

## Empirical Investigation of the Role of Foreign Direct Investment on Economic Growth in African Countries

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### Abstract

Empirical literature was surveyed using the random effects and fixed effects on multi country computable general equilibrium to analyze the impact of Foreign Direct Investment (FDI) on the economic growth of developing countries. This research examines the impact of FDI on the economic growth of most African countries from 2003 to 2017. The study seems necessary to us because it has been conducted especially on the effects of FDI on the economic growth of African countries which will complement research explaining FDI relations and the economic growth of all the countries.

**Keywords:** foreign direct investment, GDP, Economic growth.

### Introduction

After the colonial domination and the independence of African States, the economic situation of most African countries, was fundamentally described by a lack of economic development in several sectors such as the social and cultural sector, in the communication sector, the infrastructure was at the primary level, in regard to education and health sector more was to be assessed as developments took place. Thus, countries initiated a solid plan for economic, cultural and social development (Agbetsiafa, 2014). The largest investments are directed in agriculture and public infrastructure for food self-sufficiency, industry, and services with funds often borrowed, or in the form of development aid by developed countries. Faced with the insufficiency of national savings that can no longer satisfy their need for investment and the content of the massive debt, they found other alternatives as sources of financing for their economic development projects. Among them is private capital, in other words, foreign direct investment (FDI), which will eventually become one of the preferred sources of external financing for borrowing on the financial markets and official development assistance (ODA)(M.R, 2000). From 1930 to 1960, the majority of African countries, considered foreign direct investment with great distrust, probably due to the times of colonization.

FDI reputation through multinational corporations could create economic mistrust towards developing countries which suspicious behavior is now replaced by a promotion policy aimed at attracting significant flows of FDI(BALASUBRAMANYAN, V. N., SALISU, M. and SAPSFORD, 1996). This total reversal of behavioral situation was partially made possible by the increasingly liberal global economic environment and the many economic kinds of literature extolling the benefits of FDI. Indeed, several well-known authors are giving credit to FDI the essential place in economic development. Developing countries are now experiencing the benefits that foreign direct investors can bring to their economies. These African states want to emphasize the price mechanism as a factor of lessening the imbalances in the private sector also, if FDI increases productivity and these increases are not entirely appropriate for the investor, other actors in the productive national system and some economic agents will benefit directly. Domestic workers will help in terms of higher

wages, local households, in terms of lower prices and the government in terms of higher tax revenues. FDI also promotes technology transfer from developed to undeveloped countries where FDI is considered as one of the principal means of technology transfer (XU, 2000).

Organization for Economic cooperation and development OECD (1998) has found that foreign direct investment has a more significant impact on economic growth than investment by domestic firms. Foreign direct investment indicates strong points of monetary and financial affairs that envy implementations to various Countries. The geographical proximity and the cost of the cheap labor of most African countries are among the advantages to attract more investors. However taking advantage of this growth potential, it is necessary that the host country's trade regime be geared towards promotion.

### **Literature Review**

On analyzing the problem we realized that most publications have focused on the impact of foreign direct investment on the growth of Africa's two main regions which are Africa Maghreb and sub-Saharan Africa not focusing on the other developing countries looking at the relationship and impacts on economic growth in the continent (Zhang, Q., & Felmingham, 1995).

Economic growth determinants in developing nations have assumptions which at times have mixed reactions on economic growth within the nations. Sometimes contradictory answers are realized but this may be due to some methodologies and conceptual factors, including the lack of complete harmonized data which sets variation in various definitions of foreign direct investment, and different econometric specifications (Adams, 2009).

#### ***Definition of Foreign Direct Investment and economic growth***

Foreign Direct Investment (FDI) has been discussed in several economic disciplines. Thus, the theories of international trade, industrial organizations, the information on economy and development economics have focused on defining, understanding and analyzing both the determinants and effects of FDI (Barrios, S., Gorg, H., & Strobl, 2005). This analysis is carried out both at the level of the country of origin and at the level of the host country. Each of these theories relied on a particular aspect of the international movements of firms. Some have understood FDI as a manifestation of the free flow of capital, others as an investment strategy while the capitalist view supports the idea that FDI is a driver of development, Marxist-inspired theories describe them as causes of marginalized developing countries. Foreign Direct Investment is a process where companies' resident in one country acquire ownership of assets in another country to control production, distribution in the country (Borensztein, E. J., De w Gregorio, J., & Lee, 1998).

The OECD defines foreign direct investment operations and FDI as an investment made by a resident entity of an economy to acquire a lasting interest in an enterprise resident in another economy. The nation of lasting interest implies to the existence of a long-term relationship between the direct investor and the enterprise and the fact that the investor can exert a strong influence on the management of the enterprise benefiting from the direct investment. It is not necessary for the foreign investor to have absolute control hence the criterion applied is participation equal to 10% of the voting rights. This definition coincides with that of the IMF and shows that foreign investment is characterized by the contribution of the international firm to decision-making in the local enterprise (Blomström, M., Fors, G., & Lipsey, n.d.)

