



# A Developing Country's Absorptive Capacity: The Link between FDI and Economic Growth in Nigeria

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## Abstract

Developing countries' surest route to sustained poverty reduction is economic growth. Policy-makers encourage foreign direct investment (FDI) for the enhancement of productivity in-country and the promotion of economic development, through the "multiplier" effect. It is generally agreed among researchers that local conditions (absorptive capacities) are important factors contributing to the effect of FDI on economic growth. FDI has contributed to output growth in Nigeria, especially in the petroleum sector, where even more FDI should now be encouraged through investor incentives. However, the efficacy of FDI in generating the desired growth may be limited by the level of infrastructural and human capital development in Nigeria.

## Keywords

Foreign Direct Investment, Absorptive Capacity, Economic Growth, Gross Domestic Product, Nigeria

**Subject Areas:** Development Economics

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## 1. Introduction

Development economists consider poverty to be the biggest challenge encountered by any country—especially in developing countries. The surest route to sustained poverty reduction is economic growth [1]. Jerven [2] distinguishes between the short-term and the long-run effects of economic growth on poverty level: In the short term, no automatic link between economic growth and poverty reduction exists. However, in the long run there is a link between increasing gross domestic product (GDP) of a country and reduction of both absolute poverty (within a country) and poverty relative to other countries.

Economic growth has been defined as an increase in the total *output* of a country over time [3]. According to

Arrow [4], economic growth is predicated on three *inputs*: productivity, labour and capital. Capital can be taken to include “natural capital” such as mineral deposits (not just machines and infrastructure). Natural resources can be used for production or sold abroad to bring additional resources needed for economic growth.

Growth is usually measured as the annual rate of return in a country’s real gross domestic product (Real GDP) or potential real GDP. Thus, growth designates the process by which economies accumulate larger quantities of capital equipment, push out the frontiers of technological knowledge and steadily become more productive.

Economic policy frame work with an orientation towards integration into the global economy is perceived as a prerequisite for sustained growth. Policymakers encourage foreign direct investment (FDI) for the enhancement of productivity in-country and the promotion of economic development. According to Alfaro *et al.* [5] the belief in FDI among policymakers is that it creates positive externalities as well as direct capital financing. Attracting FDI for export-processing zones in African countries through preferential trade treaties and industrial policies has proved successful in recent years [2].

Foreign investors contribute to economic growth in the host country through FDI in a manner similar to domestic savings: reinvested profits and the purchase of equity by foreign investors increase the amount of funds available in the host economy for new fixed investments [6].

The International Monetary Fund [7] defines a foreign direct investment enterprise as: “an enterprise (institutional unit) in the financial or non-financial corporate sectors of the economy in which a non-resident investor owns 10 percent or more of the voting power of an incorporated enterprise or has the equivalent ownership in an enterprise operating under another legal structure.” Li and Liu [8] describe FDI as a composite bundle of capital stock, know-how and technology that can (through labour training, skill acquisition/diffusion and the introduction of alternative management practice/organizational arrangement) augment existing stock of knowledge in the recipient economy. FDI is expected to be growth-enhancing in the recipient economy, encouraging the incorporation of new inputs and technologies in the production process: capital accumulation [8].

In developing countries, FDI could be a very important channel for the transfer of technology from developed countries [9]. For African countries, there has been a debate in the economics of development regarding the real problem: is it capital *shortage* or capital *absorption*? The effect and importance of FDI vary across different sectors in the recipient countries, but positive growth impact has been reported in many recipient economies, notably in developing countries where FDI is also perceived as a conduit for knowledge and technology transfer. However, it is generally agreed among researchers that the stock of human capital available in-country will determine the magnitude of the effect of FDI on economic growth. According to Borensztein *et al.* [9] FDI can only be productive when the host country has a minimum threshold stock of human capital. Alfaro *et al.* [5] have shown that an increase in FDI leads to higher growth in countries with well-developed financial markets compared with countries with poorly-developed ones. It was also observed by Alfaro *et al.* [10] that local conditions (absorptive capacities) are important factors contributing to the effect of FDI on economic growth. Host country absorptive capacities describe the domestic firms’ ability to respond successfully to new entrants, new technology and new competition. It therefore follows that the benefit of a FDI project will depend on the interaction of the characteristics of the project and the characteristics of the host country. Li and Liu [8] show that FDI can promote economic growth by itself (directly) but also indirectly via its interaction terms: a strong positive interaction effect of FDI with human capital and a strong negative interaction effect of FDI with the technology gap on economic growth in developing countries.

FDI can emerge in many different forms: an acquisition, a green field project/investment in a new facility or a merger with an existing local firm. To become a multinational company, a company (through FDI) establishes business enterprises in two or more countries, exercising some minimum level of ownership control [11]. Generally, multinational firms locate their activities abroad for two different reasons: to avoid trade cost resulting in “horizontal” foreign investment or to take advantage of cross-border factor differences, resulting in “vertical” foreign investment [11].

