

# Research on Foreign Direct Investments on Economic Growth in Waemu Countries

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**ABSTRACT.** This study aims to analyze the decline in foreign direct investment in the WAEMU and the link between real economic growth and FDI over the period 2000-2015. In fact, we tested two models. First, we regressed the rate of economic growth on the determinants of FDI, in order to determine the overall impact of FDI on the economic growth of the WAEMU zone. Finally, the regression of real GDP on FDI was observed. It emerges from the panel of estimates given that FDI replaced external debt from 2000 to 2010. In addition, these investments have a positive and significant effect on the real growth rate of the WAEMU. Taken individually, the impact is verified.

**KEYWORDS:** Foreign direct investment, Waemu, Economic growth

## 1. Introduction

Most studies in international economics do not fail to emphasize the growth of foreign direct investment (FDI) in recent years and, the increasingly marked presence of multinational firms whether in international trade or in the economy of countries (OECD 2008 summaries, social impact of FDI).

Indeed, the growing importance of international capital flows is one of the main characteristics of today's international economy. One of the observations that we have had to make is that foreign direct investments made by multinational companies, follow a growing evolution with globalization and constitute an essential element of the strategy of internationalization of companies. In addition, to resolve the serious problems of balance of payments that have occurred for decades, the WAEMU countries have resorted to several sources of financing, the main one being FDI. And since then, these governments have clearly placed these investments at the heart of their development strategies, considering them as an alternative to external debt. To attract these flows, they liberalized their economies and put in place a battery of incentives. This is why the volume of foreign direct investment destined for the member countries of the WAEMU has increased considerably. However, the role of FDI as a factor of economic growth is taken with caution by several economists especially in developing countries because this channel of transfer of economic growth obeys several factors like political, structural factors etc. Some argue that the relationship between FDI and economic growth is ambiguous in developing countries. However, the WAEMU countries are characterized by weak infrastructure with a public investment rate below the minimum of 20% recommended by the World Bank for the initiation of economic growth profitable for poverty reduction (Dje).

This study focuses on the role played by FDI in the economic growth of the WAEMU zone. In other words, what is the real contribution of FDI on the growth rate of the WAEMU countries? Better still, could these inflows of private capital have generated economic growth despite the weakness of infrastructure and human capital?

The general objective of this study is to analyze the impact of FDI on the economies of the WAEMU countries in order to determine the economic policy measures enabling countries to reap the best benefits. Such a study seems necessary to us because it will complement the research explaining the relationship between FDI and economic growth in a well-defined methodological framework. Specifically, it will be:

➤ Assess the contribution of FDI to economic growth in the area. In other words, to study the impact of FDI on economic growth.

## 2. Research Methodology

To analyze the effect of FDI on economic growth in the WAEMU countries, an econometric approach using panel data is adopted. The estimation used is the generalized moment's method (MMG) unlike Arellano and Bond (1991). We

will use secondary data and they come from the World Bank's World Development Indicator 2017 database. The study is carried out over a period from 2000 to 2015 except Guinea Bissau. We adopt the augmented Dickey-Fuller test as well as that of Im-Pesaran-Shin to verify the stationarity of variables. The various tests were carried out under the STATA 12 software.

Results and Discussions

Test results and estimates

Table 1 : Dickey-Fuller Unit Root Test

Variables	Statistical Value	Critical Value1%	Critical Value 5%	Critical Value 10%	Decision
GDP	-3.6964	-2.190	-1.990	-1.880	I(0)
FDI	-3.2292	-2.190	-1.990	-1.880	I(0)
DOMESTIC INVEST	-4.0140	-2.190	-1.990	-1.880	I(0)
INFLATION	-4.2877	-2.190	-1.990	-1.880	I(0)
SAVING	-2.8004	-2.190	-1.990	-1.880	I(0)
DEGRE OPENING	-2.5817	-2.190	-1.990	-1.880	I(0)
EXTERNAL DEBT	-2.2658	-2.190	-1.990	-1.880	I(0)
HUMAN CAPITAL	-5.6216	-2.190	-1.990	-1.880	I(0)

Table 2 : Im - Pesaran - Shin Unit Root Test

Variables	Statistical Value	Critical Value1%	Critical Value 5%	Critical Value 10%	Decision
GDP	-4.3237	-2.190	-1.990	-1.880	I(0)
FDI	-2.5404	-2.190	-1.990	-1.880	I(0)
DOMESTIC INVEST	-3.2417	-2.190	-1.990	-1.880	I(0)
INFLATION	-2.2585	-2.190	-1.990	-1.880	I(0)
SAVING	-3.2459	-2.190	-1.990	-1.880	I(0)
DEGRE OPENING	-2.3481	-2.190	-1.990	-1.880	I(0)
EXTERNAL DEBT	-3.3135	-2.190	-1.990	-1.880	I(0)
HUMAN CAPITAL	-5.6216	-2.190	-1.990	-1.880	I(0)

NB: The values in parentheses are the standard deviations of the coefficients. \*\*\* indicates significance at the 1% level. \*\* indicates significance at the 5% level. \* indicates significance at the 10% level.