#### ***Effect on the accumulation of capital***

FDI reinforces the stock of capital that materializes with new capital goods and obliges companies to make sustainable commitments with productive assets included in FDI have immediate repercussions on the local economy through competition, imitation, labor turnover or the creation of

vertical links. It thus favors the accumulation of capital in the recipient country and activities on complementary by multinationals. However, this study has the defect of not having differentiated the results according to the regions because the flows towards them are not identical, areas which at least do not have all the same characteristics. It would, therefore, be adequate to extend this analysis and to estimate the effects of capital flows by region, since it is likely that the results for sub-Saharan Africa, particularly for West Africa, would have been close to those obtained for the group of emerging countries (Agbetsiafa, 2014). For the Franc zone countries Harrison, underlines the positive theoretical externality of FDI. According to these authors, FDI inflows can help reduce the financing constraints of domestic firms. One of the main obstacles to investment in developing countries is the unavailability of financial resources and lack of access to these resources. From this perspective, FDI can reduce these constraints by providing the necessary financial resources in the capital for developing countries besides an insufficient development of the domestic banking sector can make it difficult for local businesses to access foreign financial resources. In this case, it can slow down investment and prevent local companies from exploiting the opportunities created by the presence of foreign firms in the country.

#### *Effects on technology transfer*

For the economic literature, technology transfer may be the primary mechanism by which the presence of foreign firms can have positive externalities in the developing host economy. Indeed, multinational enterprises are the primary source of research and development (R & D) activities in the developed world, and their level of technology is generally higher than that of developing countries so that they can generate very significant technological spin-offs (Council & Kong, 2015). Nevertheless, the role played by multinational enterprises in facilitating these spillovers varies according to economic context and sectors. According to the OECD, technology transfer and diffusion is achieved through four interdependent mechanisms: vertical linkages with suppliers or acquirers in host countries; horizontal links with competing or complementary companies of the same branch; migrations of qualified personnel the availability of modern technologies is perhaps the main reason why countries want to attract foreign investment (Pesaran, 2007).

They can obtain technologies that they cannot manufacture themselves. Since the expected effect of FDI on growth is based on the absolute necessity of transferring technologies to the host country, these open their doors to multinationals, which are recognized as the primary vectors of the international diffusion of technology (Graf Von Der Schulenburg et al., 2008). They are an essential part of the world's research and development (R & D) and generally control the most advanced technologies. And developing countries characterized by the weakness of their R & D resources then depend on foreign multinationals to access modern technology. It is, in fact, thanks to technical progress that FDI stimulates growth and two main channels through which FDI may lead to increase. First, FDI can promote the adoption of new technology in the production process through capital spillovers. Second, FDI may stimulate knowledge transfers, both in terms of labor training and skill acquisition and also by introducing alternative management practices and better organizational arrangements (Adams, 2009). Evidence concerning Ireland tends to corroborate this result. In particular, by applying semi-parametric regression techniques to factory-level panel data for the manufacturing sector, they noted that, although the competitive effect may have initially discouraged the entry of local firms, the initial force has been overtaken by positive externalities, which has widely contributed to the overall impact of FDI. Adams (2009) also investigated the impact of foreign direct investment and national investment on economic growth for sub-Saharan African countries from 1990 to 2003. Their result showed (ID) has a positive and significant effect. Correlated with economic growth for the OLS estimate and fixed effects, but FDI is only positive and significant in the MLS estimate.

### Methodology

To better understand the effects of foreign direct investment on growth, several Econometric methods have been used by authors in their research. But we will do a brief critical review of these different methods before proposing the approach that seems best for us in our work. In the case of country-specific studies, the use of time series is one of the appropriate methods (De Melo, J. and Robinson, 1992). The main argument in favor of these has been that panel studies imply a common economic structure and a similar production technology between different countries, while the time series makes it possible to highlight the specificities of each country studied. Indeed, a country's economic growth is not only influenced by FDI and other factors of production.

It can also be affected by many domestic policies such as education, fiscal and external policies through which the benefits of FDI can be maximized. The other method is the use of the simultaneous equation linear system. This type of model has been used to observe the impact of FDI on the economy (Bur fisher, 2002). These models have the main advantage of taking into account the endogenous nature of growth, the two meaning of causality being simultaneously integrated into the system.

#### *Specification of the analysis model*

Analysis and evaluation of empirical effects of FDI on the economic growth of different member states from 2003 to 2017 (Graf Von Der Schulenburg et al., 2008) with using of the random effect and fixed effect for our empirical estimates about several studies have given different specifications regarding the relationship between FDI and economic growth with the understanding of the fundamental relationship between FDI and output growth. A simple production function was used. A starting point of the model formulation is:

$$Y = f(A, FDI, K)$$

Where Y is output; Gross Domestic Product (GDP), and K is capital stock. The variable A captures the total factor productivity of growth in output.

$$Y = f(FDI, Imports, GFCF, Exports, Lucp, Trad, Tp)$$

The model can be described as follows:

$$GDP = \beta_0 + \beta_1 FDI + \beta_2 Lucp + \beta_3 GFCF + \beta_4 Trade + \beta_7 Tp + \epsilon \quad (1)$$

$$GDP = \beta_0 + \beta_1 FDI + rD * P * FDI + \beta_2 Lucp + \beta_3 GFCF + \beta_4 trade + \beta_5 Export + \beta_6 Import + \beta_7 Tp + \epsilon \quad (2)$$