The flow of FDI into a developing country is affected by certain factors or conditions present or absent in the host country: the political system, economic system, public and private sector transparency [12].

## 2. The Multiplier Effect

The “multiplier effect” is the result of the marginal effect on an economic variable from a change in another economic variable, of which the first variable is a component [13]. The expenditure multiplier is the ratio of the

change in total output (or GDP) induced by an autonomous expenditure change.

The marginal propensity to consume in any economy is related to the amount of additional income in an economy that is consumed. The higher the marginal propensity to consume the higher the investment multiplier will be (all other influences remaining the same). The magnitude of the multiplier also depends on the state of the economy: how much of available capital is currently utilized in the economy, also the percentage of workers currently fully employed.

Multipliers will differ from country to country due to differences in monetary policies, tax systems, labour market flexibility and the marginal propensity to consume in each country [14]. The more open an economy is the more the marginal propensity to *import* will be, hence a lower multiplier will apply [15].

Given the above assumptions regarding the investment multiplier, the value of the multiplier in a developing country should be higher than that of a developed country. The marginal propensity to *consume* in a developing country should be much higher than that of a developed country—the poor spend a larger *proportion* of an *increase* in income than the rich. However, according to Hasan [16], in a developing country there is a lower elasticity of output compared to a developed country, this low elasticity of output could limit the benefits of increase in autonomous investment. Firms in a developing country must be kept busy (increasing absorptive capacity) to make them ready to exploit the gains from FDI.

### 3. Nigeria

The Federal Government of Nigeria has released data that showed GDP of \$454 billion in 2012 and \$510 billion in 2013 (\$259 billion and \$270 billion were the old numbers). The new figures released in 2014, revealed that Nigeria took over from South Africa as the continent's largest economy. This “rebased” data was possible through updated prices and improved methodology revealing an economy more diverse than was previously understood. The last time Nigeria's GDP was rebased was in 1990. The statistical division of the IMF recommends a change of the GDP base year once every five years [17].

According to Kale [17], rebasing/re-benchmarking of the national account series (GDP) is the process of replacing an old base year to compile volume measures of GDP with a new and more recent base year or price structure. By bringing the GDP estimates closer to reality as possible, a more accurate picture of the economy is captured. Information from rebasing would better inform Government policies to address poverty, unemployment and human development challenges.

Nigeria's GDP growth has been driven primarily by improving productivity since 2010, which has contributed 55 percent of total growth, more than labour-force expansion. Nigeria has the potential to expand its economy by roughly 7.1 percent per year through 2030, raising GDP to more than \$1.6 trillion in 2030. This could move Nigeria from being the 26th-largest economy today to a top-20 economy by 2030 and would potentially make it bigger than the Netherlands, Thailand, or Malaysia [18].

Nigeria needs an adequate inflow of foreign investment resources in order to meet its external obligations and sustain economic growth.

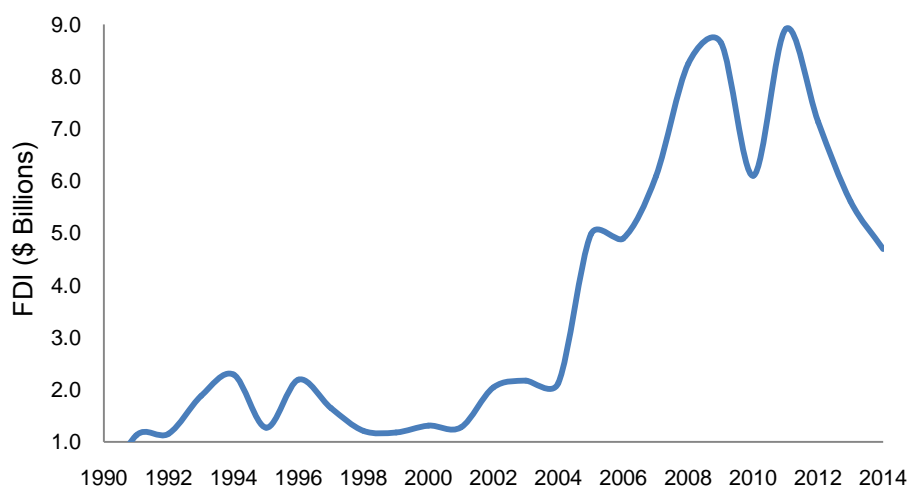
Poor economic growth prospects in developed nations have made sub-Saharan Africa a destination of FDI. There was an increase of about 50 per cent in FDI to Sub-Saharan Africa between 2005 and 2012. In 2012, the American bank J.P Morgan added Nigeria to its government-bond index for emerging markets; up until then, South Africa had been the only African country on the list [19].

