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DO EXTERNAL DEBT AND FOREIGN DIRECT INVESTMENT (FDI) INFLOW SUPPORT ECONOMIC GROWTH? EVIDENCE FROM GHANA

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DO EXTERNAL DEBT AND FOREIGN DIRECT INVESTMENT (FDI) INFLOW SUPPORT ECONOMIC GROWTH? EVIDENCE FROM GHANA

Abstract

The purpose of the article/hypothesis: The prime objective of this study is to discover whether external debt and foreign direct investment promote economic development. The paper investigates whether external debt and foreign direct investment inflows stimulate economic growth, intending to determine the causal relationship between the variables to serve as a substantial factor for policymakers.

Methodology: Numerous econometrics techniques were employed to ensure the findings' effectiveness and accuracy, including the stationarity test, Johansen cointegration test, and multiple regression (ordinary least squares). The hypothesis test that external debt and foreign direct investment inflows do not attain their justification of ensuring economic growth was conducted empirically.

Results of the research: The outcome revealed that external debt and foreign direct investment positively and significantly support Ghana's economic growth. This leads to the conclusion that these variables fulfilled their purpose.

Keywords: External debt, FDI, economic growth, GDP, Ghana.

JEL Class: E22, F14, H63.

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INTRODUCTION

Most developing countries, including Ghana, depend on external loans and foreign direct investment (FDI) inflows as a medium of capital accumulation for developmental projects. Countries that get fever investments through domestic or foreign trade may need to borrow to support and boost their economic development and growth (Agyapong and Bediabeng, 2019: 81-98; Bese and Friday, 2021: 1-11; Joshua et al., 2021: 1–13; Gaies and Nabi, 2021: 736–761). Between 1973 and 1977, the outstanding external debt of emerging countries doubled and then doubled again by 1981. In 1996, the HIPC initiative was launched by the International Monetary Fund and World Bank to ensure that no low-income country faces a debt burden it cannot manage. According to OCED, FDI is a type of cross-border investment in which investors from one country have a long-term stake and significant influence over a company from another economy. As per the OCED detailed definition, FDI can be in the form of loans. The debt instrument of the FDI component consists of marketable securities, bonds, debenture, commercial paper notes, promissory notes, non-participating preference shares, and other marketable non-equity securities and loans, deposits, trade credit, and other accounts payable/receivable (OECD, 2008: 59–90). Obtaining external loans with repayment conditions puts Ghana and most countries in an adverse fiscal situation. For example, the Buidam financing contract, in which cocoa will be used to pay the cost of credits, is an investment with strict conditions attached.

Eternal Debt and FDI inflow could positively or negatively impact an economy. More debt servicing can increase the government's interest bill and budget deficit, diminishing public savings; this, in turn, can expand interest rates or crowd out credit for private investment, depressing economic growth (Benedict et al., 2003: 1–25). Besides, external funding, including FDI, can devastate some economies in the short and long run. Foreign and domestic debts harm the gross domestic product (GDP); policymakers should avoid heavily relying on debt to finance fiscal deficits as there is a pressing need to increase revenue (Munasinghe et al., 2018: 775–789). However, during the 1971–1979 period, there was a negative linkage between the growth of debt burden and economic growth in the heavily indebted developing countries (Rosemary, 1993: 115–126). On the other hand, a minimum aggregate external debt level is associated with a significant growth rate (Alfredo, 2004: 1–37).

In recent times, the consequences of Ghana depending on external funds and credit facilities for its economic activities are against the current administration. Most people in Ghana believe that external loans harm the country in both the long and short run. The nation's increasing GDP to debt ratio has also raised

economic concerns (Agyapong and Bediabeng, 2019: 81–98; Bese and Friday, 2021: 1–11; Joshua et al., 2021: 1–13; Gaies and Nabi, 2021: 736–761). Ghana's overall government debt was US$ 8,345 million as of December 2005, or 78% of gross domestic product (MOFEP, 2011: 1–46). The aggregate government debt consists of US$ 6,348 million in external Debt and US$ 1,997 million in local Debt (MOFEP, 2011: 1–46).