Where P is a dummy variable of recent years.

$$GDP = \beta_0 + \beta_1 FDI + rD * Land * FDI + \beta_2 G + \beta_3 GFCF + \beta_4 Tp + \beta_7 Trad + \epsilon \quad (3)$$

Where Tp is a dummy variable of landlocked countries.

$$GDP = \beta_0 + \beta_1 FDI + rD * Big * FDI + \beta_2 LUCP + \beta_3 GFCF + \beta_4 Tp + \beta_7 Trad + \epsilon \quad (4)$$

Where Big is a dummy of big countries, by GDP size countries Big=1, or, Big=0.

$$GDP = \beta_0 + \beta_1 FDI + rD * High * FDI + \beta_2 Lucp + \beta_3 GFCF + \beta_4 Tp + Imports + \beta_6 Exports + \beta_7 Trad + \epsilon \quad (5)$$

Where high is the dummy of high countries income

GDP (current), The GDP here is considered the aggregate gross value added by all resident producers in the economy, adding taxes on products, subsidies, and not included in the value of production. Foreign Direct Investment (FDI) is a cross-border investment by an investor to establish a sustainable financial interest in a sector or business and to influence the operation of the business this holds a stake of at least 10% of the share capital with the net FDI used in this study corresponds to produce an economic unit of production that shows a lower ratio indicates that less energy is used to produce a group of output.

Where:

FDI: Foreign Direct Investment (current U.S dollars)

TP: Transport service on Imports

GFCF: Gross fixed capital formation %

LUCP: Land under cereal production

IMP: Import of goods and service

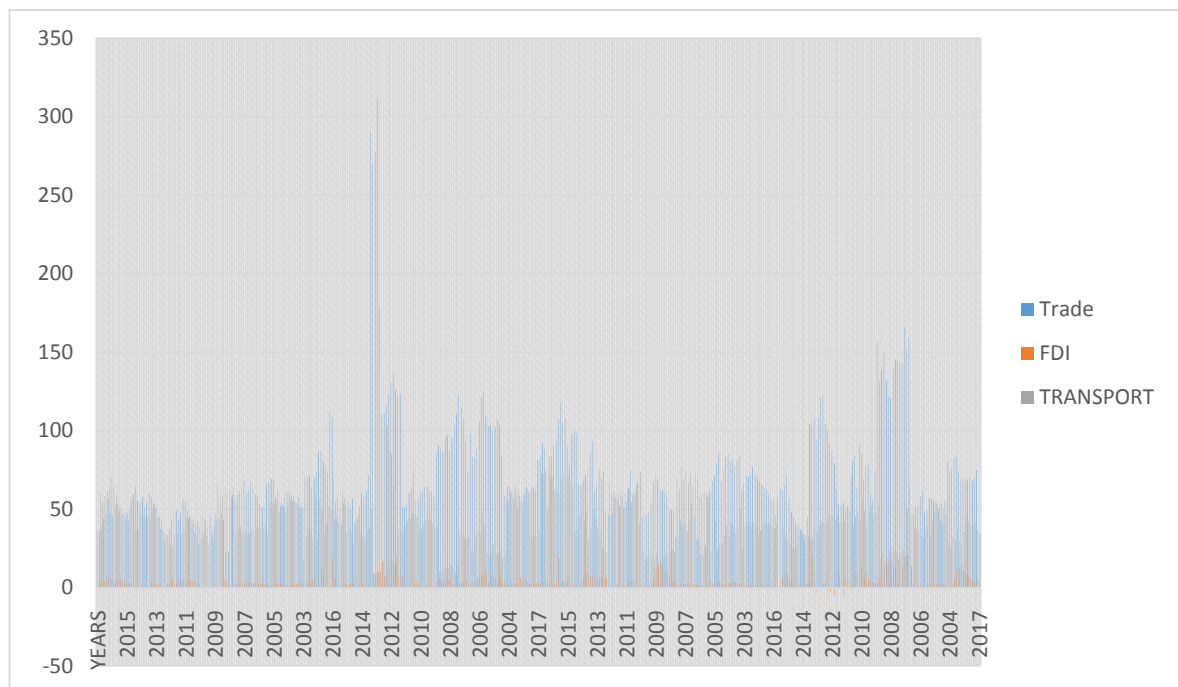
EXP: Exports of and services (% of GDP)