FDI has been confirmed as a contributor to economic growth in Nigeria, in research carried out by Adegbite and Ayadi [20]. It was discovered that FDI has contributed significantly to output growth in Nigeria. However, the efficacy of FDI in generating the desired growth may be limited by the level of infrastructural and human capital development in Nigeria. A steep increase in FDI inflow into Nigeria started in 2005 depicted in **Figure 1** above, when Nigeria and the Paris Club reached an agreement for a \$18 billion debt relief package [21].

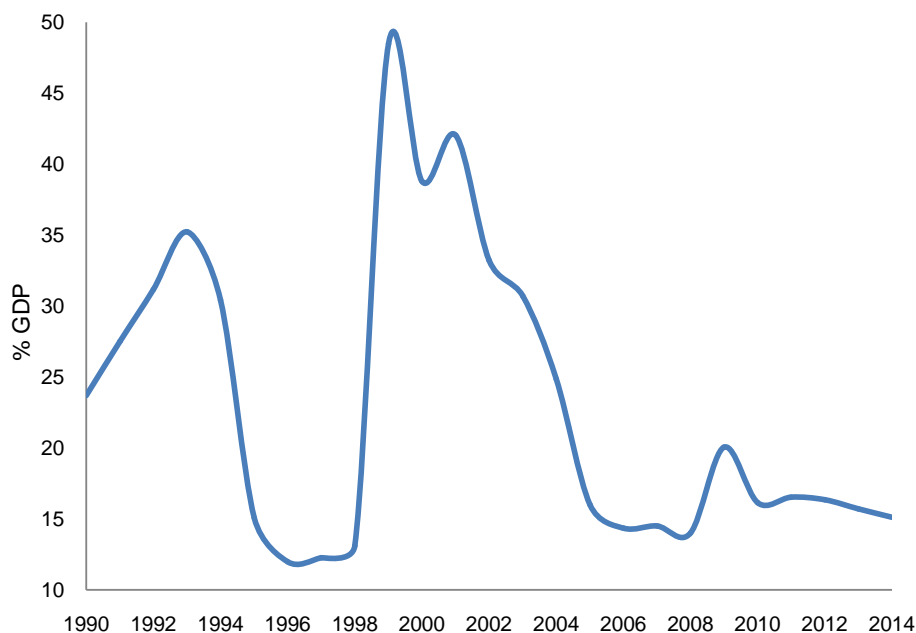
A sharp increase in the contribution of FDI to economic growth (GDP) in Nigeria occurred during the period of Nigeria's transition in 1999 from military rule to democratic governance is evident from **Figure 2**.

Umoh *et al.* [22] provided evidence that suggests a bi-directional relationship between economic growth and FDI inflows to Nigeria. They explain that FDI encourages growth, more growth also encourages more FDI: a positive feed-back relationship between FDI and economic growth in Nigeria. These results have far-reaching implications for policy making in Nigeria.

Nigeria's macro economy encourages FDI inflows, various policy initiatives aimed at encouraging investors is yielding the expected results. Among such pivotal policies are the abrogation of the indigenization policy and



**Figure 1.** FDI inflow into Nigeria: 1990-2014. Source: United Nations conference on trade and development, 2015.



**Figure 2.** FDI inward stock in Nigeria as percentage of GDP: 1990-2014. Source: United Nations conference on trade and development, 2015.

the promulgation of the NIPC decree (the Nigerian Investment Promotion Commission Decree 16 of 1995).

The petroleum industry is the largest industry in Nigeria. Petroleum and petroleum products account for about 95 percent of Nigeria's exported goods, more than 75 per cent of the federal government's revenues, and about 30 percent of real GDP [23]. The petroleum industry the pivot of the Nigerian economy.

Oil companies in Nigeria are taxed under the Petroleum Profit Tax (PPT): a tax rate of 67.5 per cent for the first five years of operation and 85 per cent after five years. Fiscal incentives will encourage further investments by foreign companies and more participation in the petroleum sector by indigenous companies.

#### 4. Conclusions

In the long term, Nigerian needs to diversify its economy away from petroleum—this one-sector economic engine will not be sustainable. In the short term, however—when absorptive capacity is considered—no other sec-

tor has the capacity of the petroleum industry. There has been much learning by local firms, technological transfer and human capital development, and hence greater absorptive capacity within the petroleum sector. Continual flow of investments into the petroleum sector will eventually have noticeable spillover effects on other sectors of the economy. Billion-dollar investments into the petroleum sector have been put on hold in recent years due to fiscal uncertainty. This fiscal uncertainty is due to the delay in passing the controversial Petroleum Industry Bill (PIB).

Further FDI into the petroleum sector in Nigeria must be encouraged. Leading industry analysts like Ibilola Amao believe [24] that Nigeria needs to review oil and gas industry contracts to encourage investments. In the short term, restoration of investor confidence in the industry is paramount. Nigeria needs to attract (and retain) FDI, as the country competes with other oil and gas provinces in the Gulf of Guinea (e.g. Angola) for foreign capital.

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