As a result of debt relief provided to Ghana through the HIPC and Multilateral Debt Relief Initiatives (MDRI), the total public debt was reduced dramatically to around US$ 5,310 million in 2006 (MOFEP, 2011). Due to debt forgiveness, external debt for the same year dropped significantly to around US$ 2,177 million (MOFEP, 2011: 1–46). However, Ghana's public debt started increasing in 2007 because of the maiden Eurobond issuance in the same year. The nominal debt as of December 2020 was GH¢ 291,630.7 million (US$ 50,0832.4 million), compared to the stock level of 2019 at GH¢ 218,228.9 million (US$ 39,387.2 million) (Ken, 2020: 1–77). The expansion in the external debt stock by GH¢ 29,049.1 million (US$ 4.366.4million) from the 2019 stock of GH¢ 112,474.7 million was mainly due to extra disbursement of loans, the US$ 3,000 million Eurobond issuance in February 2020, as well as exchange rate fluctuations (Ken, 2020: 1–77). As the flow of FDI and external debt continue to increase, this study aims to determine the impact of external debt and FDI inflow in Ghana using GDP as a proxy for economic growth. The out-comes from the results of this study are expected to be significant to policy-makers, investors, and academic researchers who want to gain much insight into Ghana's economic responsiveness to FDI and external debt.

1. LITERATURE REVIEW

The effect of external debt and FDI on economic growth have been re-searched by many scholars using different methods and obtained different results and conclusions. However, (Asafo and Matuka, 2019: 45–53) employed a cointegration analysis and an error correction methodology to investigate the effect of external debt on economic growth in Ghana. The outcome showed that foreign debt inflows increase growth in Ghana both in the long and short run. They also confirmed the crowding-out effect, debt overhang impact, and external debt's non-linear effect on Ghana's economic growth. Conversely, (Frimpong and Oteng-Abayie, 2007: 121–130) estimated the empirical impact of external debt on economic growth in Ghana to determine the existence of a 'debt overhang' and 'crowding-out' effect. The findings indicate that external debt influences gross domestic product positively and negatively by servicing, revealing a 'crowding out effect'. The outcome further showed that a 'debt overhang effect' is also found through the negative impact of domestic investment. Additionally, (Wondatir,

2020: 6–27) is an effort to determine the effect of public external debt on economic growth.

Authors tried to answer whether stock of foreign public debt and public external debt servicing have significance on economic growth and determined the magnitude effect. The result showed that a high level of stock of public external debt hurts economic growth and poses great challenges to an economy in the long run. Furthermore, (Hakimi et al., 2019: 725–745) analyzed whether external debt drives investment and economic growth in low-income nations. Their empirical results of the seemingly unrelated regression model show that foreign debt significantly decreases investment and economic growth. However, (Naeem, 2013: 29–52) studied the consequences of public debt on economic growth and investment in four South Asia. The results show that foreign public debt and debt servicing negatively affect economic growth and investment, pointing to the "debt overhang effect" and "crowding out effect". In addition, it also stated that local debt exhibits a negative and significant relationship with economic growth and investment.

Furthermore, (Ebenezer and Xicang, 2013: 64–74) investigated the relationship between FDI and economic growth in Ghana using the cointegration method. The study established a long-run equilibrium and causal relationship between the dependent variable, FDI, and the two independent variables under consideration. It was indicated that the impact of GDP and GNI volatility on FDI in the short run is nearly imaginary. On the other hand, (Tee et al., 2017: 240–246) studied the relationship between FDI and economic growth in Ghana using linear regression. The research established that FDI and the other two control variables significantly impact Ghana's economic advancement. It was determined that an increasing trend of FDI inflows has also significantly expanded the GDP in the country.