Trade: Trade % of GDP

$\epsilon$ : error term

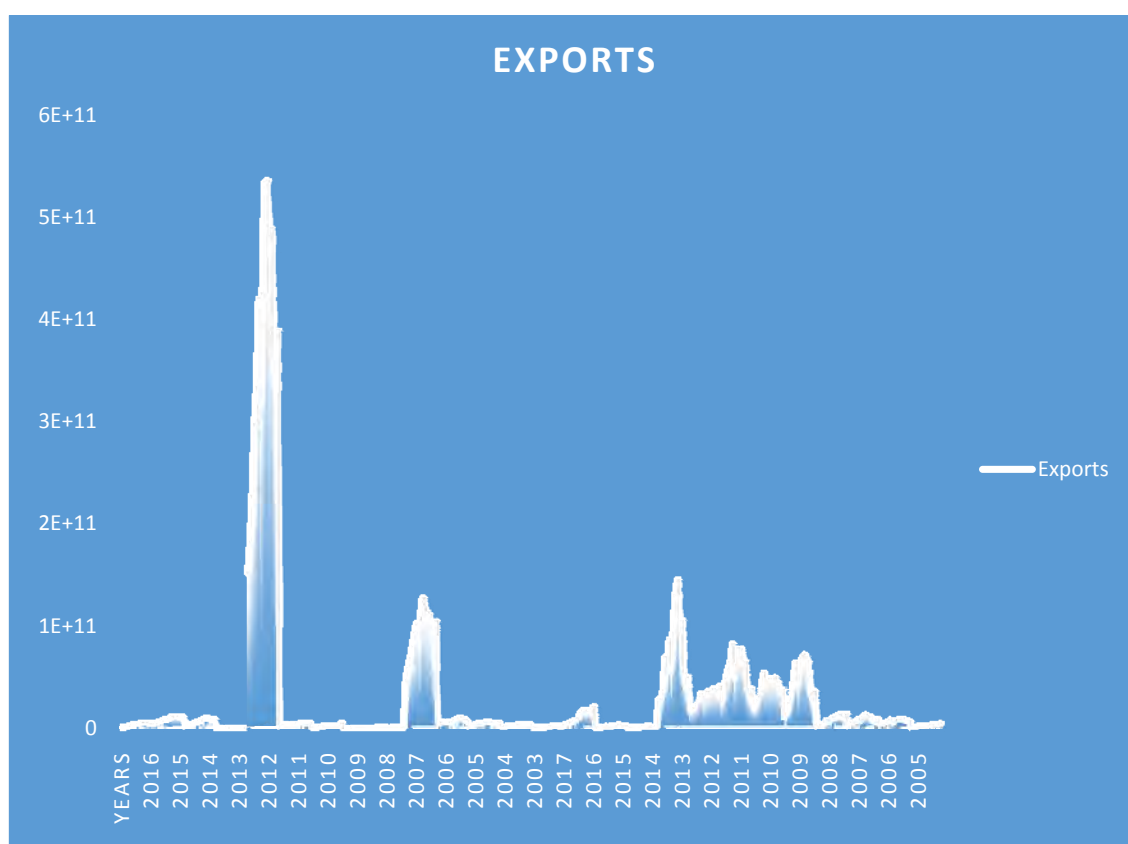
### *Data source*

At the international level the statistical data are relatively homogeneous that compels foreign direct investment for main developing countries through World Bank and IMF statistics with total reference made in different directions. Generally, investment and development issues statistics from central banks, statistical offices, and national authorities and then compiles them with the IMF, the World Bank, and the OECD. It obtains them from investigations of their agents with the companies concerned. The National Statistical and Information Departments (DNSI) also collect statistics on large enterprises that could provide information on FDI flows. To favor the homogeneity of the data, two sources have been exploited. All data are extracted from the database of the Central Bank of West African States (BCEAO) and the database of the World Bank. These data cover the period 2003-2017 selected for the analysis. The reasons for this choice are the implementation during this period of several economic and financial policy measures in the Union in particular the Convergence, Stability and Solidarity Pact, the Customs Union, the standard external tariff and attracting foreign direct investment on the continent.



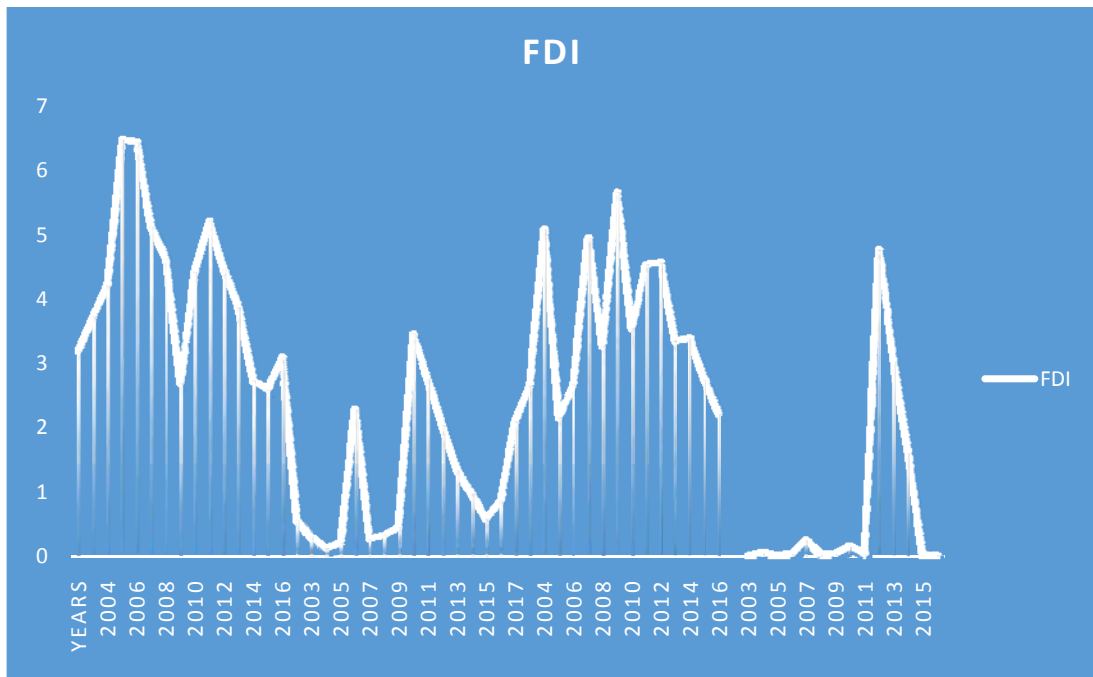
**Figure 1. Trade %FDI & transport**  
**Source: the author with World Bank Data**

