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External Financial Position on Foreign Capital Inflows in Selected Subsahara African Countries (2008-2025)

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Abstract

Despite the growing reliance on foreign direct investment (FDI) to bridge investment and financing gaps in Sub-Saharan Africa, the region continues to experience unstable capital inflows amid rising external debt, increasing debt servicing obligations, exchange rate fluctuations, and varying levels of domestic financial development. Existing empirical evidence has largely examined these macroeconomic factors independently, with limited attention given to how a country's external financial position jointly influences FDI inflows across the region. This paper therefore examined the effect of external financial position on foreign direct investment inflows in 18 selected Sub-Saharan African countries over the period 2008–2025. The study employed panel data obtained from the World Development Indicators (World Bank) and estimated the model using the Fixed Effects estimator following the outcome of the Hausman specification test. Descriptive statistics, correlation analysis, panel unit root tests, and residual cross-sectional dependence tests were conducted as preliminary analyses. The findings revealed that total debt service significantly reduced foreign direct investment inflows, while external debt stocks significantly promoted foreign direct investment. Domestic credit to the private sector also exerted a significant negative influence on foreign direct investment, whereas the official exchange rate had a positive but statistically insignificant effect. The model explained approximately 44% of the variations in foreign direct investment inflows and was statistically significant overall. The paper concluded that maintaining sustainable debt management, ensuring productive utilization of external borrowing, improving domestic financial intermediation, and preserving exchange rate stability are essential for strengthening foreign direct investment inflows in Sub-Saharan Africa.

Background of the Study

Foreign direct investment (FDI) has remained one of the most important sources of external financing for developing economies because it supplements domestic savings, facilitates technology transfer, promotes employment creation, and enhances long-term productive capacity. Compared with other forms of capital inflows, FDI is generally regarded as more stable and less susceptible to sudden reversals, making it a preferred source of financing for sustainable economic development in Sub-Saharan Africa (SSA) (Calderón *et al.,* 2019; Joshua *et al.,* 2021). However, despite abundant natural resources, expanding consumer markets, and numerous investment reforms, FDI inflows into SSA have remained relatively weak and uneven across countries since the global financial crisis of 2008. The region experienced significant fluctuations in capital inflows following the 2008–2009 global financial crisis, the 2011–2012 Eurozone sovereign debt crisis, the 2014 collapse in global oil prices, the COVID-19 pandemic, and the tightening of global monetary conditions after 2022. These episodes altered the composition of external financing by increasing reliance on external borrowing while reducing the relative contribution of FDI in many African economies (Calderón *et al.,* 2019; Dinga *et al.,* 2020; Ayenew, 2022).

The external financial position of many SSA countries has consequently become increasingly fragile due to rising public debt, growing debt-servicing obligations, exchange rate pressures, and financial market vulnerabilities. While external borrowing has enabled governments to finance infrastructure and development programmes, excessive debt accumulation has increased macroeconomic risks and weakened investor confidence. Consequently, many countries have experienced rising debt-service burdens that consume scarce foreign exchange earnings and reduce fiscal space for productive investments. At the same time, concerns over debt sustainability have heightened perceptions of sovereign risk, thereby discouraging foreign investors from committing long-term capital (Azolibe, 2022; Manasseh *et al.,* 2022; Gachunga & Kuso, 2018). These developments have intensified debates on how external debt dynamics influence the attractiveness of SSA economies to foreign direct investors and the overall sustainability of external financial positions (Joshua *et al.,* 2021; Ndikumana & Boyce, 2022).

Theoretically, the relationship between external financial indicators and FDI is multidimensional. The debt-overhang hypothesis argues that excessive external debt and rising debt-service obligations create uncertainty about future taxation, macroeconomic stability, and repayment capacity, thereby reducing the expected returns on private investment and discouraging foreign investors (Azolibe, 2022; Manasseh *et al.,* 2022). Exchange rate movements constitute another important determinant of foreign investment decisions. Although currency depreciation may lower production costs and increase the competitiveness of export-oriented investments, persistent exchange rate volatility raises transaction costs, increases uncertainty, and weakens investor confidence, thereby reducing FDI inflows (Dinga & Fonchamnyo, 2021; Joshua *et al.,* 2021; Godspower *et al.,* 2025). Similarly, the depth of domestic financial systems influences investment decisions because well-developed financial markets facilitate access to credit,

improve resource allocation, and complement foreign investment. Nevertheless, inefficient credit allocation and excessive financial instability may crowd out productive private investment and diminish the attractiveness of domestic markets to foreign investors (Acheampong, 2019; Opperman & Adjasi, 2017; Ogbonna *et al.,* 2022; Acheampong et al., 2023).