Conversely, (George et al., 2013: 573–584) identified the factors influencing Ghana's FDI flows. The outcomes showed trade openness, exchange rate, natural resources, and infrastructure as FDI drivers in Ghana. They further indicated that Macroeconomic variables, such as inflation and per capita gross domestic product, were also registered as the impact determinants of FDI in Ghana. Additionally, (Samuel et al., 2013: 18–25) studied the relationship between FDI and economic progress in Ghana. They concluded that the independent variables GDP, GDPG, GNI, MVA, GDPc, and TRA are significant in explaining FDI since their corresponding p-value of the t-statistic is less than 5% and thus influences FDI in Ghana.

Conversely, (Mustapha et al., 2015: 167–184) investigated the impact of FDI on Ghana's economic growth and service sector value addition. The study employed the Johansen Co-integration approach, and the outcome showed that FDI has an essential positive impact on economic growth both in the long-run and

short-run. Finally, (Michael et al., 2019: 56–75) examined the determinants of FDI in Ghana using Johansen's method of Co-integration within the autoregressive vector framework. The study indicated that both the long-run and short-run findings found statistically significant but negative effects of inflation, exchange rate, and interest rate on FDI in Ghana. Whiles GDP, electricity production, and telephone usage positively impacted FDI.

According to the United Nations Conference on Trade and Development, the total net flow resource flows rose sharply between 1990 and 1996. Following a surge in the 1970s, when they began a supplant official as the primary source of external funding, net private capital flows to developing nations plummeted during the 1980s debt crisis, reaching their lowest point in 1986 (UNCTAD, 2004: 1–15). Conversely, the aggregate external debt contains long-term debt, short-term debt, and access to the International Monetary Fund (IMF) credit. However, the Debt of African and least developed nations, most of which have no or limited access to the international capital market, has been growing over the years (UNCTAD, 2004: 1–15). The source of external loans and financial funding comes from Multilateral institutions, the IMF, International Development Assistance (IDA), African Development Bank (AfDB), International Fund for Agricultural Development (IFAD), Official Bilateral, Paris Club, Non-Paris Clubs, and other Creditors. Ghana's external Debt was GH₵ 124.79 million at the end of March 2020, accounting for 52.87% of the aggregate public debt and 31.35% of GDP, while local debt was GH₵ 111.26 million, reflecting 47.13% of the total debt stock and 27.95% of GDP (Treasury and Debt Management Division, 2020: 1–25).

The trend in public debt from March 2018 to March 2020 indicated a growth of 2% increase in 2019 and 3% in 2020. Commercial debt dominates the external debt portfolio, accounting for 41.1% of the total, followed by multilateral creditors with 28.9% in March 2020 (Treasury and Debt Management Division, 2020: 1–25). Other concessional debt accounted for 7.3% of the total debt in the same period. Official Bilateral and Export Creditors come second and third with 5.2% and 4.4% of the market. The stock of Eurobonds is primarily responsible for the commercial debt's dominance in the foreign debt portfolio in March 2020 (Treasury and Debt Management Division, 2020: 1–25). World Bank loans account for most multilateral debt in the same period.

FDI inflow in Ghana comes in joint ventures and foreign wholly owned. Foreign wholly owned investment is an enterprise or project 100% controlled and managed by investors from abroad in Ghana. On the other hand, Ghanaians and their foreign counterparts' control and regulate joint venture investment. Investments are from developed economies and some developing countries in Asia, such as China and India. China is the top investing country in the Ghanaian economy, followed by India.

However, in most cases, the Netherlands often tops concerning the monetary value of these FDI projects (Yeboah and Anning, 2020: 6–16). According to the Ghana Investment Promotion Centre (GIPC), FDI comes in the form of registered projects undertaken by investors in the various sectors of the economy. FDI has had a higher share of the total estimated value of the investment over the past decades. The GIPC accumulated an estimated number of 4,714 registered projects between 1994 and 2013, with the manufacturing sector accounting for 22.14 percent, 29.29 percent to the service sector, general trading for 16.35 percent, building and construction for 8.67 percent, tourism for 8.54 percent, and liaison for 5.17 percent (Kusi, 2013: 1–24). Conversely, the GIPC recorded 1,312 foreign FDI projects from 2013 to 2018 (Yeboah and Anning, 2020: 6–16). As per the GIPC investment reports, joint venture investment has much more monetary value than foreign wholly-owned investment.