Having seen steady increase in net foreign direct investment flows in African countries since the beginning of 2003 as a result of different development policies, and their pace has accelerated over the last years, despite the crisis context in the Economy and international finance. These flows increased at an average annual rate of 15.9% over the period 2008-2016, compared with 2.5% before 2003. West African countries are the leading countries in receiving the FDI amendments in contrast to within the continent, the leading countries receiving FDI are Niger (30.2%), Côte d'Ivoire (20.0%), Mali (14.8%) and Senegal (14%). 3%), representing more than four-fifths of the FDI received between 2006 and 2015. Compared with those of East African countries tend to be primary beneficiaries to the Union which increased investments in the natural resources for the first sector and the opening up in the market. However this is associated with the multiplication of development investments in this sector



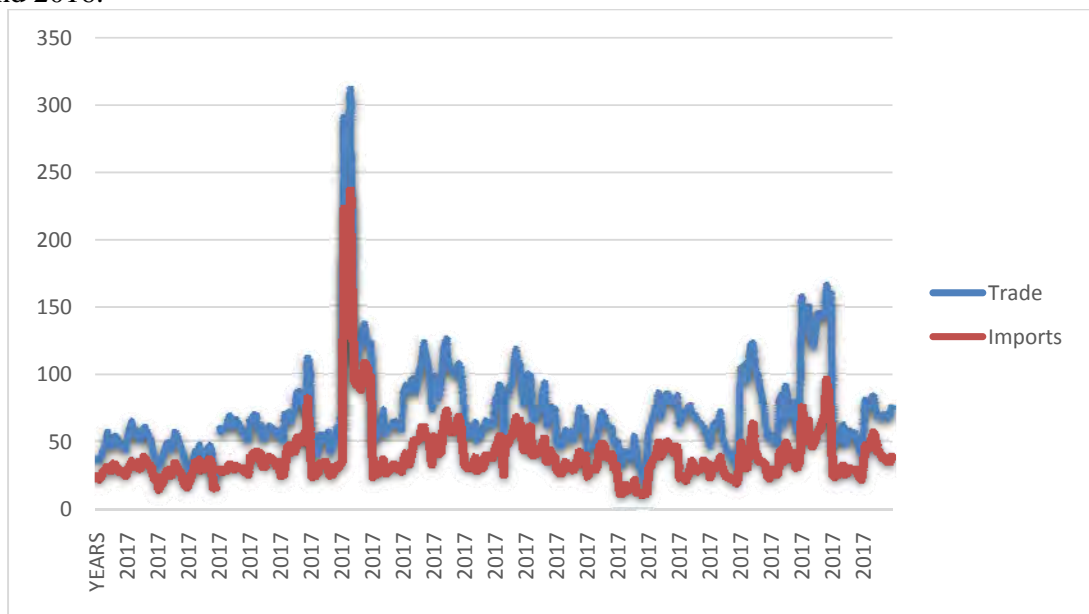
**Figure 2. Evolution exports in African countries**  
**Source: the author with World Bank Data**

This graph shows the comparative evolution of FDI as a percentage of Exports in big and small countries in terms of income. On the figure, the white color represents the high-income countries and Blue color on the graph represents the low-income countries because of all that continued growth of Trade by capita in different countries and the Export per capita in high-income countries is almost double that of low-income countries.