The results of this regression are largely significant in the WAEMU zone. The delayed real growth rate is negatively and significantly linked to the growth rate at the 10% threshold. Foreign direct investment, on the other hand, positively and significantly impacts the real growth rate at the threshold of 1%. In addition, human capital positively and significantly influences the real growth rate at the threshold of 1%. In addition, external debt is positively and significantly linked to the real growth rate at the 5% threshold. The other variables in the model, openness, savings, inflation and domestic investment, are not significantly related to the real growth rate.

Table 3 : Regression Result of the Model (1)

Variables	Coefficients	Probabilities
GDP	-0.212294	0.095
FDI	(0.12705)*	0.000
DOMESTIC INVEST	-0.318128	0.812
INFLATION	(0.080695)***	0.756
SAVING	0.010619	0.439
DEGRE OPENING	(0.04459)	0.150
EXTERNAL DEBT	-0.016395	0.047
HUMAN CAPITAL	(0.05275)	0.003
	0.03383	
	(0.043702)	
	0.035297	
	(0.024533)	

	0.482012 (0.242335)* 0.91736 (0.030909)***	
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Wald chi2 (6) =78.60      Prob  $\geq$  chi (2) = 0.0000

Table 4 : Regression Result of the Model (2)

Variables	Coefficients	Standard Deviation	Probabilities
GDP(-1)	-0.33500	0.16880	0.047***
FDI2	-0.41695	0.17044	0.014***
FDI3	1.63477	0.22463	0.000***
FDI4	0.59520	0.24775	0.016***
FDI5	0.31108	0.04837	0.000***
FDI6	0.46486	0.23230	0.045***
FDI7	0.27437	0.31034	0.377
DOMESTIC INVEST	0.06049	0.05290	0.253
INFLATION	-0.04121	0.01695	0.451
SAVING	-0.02896	0.07972	0.716
DEGRE OPENING	0.00832	0.04430	0.623
EXTERNAL DEBT	0.65752	0.34521	0.057*
HUMAN CAPITAL	0.06544	0.05470	0.140

Wald chi2 (6) = 670.77      Prob  $\geq$  chi (2) = 0.000

NB: The values in parentheses are the standard deviations of the coefficients. \*\*\* indicates significance at the 1% level. \*\* indicates significance at the 5% level. \* indicates significance at the 10% level.

The results of this regression are mostly significant in the WAEMU zone. Foreign direct investment in Burkina Faso, Cote d'Ivoire, Mali, Niger and Senegal positively and significantly impacts the real growth rate at the threshold of 1%. As for Benin, foreign direct investment has a negative and significant impact on the real growth rate at the 1% threshold. On the other hand, FDI in Togo is not significant. External debt is positively and significantly linked to the real growth rate at the 5% threshold. The other variables in the model, openness, savings, human capital, inflation and domestic investment, are not significantly related to the real growth rate.

### 3. Discussions

Estimates show that, foreign direct investments have a positive and significant impact on the real growth rate of the WAEMU zone, in other words, they allow an improvement in economic growth. Indeed, when the level of FDI varies by 1% the real growth rate varies in the same direction by 0.32%, all other things being equal. This result corroborates with those of Bouoiyour Jamal, Mouhoud El Mouhoub, Hanchane Hicham (2008). Human capital also has a positive and significant impact on economic growth at the 5% threshold. However, its impact is moderate and is around 0.09 for all the WAEMU countries. In other words, when human capital varies by 1%, the real growth rate also varies in the same direction but by 0.09%. This result is similar to that of Nazaire Fotso Ndefo (2003) who showed the impact of human capital on growth being around 0.03 for all African countries south of the Sahara. External debt has a positive effect on growth. We see that when it increases by one, the growth rate increases by 0.48. For Djaowe (2009), external debt has a positive and significant impact on the inflow of FDI. In addition, despite their insignificance, the degree of openness, savings and inflation had the expected signs. The structure of these economies remains very extroverted. It is often centred on the petroleum and mining sectors or on export-oriented cash crops whose revenues are then converted into imported manufactured goods. As for savings, it is a prerequisite for investment in the area and stimulates economic growth. In addition, the impact of domestic investments on growth is not significant and also has the expected sign. This result is similar to that of Zallé (2011). He has shown that the participation of foreign investment in the development of physical infrastructure and the development of financial markets can help improve the efficiency of domestic investment.

### 4. Conclusion

The present study has highlighted the impact of foreign direct investment in the WAEMU countries. To do this, we estimated a panel model over the period from 2000 to 2015. From our estimates, the following results emerged:

FDI influences positively and significantly the economic growth of the WAEMU countries;

The impact of FDI in the UEMOA zone does not all vary in the same direction.

The majority of contemporary empirical work on the impact of foreign investment shows that FDI is a major player in economic growth and development and could be an effective solution to the problems of financing sustainable growth. Other external funding mechanisms should therefore be used to reduce poverty and improve living conditions in space.

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