2. METHODOLOGY

Evaluating the effect of FDI and External Debt continuous variable on GDP requires systematic and rigorous tests, which include not only a correlation analysis to determine trends and association between variables, but also linearity, multivariate normal, multicollinearity, auto-correlation, and homoscedasticity tests to ascertain a linear relationship between the dependent variable and independent variables. In the following steps, the study performs the various tests needed to adopt the simple linear regression method of analysis to establish the relationship between Economic Growth, Foreign Direct Investment and External Debt. The study used data from the World Bank from 1990 to 2020. However, all analyses were performed using Gretl software.

Firstly, descriptive and correlation analysis are performed using 31 dataset each of all variables. A correlation coefficient is calculated for each of the association between variables to obtain matrix as shown below.

$$r = \frac{Cov(X,Y)}{\sigma_x \sigma_y} = \frac{E((X-\mu_x)(Y-\mu_y))}{\sigma_x \sigma_y} \quad (1)$$

Where X and Y are the independent and dependent variables respectively, and r represents the correlation coefficient. However, a cointegration test was conducted using the Johansen test. Cointegration's goal is to match the degree of non-stationarity in time series so that residuals become stationary and false regression is avoided (Vaclav, 2014: 1–34). Two cointegration tests are used: the trace rank test and the loglikelihood maximum test. The first hypothesis is that there is no cointegration (r = 0). There is at least one cointegration equation,

according to the alternative hypothesis. According to the second hypothesis, there is just one (r = 1).

The last test was to account for no autocorrelation between predicted variables and error terms to be obtained. Using the Durbin-Watson autocorrelation test, we test the hypothesis as H0: There is no first order autocorrelation. The test statistic is calculated as shown below in equation 2:

$$d = \frac{\sum_{t=2}^{T}(e_t - e_{t-1})^2}{\sum_{t}^{T} e_t^2} \quad (2)$$

Where d is the Durbin-Watson test statistic, e_t is the residual from the ordinary least square regression (OLS). The test statistic runs between 0 and 4 where value around 2 depicts no autocorrelation. The rule of thumb has 1.5< d <2.5 as a no autocorrelation range, where values below 1.5 show a positive autocorrelation of residuals and values above 2.5 indicates a negative one. The test statistics in the critical region of the Durbin-Watson table, depend on the sample size, alpha value, and the number of independent variables in the regression model.

2.1 Model Specification

Understanding the influence of external debt and FDI inflow on Ghana's economic growth is critical as the country depends heavily on them for its developmental projects. As a result, the primary research question is: Is there a link between Ghana's external debt, FDI inflow, and economic growth? The study investigated the relationship between the abovementioned factors by constructing econometrics model equations to ascertain a correct model specification. Firstly, we tested for the impact of external debt and FDI inflow on economic growth in Ghana using GDP as a proxy for growth. It is well known that gross domestic product is one the of most used indicators and is widely accepted for assessing the growth of a country. The model equation 3 has GDP as the explained variable.

$$lnGDP_t = \alpha_0 + \beta_1 lnFDI_t + \beta_2 ExtD_t + \varepsilon_t \quad (3)$$

Consequently, to ascertain the relationship between FDI, GDP and external debt towards economic development, FDI was the dependent variable, whereas GDP and external debt became the regressors. This helps to investigate the effects of GDP and external debt on FDI inflow as indicated in model equation 4. However, in the model with FDI as the dependent variable, all the variables were transformed into their logarithm for a correct model specification.

$$lnFDI_t = \alpha_0 + \beta_1 lnExtD_t + \beta_2 lnGDP_t + \varepsilon_t \quad (4)$$

Where GDP is Gross Domestic Product, FDI is Foreign Direct Investment inflows, ExtD is External Debt. All the variables are measured in billions of US dollars. Also, $\beta_1 and\ \beta_2$ are the regression coefficients while ε_t represents the error term, and α_0 represents the constant term of the obtained model.