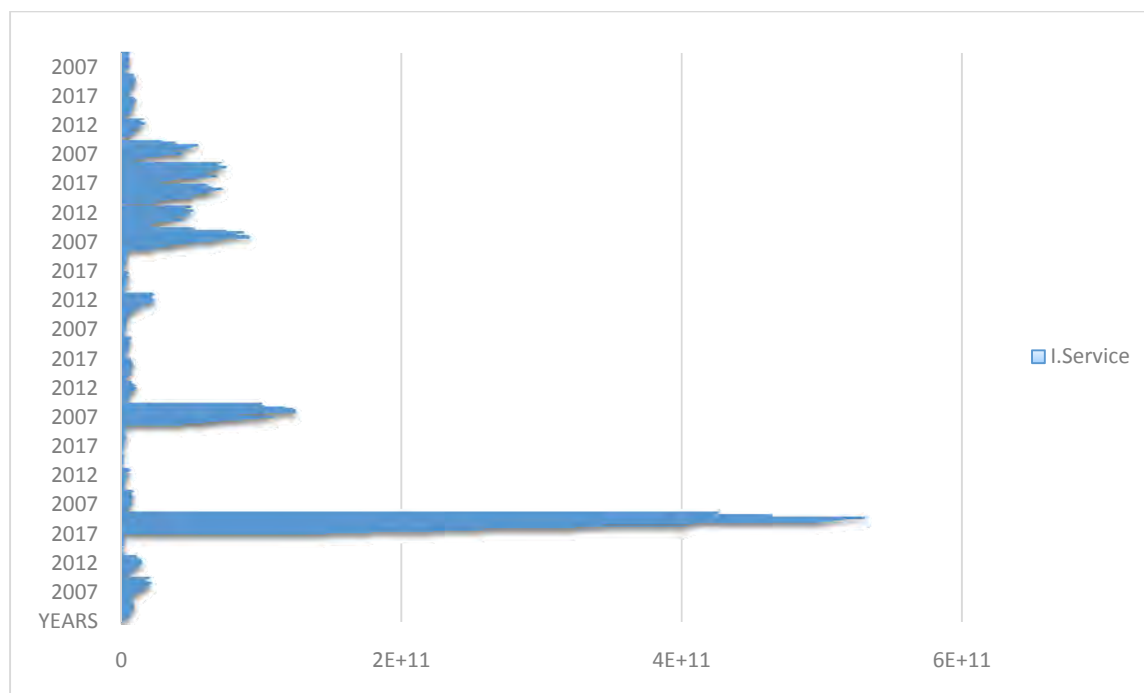
**Figure 3. Foreign direct investment evolution in East African countries**  
**Source: the author with World Bank Data**

Foreign countries in years of colonization oversaw their own colonies and concentrated on investment in different sectors. During the analysis of our research the magnitude of the flows recorded in 2006 and 2010 is in line with the construction of a new cement plant and the investments of the BOLLORE Group in different ports. On average, they stood at 3.7% of GDP over these four years. After the sharp decline recorded in 2009 a significant recovery in flows is observed between 2009 and 2016.



**Figure 4. Trade & imports of Most African countries (Million Dollars)**  
**Source: the author with World Bank Data**

The figure shows Trade as a percentage of Imports and the real Trade rate from 2003 to 2017. Trade represents the dollar value of goods and services produced by resident producer units over a given period in the year. We distinguish between nominal trade (current or value) and real Import (constant). Real Trade reflects the dynamism of a country's economy and in this commentary we are interested only in the Trade as a percentage of imports and that of trade in real terms. One of the objectives of the African member states was to continue the growth obtained just after its creation.



**Figure 5. Import Service in Developing countries**  
Source: World Bank

This graph shows import service as a percentage of economic growth and Division of countries into large countries and small countries by the size of their GDP. On the graph, the blue color represents the big countries with average GDP from 2003 to 2017 which have had steady growth in terms of service on percentage of GDP.

**Table 1. Ordinary least square for trade**

Variables	Coef.	Std. Err.	z	P>z	[95% Conf.]	Interval]
Fdi	0.0413	0.0385	1.0700	0.2840	-0.0342	0.1167
Gfcf	-0.3251	0.0648	-5.02	0.0000	-0.4522	-0.1981
imports	1.3887	0.0244	56.8900	0.0000	1.3409	1.4366
Exports	0.0000	0.0000	2.9300	0.0030	0.0000	0.0000
Lucp	0.0000	0.0000	-2.33	0.0200	0.0000	0.0000
Tp	-0.0183	0.0347	-0.53	0.5970	-0.0863	0.0496



Variables	Coef.	Std. Err.	z	P>z	[95% Conf.	Interval]
_cons	22.9851	3.1539	7.2900	0.0000	16.8035	29.1667
Sigma u	11.8762					
Sigma e	5.2873					
Rho	0.8346	(fraction	of variance due	to	u_i)	

According to the result of Table 1, the effect of FDI of larger Gfcf by size on economic growth is significantly better than FDI of the entire sample and large fdi presents the variable of the largest GDP by size, the coefficient is positive and the p-value is significant (0.000). Variables are all positively significant to the economic growth of most African countries.

