoclassical financial theory. In his view FDI is more than a process by which assets are exchanged inter nationality. It also involves international production. By putting forward the ideas that FDI represents not simply on transfer of a "package" in which capital, management, and new technology are all combined. Hymer characterized FDI as an international extension of industrial organization theory.

TWO GAP MODEL (2GM)

This model which expands out of the adaptation of Harrod-Domar growth hypothesis to the open economy by planners is interested in exports, imports, savings gap. Hollis and other concur the domestic savings and foreign exchange gaps are separate and • have independent constraints towards achieving growth in the LCDs to fill these gaps, chenery (1996) sees its action to source for foreign aid in order to achieve economy's target growth rate. He further postulates a fixed relationship between targeted foreign exchange gaps prevails this can be obviated by foreign aid. To explain this phenomenon, the national income accounting identity is employed thus

$$E = Y = I = S = M - X = F$$

Where: E= National Expenditure, Y= National output or income, I= investment, S= savings, M=import, X=Effort, and F= capital inflow.

Therefore, an economy is said to be in a foreign exchange gap or I savings constraints depending on the most prevailing one.

However, foreign aid eliminates foreign exchange gap by allowing new investment project, importing plants and machineries (technical assistance) and intermediate goods. In the long-run, the foreign aid required equals the difference between increase in investment and savings increase caused by increasing income. The elimination of savings gap about sustained growth rate. The vital issue is how beneficial or detrimental foreign aid is to growth of LCDs. Appropriate utilization of foreign enhance rapid growth of a debtor country. This reflect through increase in investment level at a faster rate than it could otherwise have been, if the I source of savings of the recipient country. Also the size of the rate of investment increases depending on the assumed savings function. On the other hand, foreign loan could be detrimental if it is spent on unproductive like political campaign, buying and maintenance of luxurious cars, houses etc at the expenses of necessities and consumption not likely to raise enough funds for debt servicing.

COEFFICIENT OF MULTIPLE DETERMINATION

From the result above, R2 value of 0.957551 suggests that the independent variables explained 96% of the variations in the power sector output which is the dependent variable. After adjustment for degree of freedom, the adjusted R2 value of 0,949971 indicate that 95% of (PSO) variations is explained by the independent variables.

The regression result for the model is shown below

Table Summary of regression output.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-26782.98	5133.974	-5,215812	0.0000
NFD!	0.204457	0.009298	21.98827	0,0000
EXCH	333.5159	38.30970	8.705733	0.0000
INFDI	0.497798	0.135496	3.673886	0.0010
INT	-130.5586	234,2841	-0.557266	0.5818
INFR	-60.07818	70.86658	-0.847785	0.4038

Source: Author's Analysis, Appendix B 2014

The result can be summarized in equation form as follows:

PSO -26782.98 + 0.204457NFDI + 333.5159
EXCH + 0.497798INFDI - 130.5586INT -60.07818
Se = 5133.9740.00929838.309700.135496234.284170.86658
t- Stat= (-5.216812) (21.98827) (8.705783) (3.673886) (-0.557266) (-0.847765)
Prob. = {0.0000} {0.0000} {0.0000} {0.0010} {0.05818} {0.4038}

DISCUSSION OF FINDINGS

Foreign direct investment has a significant impact on power sector in Nigeria.

This was observed through the coefficient of foreign direct investment which is 0.204457 and the value of the probability (0.0000) which is less than 0.05; so, foreign direct investment has a positive significant impact on the power sector of this country during the period under study. Based on what was stated in the a priori expectation of positive impact of net foreign direct investment on the power sector, it shows that the net foreign direct investment has contributed greatly up to 0.204457 to the power sector in the economy which helps in the production of goods and services as well as increase the national output to solve most macroeconomic problems like depression.

1.9, which shows that there is little or no auto correction among the variables. Thus, the overall estimates presented in this study suggest that an increase in net FDI inflow will bring about a rise in power sector output in Nigeria. We also discovered that FDI flow in Nigeria have a significant effect on power sector of the Nation.

Conclusion

Attraction, of FDI is particularly an important policy issue for Nigeria government. In the context of their effort to increase electricity power generation in the country, the country open bid for privatization of power sector and lay greater emphasis on attracting FDI by improving the overall enabling power sector and by putting in place specific incentives for such investment.

However, the need to overcome the current trend of FDI inflows to Nigerian economy becomes necessary, thus, while the need for FDI is sharp. In fact, there is a wide range of positive incentives and policies available for government to enhance inflow of FDI, the effectiveness of which would be facilitated by improving the enabling investment environment through sound macroeconomic policies, strengthened institutions intensification of structural reforms, rapid liberalization and regulation of marketers, and privatization of economic activities. And progress is made on the issues, there will be less need for Nigeria government to resort to negative incentives and policies for attracting FDI, which not only undermine fiscal financial and balance of payment (BOD) structures but also tend to attract the less productive type of FDI. More importantly, greater cooperation and harmonization in less developed countries such as Nigeria would assist in this regard by creating an attractive overall environment for longer term development FDI, which can contribute significantly to attaining the growth and development of Nigerian economy. Power sector is very important to the health and wellbeing of Nigerians. There are several reasons for this. Electricity power supply brings about a higher standard of living: the quality of life based on the possession of necessities and luxuries which make life easier.