3. STATISTICS AND RESULTS

The descriptive statistics (Table 1) showed less dispersion of all variables under consideration when the standard deviations were compared to the mean values. However, GDP had the largest standard deviation, indicating high volatility in the data.

Table 1. Summary of statistics

Variable	Mean	Median	S.D.	Min	Max
Log of GDP	31.3	25.6	16.0	13.2	62.7
Log of FDI inflow	1.40	0.244	1.47	0.005	3.88
External Debt	10.6	7.10	7.64	3.69	31.3

Source: own study.

Table 2 gives a correlation matrix between the variables of interest. There was a general high positive association between the variables, with the highest being GDP-External debt, followed by GDP-FDI inflow, and the least being FDI-External debt. It was realized again from Table 3 that there was no multicollinearity between the independent variables. Thus, the correlation coefficient for FDI-External debt of 0.71 was less than 0.8. Furthermore, the variance inflation factor (VIF) found in both models are far less than 10 and well below 5, buttresses the fact that there was no multicollinearity between predictor variables, as indicated in Table 3 and 4.

Table 2. Correlation Matrix

GDP	FDI inflow	External Debt	
1.0000	0.891	0.925	GDP
	1.000	0.709	FDI inflow
		1.000	External Debt

Source: own study.

Table 3. Collinearity test for model 1

Variables	Variance Inflation Factor
FDI inflow	2.010
External debt	2.010

Source: own study.

Table 4. Collinearity test for model 2

Variables	Variance Inflation Factor
Log of external Debt	4.091
Log of GDP	4.091

Source: own study.

3.1 Stationarity Test

Table 5 shows unit root test using Kwiatkowski-Phillips-Schmidt-Shin (KPSS). The null hypothesis under the KPSS unit root test states that there is no unit root in the variables at level and the alternative hypothesis indicates a unit root presence. The test statistics must be greater than 10% critical value to reject the null hypothesis. However, after the selected variables' first difference, the test statistics must be lower than 10% critical value.

Table 5. KPSS unit root test at level and first difference

Variables	Sample size	T-stats	p-value	T-stats	p-value
Log of GDP	1990-2020	0.751	< .01	0.085	> .10
Log of FDI inflow	1990-2020	0.335	< .01	0.092	> .10
External debt	1990-2020	0.647	< .01	0.081	> .10

Source: own study.

The outcome of the unit root test in Table 5 displays that, at level, unit root exists in the series. It means that the variables are non-stationarity based on the obtained test statistics since they are all greater than the 10% critical value. However, after the first difference, the variables became stationarity because their test statistics are below the critical value, showing that the series are integrated at first order (1).

3.2 Johansen Test

The Johansen cointegration test between FDI and GDP is indicated in Table 6. The hypothesis (r = 0) which states that there is no cointegration equation between these two indicators is not rejected because the p-value is more significant 5% significance level. Conversely, the hypothesis(r = 1) which states that at most one cointegration equation cannot be rejected since the trace and loglikelihood test produced the same p-value greater the critical value.

Table 6. Johansen Test between FDI and GDP

Rank	Eigenvalue	Trace test	p-value	Lmax test	p-value
0	0.368	13.351	0.102	12.891	0.080
1	0.016	0.459	0.497	0.459	0.497

Source: own study.

The cointegration equation with FDI as the dependent variable can be written as follows:

$$\text{FDI inflow} = 0.022135(\text{GDP}) - 32.72$$

The cointegration equation shows a positive long-run relationship between FDI and GDP, and it means that an increase in GDP will lead to a rise in FDI inflow. On the other hand, Table 7 indicates the cointegration outcome between FDI and external debt.

Table 7. Johansen Test between FDI and External debt

Rank	Eigenvalue	Trace test	p-value	Lmax test	p-value
0	0.233	9.395	0.336	7.462	0.444
1	0.066	1.933	0.164	1.933	0.164

Source: own study.