**Table 2. Hausman Test**

----	Coefficients ----			
	(b)	(B)	(b-B)	sqrt(diag(V_b-V_B))
	random	fixed	Difference	S.E.
fdi	.0549996	.0549996	0	0
gfcf	-0.72813		0	0
imports	1.400798	1.400798	0	0
exports	3.58e-11	3.58e-11	0	0
lucp	-6.8E-07		0	0
tp	-0.01786		0	0

$$\chi^2(0) = (b-B)'[(V_b-V_B)^{-1}](b-B) = 0.00$$

$$\text{Prob} > \chi^2 =$$

(V\_b-V\_B is not positive definite)

**Table 3. Fixed and Random Effect Regression Analysis of Trade**

Variables	Coef.	Std. Err.	t	P>t	[95% Conf.	Interval]
fdi	0.0550	0.0386	1.4300	0.1550	-0.0208	0.1308
gfcf	-0.3641	0.0652	-5.59	0.0000	-0.4922	-0.2359
imports	1.4008	0.0249	56.2300	0.0000	1.3518	1.4498
exports	0.0000	0.0000	2.9000	0.0040	0.0000	0.0000
lucp	0.0000	0.0000	-2.66	0.0080	0.0000	0.0000
tp	-0.0089	0.0349	-0.26	0.7980	-0.0775	0.0597
_cons	23.6640	2.1272	11.1200	0.0000	19.4802	27.8479
sigma_u	14.3772					
sigma_e	5.2873					
rho	0.880869	(fraction	of variance due	to	u_i)	

F test that all u\_i=0: F (25, 349) = 71.23 Prob > F = 0.0000

According to the results of the random effect, the coefficient of estimation has high values which indicates that there is a strong relationship between the GDP and other variables

The coefficient of FDI has a negative effect on the economic growth of many countries. Variables such as GFCF (0.000), exports (0.0000) and trade (0.000) are all significantly positive for union economic growth, exports, land for cereal produce and transport as an addition value for economic growth. Since the p-value is greater than 5%, these variables are not significant. Variables (GBCF, Transport and Trade) have a positive impact on economic growth: if they increase by one unit, the GDP will also increase by one unit. According to fixed effect results the estimated value means that there is a strong relationship between the dependent valuables and independent valuables, the p-value of the FDI is (0.0155) significant, but the coefficient is negative. Variables such as GFCF (0.000), Transport (0.000) and Trade (0.000) all have a positive impact on economic growth. The variables, Most of the FDI in African countries are directly oriented in the exploitation of natural resources, which does not favor the transfer of technology and the profit of foreign investors and that is generally repatriated.

## **Results and Discussions**

### ***Impact of Foreign Direct Investment (FDI) on Economic Growth***

The literature on the impact of FDI on growth especially that of developing countries, is particularly abundant. Currently, economists tend to recognize a generally positive effect of FDI on growth in developing countries. The results of research on the impact of FDI on growth are still unconcluded as to the expected or realized effects. The analyzing may be carried out at the micro- and macroeconomic levels which show that these effects can be at times decisive, neutral or even harmful (Dixit, A. and Stiglitz, 1997). Dixit finds that there is little evidence of a positive effect of foreign investment on growth for recipient countries. Likewise, studying the potential positive effects of firms with a majority of foreign capital on local firms, concludes that there is usually a negative impact which has shown the need for prerequisites for assessing the link between foreign investment and growth.

It establishes that this link is unstable, positive or negative, depending on the state of the environment that favors investments in different nations. At the decision-making level, opportunities for technology transfer, externalities and other benefits for recipient countries have led to the introduction of incentives in different forms to attract foreign investment. It is estimated that foreign investment can bring significant benefits in terms of technology transfer and innovation in management, thereby helping to reduce the development gap. It is improving human capital, between rich and developing countries. The researches of the links between foreign investment and growth can be considered as indicated above at the microeconomic and macroeconomic level. At the microeconomic level, studies have sought to assess the impact of FDI on different sectors and the horizontal or vertical distribution of spillovers. Most of these sectoral studies make a positive contribution to investment in the secondary and tertiary sectors and a neutral or even negative impact on the primary sector, particularly in agriculture (Graf Von Der Schulenburg et al., 2008). Show that technology transfers generated by foreign investment generally go to secondary and tertiary sector firms rather than to the primary sector. This is because the primary sector (agricultural) uses much less technology than other areas, particularly in developing countries, while the mining resource industries are technologically poorly connected to other local firms (Westerlund, 2007).

The potential for FDI to create technological linkages between domestic firms is essential for the diffusion of innovation. Ndikumana conducted a study in sub-Saharan African countries on the two-way links between FDI and national investment and its results suggest that investments in the

diversification of the economy with data used from 1994 to 2013 showed that there was a significant relationship between FDI, Exports and gross capital formation but no dependence between the human development index and the GDP(Ogutuhwayo, n.d.). He shed light on the empirical relationship between foreign direct investment and economic growth and as result revealed the existence of a significant relationship between GDP, FDI, net inflows, exports and the development of the financial system in the long and short term. Besides, he showed that there was a conditional between GDP and FDI, ranging from GDP to FDI.

Studies show the impact of FDI on economic growth in countries like Angola, Nigeria, Egypt, Mali, Botswana, Burkina Faso, South Africa, Côte d'Ivoire, and Tunisia from 1970 to 2003. In its regression, it used GDP as a dependent variable and FDI, gross capital formation and export balance as the independent variable. Its results reveal that the effects of FDI are positive in several countries: Nigeria, Egypt, Mali, Botswana, and Burkina Faso, but it is only in Angola that this effect is positive and significant. However, several other countries such as South Africa, and Morocco show the negative impact of FDI on economic growth.