Recommendations

The paper made the following recommendations.

FDI in Nigeria induces the nation's power sector growth. Although the overall effect of FDI on the whole economy may not be significant, the companies of FDI positively affect power sector and therefore FDI needs to be encouraged. Since FDI has the highest potential for contributing growth, it needs to be properly channeled and integrated into the mainstream of the nation's power sector.

The negative contribution of manufacturing sector is a reflection of Nigerian's power sector poor output. There is need to consciously improve the level of electricity power supply to enable manufacturing to contribute positively to growth of Nigerian economy. FDI should focus more on Nigerian's power sector because of the strategic relevance of the sector to the nation's economy.

This will mitigate capital (fund) constraints faced by the key actors in the power sector of Nigeria's economy. "Concerted effort should be made by the stakeholders and NCOS to enhance the growth rate of Nigerian power

sector. This will make the power sector more attractive to foreign investors encourage production and generate employment especially for the rural population.

References.

- Adelegan, J. O. (2000). Foreign Direct Investment and Economic Growth in Sub-Saharan-African: A Seemingly Unrelated Model. African Review of Money, Finance and Banking, Supplementary Issue of Saving and Development' 2000,525 Milan, Italy.
- Adeosu, B.A. (2010). Foreign Direct Investment and Economic Growth. Evidence from Nigeria. Department of Agricultural Economics, Obafemi Awolowo University Ile-Ife, Nigeria. AEFRC Research Paper 165, African Research Consortium, Nairobi.
- Akinkugbe, E. (2003). "The Determinants of Foreign investment in Sub-Saharan African" Journal of Economy and Finance, 20(11), 7-9.
- Akpan, H.E. (1997). Foreign Direct Investment in Nigeria. Central Bank Financial and Economic Review, 35 (1)22-34.
- Aljiro, L Chanda, S. Kalenli, O. & Sayek, S (2003): Foreign Direct Investment and Economic Growth The Role of Local Market Journal of International Economics, 11 930. 23-27.
- Amadi, S.N. & Osaro, O. (2000): Security Pricing and Nigerian Capital Market. African Journal of Business and Economics Research 1 (1), 35.
- Anderson. J. (2000). Effect of FDI Inflows on Host Country Economic Growth. Journal of Investment 34(2)23-24.
- Anyanwu, J.C. (2004). An Economic Investigation of the Determinant of Foreign Direct Investment in Nigeria. Preceding of the 1988 NES Annual Conference, 219-241. Lagos.
- Asiedu, E. (2001) on the Determinant of FDI to Developing countries in Africa Different World Development 30(1) 107-119.
- Aseidu. A. (2009). Foreign Direct Investment in Africa. The role of Natural Resources Market, Government Policy, Institutions and Instability. United Nations University. World Institute of Development Economic. Research Paper No 2005/24,1-5.
- Battle. G. (2009). Foreign Direct Investment's Service Sector. Proceeding of the 12th Annual Conference of the Regional Research Unit of the Central Bank of Nigeria 227-236.
- David, M. (2008). Concept and Practice of Foreign Direct Investment, Economic Freedom and Growth. European Journal of Economy and Finance.
- David M (2009). Foreign Direct Investment Policies Around the World. American Journal of Investment 29(3), 39-40.
- De-Gregario, J. (2003). The Role of FDI and Natural Resources in Economic Development Working Paper No 196. Central Bank of Chile, Santiago.
- Ekpo, A.M. (2003): Foreign Direct Investment in Nigerian: Evidence from time series Data. CBN Economic and Financial Review 35(1), 59-78 Abuja.
- Feldastan, M. (2008). Aspects of the Global Economic Integration: Outlook for the future Cambridge, Massachusetts: Nb: Working Paper no.7(89) 12-14.
- Ginansomou: E. (2008). Boosting the Electricity Sector in West African; An Integrative Vision.
- Hymer. S. (1976). Industrialization Theory of FDI and Spillover Effect, Econometric 34-34.
- Keily, G. (2007) Transitional Co-operations and the Capital Investment. Journal of International Economics.
- Obwoma, M. (2004). Foreign Direct Investment in Developing Countries. World Bank Research Working Paper 2848, 3-24. Review, 43,335-356.
- Odozi. Va(1995). An Overview of Foreign Direct Investment in Nigeria 1960-1995. Occasional paper No 11. Research Department Central Bank of Nigeria.
- Oecd. (2011). Benchmark Definition of Foreign Direct Investment in Nigeria. The Fate of Nigeria's Agricultural Sector, a Publication of Nasarawa State University, Keffi 6(2)15-25.
- Opaluwa I. Ameh. A.A., Alibi. J.O. & Abdul, M. 20. The Effect of Foreign Direct Investment on Nigeria Manufacturing Sector, International Journal of Business and Management 4(2), 40-148).

Raul, D.N. (2012). Impact of Foreign Direct Investment (FDI) on the Growth of Nigerian Economy. *The International Trade Journal of Administration* 7(4), 655-672.

Renewable Electricity Policy of the Federal Government of Nigeria. (2006).