The outcome of the Johansen test in Table 7 found a cointegration relationship between FDI and external debt towards economic growth in the long-term. There is a positive relationship between these two variables based on the cointegration equation. The cointegration equation is written below as follows:

$$\text{FDI inflows} = 1.9986\ (\text{external debt}) - 73.8$$

Based on the cointegration equations, an expansion external debt will lead to an increase in FDI inflow in the Ghanaian economy in the long run. Furthermore, there was a long positive relationship between external debt and GDP with external debt as the dependent variable as indicated in the cointegration test in Table 8.

Table 8. Johansen Test between External debt and GDP

Rank	Eigenvalue	Trace test	p-value	Lmax test	p-value
0	0.241	7.869	0.486	7.742	0.414
1	0.004	0.126	0.721	0.126	0.721

Source: own study.

Cointegration equation with external debt as the dependent variable is written below:

$$\text{External debt} = 0.66601\ (\text{GDP}) - 3.78$$

This proved that in the long run an increase in GDP will lead to a rise in external debt. The Johansen test proved that FDI and external debt support economic growth in the long-term and their impact is positive.

3.3 Regression Results

Table 9 shows the regression coefficients for the model estimation with GDP as the proxy for economic development. The outcome shows that FDI and external debt positively affect economic growth. However, FDI supports economic growth rather than external debt based on the coefficients as in the equation below.

Table 9. Model 1 estimation

Variables	Coefficient	Std. Error	t-ratio	p-value
constant	3.122	0.055	56.77	0.000***
Log of FDI inflow	0.158	0.015	10.23	0.000***
External Debt	0.030	0.003	7.961	0.000***

Note: significant codes: *** 1%

R-squared	0.94
Adjusted R-squared	0.93
F-statistic (2, 28) = 229	P-value (F) = 0.000
Number of observations	31

Source: own study.

$$lnGDP_t = 3.122 + 0.158lnFDI_t + 0.030ExtD_t + \varepsilon_t$$

The regression statistics of model 1 shows an R-squared of 94% which indicates the percentage of variation explained in the GDP by the regressors (FDI and external debt). The normality test produced test statistic of 5.88532 with a p-value of 0.341129 which shows that the error term is normally distributed. Null hypothesis which states that heteroskedasticity not present found no heteroskedasticity because of the test statistic 8.83434 with p-value 0.115857 greater than 5% significance level. Furthermore, the model 2 coefficients are indicated in Table 10. The outcome shows that external debt has e negative impact on FDI inflows whereas GDP has positive effect on it. The negative effect of external debt on FDI based on the coefficient means that an increase in external debt will reduced FDI inflow into Ghana's economy.

$$lnFDI_t = -14.030 - 1.281lnExtD_t + 4.810lnGDP_t + \varepsilon_t$$

Table 10. Model 2 estimation

Variables	Coefficient	Std. Error	t-ratio	p-value
constant	−14.030	1.115	−12.58	0.000***
Log of External Debt	−1.281	0.444	−2.885	0.000***
Log of GDP	4.810	0.552	8.713	0.000***

Note: Significance codes: *** 1%

R-squared	0.85
Adjusted R-squared	0.84
F-statistic (2, 28) = 82.9	P-value (F) = 1.72e-12
Number of observations	31

Source: own study.

The R-squared from the regression statistics of model 2 indicates that 85% variation is explained by the regressors (GDP and external debt). However, the model 2 was burden with first-order autocorrelation based on the Durbin-Watson value.

Ghana's dependency on external loans, credit facilities, and FDI inflows for its developmental schemes and economic growth is significant. The statistics showed that a slow rise in FDI has a huge spike in Ghana's GDP even though other factors influence the same. This is irrespective of the increase in external debt, which has equally increased rapidly. Our results are in tandem with some of the previous global studies (Agyapong and Bediabeng, 2019: 81–98; Bese and Friday, 2021:

1–11; Joshua et al., 2021: 1–13; Gaies and Nabi, 2021: 736–761). The significance of Ghana's dependency on external funding and credit services for its financial muscle can be dangerous if not taken good care of by the current government. The Ghanaians think that external loans are harmful to the country in both the short and long. The rate of debt ratio to the nation's GDP has also raised alarms about the economic track for the future.