The method used is the simultaneous equation system and tested by the two-step method. The result shows that FDI has a positive and significant effect on the growth rate and is more efficient than national investment. Human capital and the degree of openness of the economy do not play a substantial role as a catalyst for the country's growth. Their interaction with FDI has a positive effect but has no significant effect on the growth rate(Barrios, S., Gorg, H., & Strobl, 2005). The link between FDI and domestic investment in the 10 Central and Eastern European countries over the period 1995-2015was investigated. The result shows that FDI leads to a destructive creation phenomenon, with a knock-on effect which in Short-Term foreclosure on domestic investment, followed by long-term crowding. New FDI enhances the long-term complementarity of domestic investments, while mergers and acquisitions have no significant effect on domestic investment. Financial development appears to ease foreclosure pressures and even foster the concentration of mergers and acquisitions.

According to Brewer (1991), there is an adverse effect of FDI on economic growth which indeed is the negative effect that can be explained by the result of the domination exercised by foreign companies on local businesses which discourage them from developing their research and development activities(Ogutuhwayo, n.d.).

#### ***Effect on infrastructure***

In the literature, infrastructure is presented as intermediate goods that facilitate trade and improve the productivity of other inputs in the production. Infrastructure can be defined as a result of the work of Hirschman (1958), as goods and services that support economic activity. In addition to physical infrastructure such as electricity, transport, and communications, whose characteristic is to participate in the productive process with proposes a broader definition that includes social infrastructure including education and health whose function is to maintain and develop human capital. Infrastructure is more understood as a factor in improving product performance and private sector investment. Infrastructure is at the heart of the concerns of developing countries(Deardorff, 1998).

FDI provides not only substantial funds but also modern technologies, advanced skills, and knowledge which also makes it easy to carry out the project at low cost and with minimum deadlines(Dixit, A. and Stiglitz, 1997) being a fundamental criteria FDI is considered the most important means of transferring modern technologies, funds and innovative ideas from one country to another for the development of the host country.

However, the availability of the landline does not attract foreign investors, both in developing countries and in African countries. Developing countries can be strongly recommended to promote the development of electricity infrastructure to make available the quantity and quality of

energy produced sustainably(Wester Lund, 2007) with development and economic growth using a panel of nine African countries from 2009 to 2016.

It is based on an approach of distinguishing the factors that determine these capital flows as external or internal factors in the various economies of the Union which results show that infrastructure, openness and political instability are vital determinants of foreign direct investment (FDI). Two of these factors (openness and infrastructure) associated with countries' economic growth significantly determine portfolio investment in the different countries, while debt depends mainly on inflation infrastructure, and public consumption(Deardorff, 1998).

### **Conclusion**

As part of our study, we empirically analyzed the effect of foreign direct investment on the economic growth to African member states between 2003 and 2017. The main objective of our paper was to verify the effects of FDI on different economic growth of member countries and Random effects and fixed effect methods used for different test analysis. This allowed to obtain these different results for the countries which show us that FDI has a negative effect on the entire sample therefore rejecting our hypothesis that FDI has a positive effect on the entire sample and maintains the alternative hypothesis. However, while we observe other results in recent years, these show us that FDI has had positive effects on the economic growth of the main countries.

In recent years, the relationship between FDI and economic growth in the region is positive and it is through FDI that the holders of modern technology transfer modern technology to countries that cannot possess it. According to the results of our tests, variables such as gross fixed capital formation, public consumption, and trade opening are all positive and significant. When these variables have a potential impact on economic growth, governments realize that FDI can contribute to economic development and the need to attract it. The global market for this type of investment is highly competitive and developing countries, in particular, want this type of investment to accelerate their development efforts.

Economic determinants are nonetheless crucial source of investment capital, FDI stimulates employment and also it is perceived as a means for developing economies to acquire advanced technologies, new management methods and access to developed countries' markets. Following the many social and economic concerns of developing states, most countries have sought to find a solution to their concerns. These concerns included youth unemployment, the high poverty rate, and the crucial lack of technology. To remedy these problems developing countries called on the IMF and the World Bank to facilitate the entry of FDI that is likely to play an important role in economic development.

Recommendations of the study present a limitation due to the nature of the data available. Indeed, the data used did not allow for a sectoral distribution of FDI and to analyze the impact of each sector's FDI on economic growth therefore, wishing to undertake studies in this direction, Essential economic policy decision helps states in decision making and rational choice for investments. Improving the macroeconomic framework it is important to consider that a proactive FDI policy alone is not enough to bring about a sustainable acceleration of economic growth which could indeed be part of a macroeconomic as a whole. This involves creating stability and ensuring a stable economic and socio-political environment for foreign investors to increase and improve the quality of the physical infrastructure. The weak socio-political climate is detrimental to the image of the region among investors and improving this image requires efforts at the country level as well as at the regional level in promoting a good governance, democracy, justice, transparency and respect for

human rights. All that will prevent internal conflicts and the local level efforts by the Economic Community of most African States to maintain peace in the regions.

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