CONCLUSIONS

The study aimed to analyze the impact of external Debt and FDI inflows on Ghana's GDP. The study evaluated the effect of FDI and External Debt as continuous variables on GDP. Herein, we thoroughly and rigorously tested the correlation to determine the association between the variables. Multicollinearity and cointegration tests were conducted to establish the relationship between the dependent and independent variables. It was observed that there is no multicollinearity amongst the independent variables.

Given that the external debt of 0.71 is less than 0.8, the variance inflation factor of 2.010 and 4.091 in both models being far less than 10 and below 5 supports the fact that there is no multicollinearity amongst predictor variables. The multivariate normal conditions for linear regression were met. The KPSS unit root test found a unit root presence in the variables and was integrated at first-order difference I (1). In contrast, the Johansen cointegration analysis indicated a long-run positive relationship between the variables toward economic growth. The regression coefficients demonstrated that external debt and FDI inflow positively and significantly influenced GDP in Ghana. If well utilized, both FDI and external debt could turn around major sectors in Ghana, among other developing nations.

ABSTRACT

Like many nations in the Global South, Ghana has depended on external funding for most development projects. The country's Foreign Direct Investment (FDI) inflows have increased over two decades hence the debt burden. This trend could only hinder national development in the long run if carefully analyzed. Besides understanding Ghana's situation, it could also bail out numerous other African countries in a similar situation. The prime objective of this study is to discover whether external debt and foreign direct investment promote economic development. The paper investigates whether external debt and foreign direct investment inflows stimulate economic growth, intending to determine the causal relationship between the variables to serve as a substantial factor for policymakers. Policymakers seek foreign credit facilities and depend on foreign direct investment for

economic development, but these factors often do not achieve the anticipated advantages. Numerous econometrics techniques were employed to ensure the findings' effectiveness and accuracy, including the stationarity test, Johansen cointegration test, and multiple regression (ordinary least squares). The hypothesis test that external debt and foreign direct investment inflows do not attain their justification of ensuring economic growth was conducted empirically. The outcome revealed that external debt and foreign direct investment positively and significantly support Ghana's economic growth, which leads to the conclusion that these variables fulfilled their purpose.

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CZY ZADŁUŻENIE ZEWNĘTRZNE I NAPŁYW BEZPOŚREDNICH INWESTYCJI ZAGRANICZNYCH (FDI) WSPIERAJĄ WZROST GOSPODARCZY? DOWODY Z GHANY

Streszczenie

Cel artykułu/hipoteza: Podstawowym celem niniejszego badania jest odkrycie, czy zadłużenie zewnętrzne i bezpośrednie inwestycje zagraniczne sprzyjają rozwojowi gospodarczemu. W artykule zbadano, czy zadłużenie zewnętrzne i napływ bezpośrednich inwestycji zagranicznych stymulują wzrost gospodarczy oraz określono związek przyczynowy między zmiennymi, które będą istotnym czynnikiem dla decydentów.

Metodyka: Aby zapewnić skuteczność i dokładność wyników, zastosowano liczne techniki ekonometryczne, w tym test stacjonarności, test kointegracji Johansena oraz regresję wielokrotną (Metoda Najmniejszych Kwadratów). Hipoteza artykułu, czy zadłużenie zagraniczne i napływ bezpośrednich inwestycji zagranicznych nie znajdują uzasadnienia dla zapewnienia wzrostu gospodarczego, została przeprowadzona empirycznie.

Wyniki/Rezultaty badania: Wyniki wykazały, że zadłużenie zewnętrzne oraz bezpośrednie inwestycje zagraniczne pozytywnie i istotnie wypływają na wzrost gospodarczy Ghany, co prowadzi do wniosku, że zmienne te spełniły swoje zadanie.

Słowa kluczowe: dług zewnętrzny, FDI, wzrost gospodarczy, PKB, Ghana.

JEL Class: E22, F14, H63.

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