The period from 2008 to 2025 provides a particularly important context for examining these relationships among selected Sub-Saharan African countries, namely Benin, Burkina Faso, Botswana, Cameroon, Kenya, Lesotho, Mali, Mauritania, Namibia, Niger, Nigeria, Rwanda, Senegal, Togo, Tanzania, Uganda, South Africa, Zambia and Zimbabwe. During this period, these economies experienced diverse macroeconomic conditions characterised by increasing external debt stocks, rising debt-servicing commitments, multiple exchange rate adjustments, financial sector reforms, and repeated global economic shocks. Although policy reforms were implemented to improve investment climates and strengthen domestic financial systems, the responsiveness of foreign investors varied considerably across countries due to differences in macroeconomic fundamentals and institutional capacities (Calderón *et al.*, 2019; Dinga *et al.,* 2020; Ayenew, 2022). Against this background, this study examined the effect of total debt service, external debt stocks, official exchange rate, and domestic credit to the private sector on foreign direct investment inflows in nineteen selected Sub-Saharan African countries between 2008 and 2025. The study contributes to the growing literature on external financial sustainability by providing empirical evidence on the key macro-financial determinants of FDI within the region.

Literature Review

Conceptual Review

Foreign Capital Inflows

Foreign capital inflows refer to the movement of financial resources from non-residents into a domestic economy to finance investment, production, and economic development. According to the World Bank (2025), foreign capital inflows comprise external financial resources entering an economy through foreign direct investment (FDI), portfolio investment, external borrowing, remittances, grants, and official development assistance. The World Bank emphasizes that these inflows supplement domestic savings, promote capital formation, facilitate technology transfer, and stimulate sustainable economic growth, particularly in developing economies. Similarly, the International Monetary Fund (IMF, 2024) defines foreign capital inflows as cross-border financial transactions recorded in the financial account of a country's balance of payments, including FDI, portfolio investment, loans, trade credits, and other financial investments. The IMF notes that these flows influence external sector stability, exchange rate dynamics, and financial market development.

The United Nations Conference on Trade and Development (UNCTAD, 2025) describes foreign capital inflows as international financial resources transferred by multinational enterprises, foreign investors, international financial institutions, and governments to

support productive investment, industrialization, and sustainable development in host countries. From the academic perspective, Mowlaei (2018) define foreign capital inflows as external financial resources including FDI, portfolio investment, external debt, remittances, and foreign aid that complement domestic investment and enhance productive capacity in developing economies. Likewise, Ali *et al.* (2025) view foreign capital inflows as cross-border financial resources that improve capital accumulation, technology diffusion, employment creation, and long-term economic growth when supported by sound macroeconomic policies and strong institutions.

Foreign Direct Investment (FDI)

Foreign capital inflows refer to financial resources transferred from foreign economies to a host country to support investment, production, and economic development. These inflows include foreign direct investment (FDI), foreign portfolio investment (FPI), official development assistance (ODA), remittances, and external borrowing. Among these, FDI is regarded as the most stable and productive form because it involves long-term investment in physical assets and business operations rather than short-term financial speculation (Ayenew, 2022). The International Monetary Fund (IMF, 2009) defines FDI as a cross-border investment in which an investor acquires a lasting interest and significant influence in the management of an enterprise in another country. Similarly, the Organisation for Economic Co-operation and Development (OECD, 2008) describes FDI as an international investment where a foreign investor owns at least 10 percent of the voting shares of an enterprise abroad. The World Bank (2024) defines FDI as the net inflows of investment made to obtain a lasting management interest in an enterprise operating in another economy, while UNCTAD (2023) emphasizes its role in promoting technology transfer, employment generation, industrial development, and productivity growth. Calderón *et al.* (2019) view FDI as a stable source of external finance capable of supporting sustainable development despite global financial shocks. Likewise, Joshua *et al*. (2021) argue that FDI enhances economic growth through capital accumulation, technological diffusion, and productivity improvements. In this study, foreign capital inflows are operationalized as foreign direct investment (FDI), measured by net FDI inflows into each selected Sub-Saharan African country as reported by the World Development Indicators (WDI). This measure reflects long-term foreign investment that contributes directly to productive economic activities.

External Financial Position

The International Monetary Fund (IMF, 2023) defines external financial position as the stock of a country's external financial assets and liabilities, including foreign direct investment, portfolio investment, reserve assets, external debt, and other cross-border financial claims and obligations.

The European Central Bank (ECB, 2022) describes external financial position as the net financial relationship between residents of an economy and non-residents, measured through the International Investment Position (IIP), which reflects the sustainability of a country's external finances. According to the World Bank (2024), external financial

position refers to the overall condition of a country's external finances as reflected by its external debt obligations, foreign exchange reserves, exchange rate performance, and capital inflows. Akyüz, Y. (2021) define external financial position as the balance between a country's external assets and liabilities that determines its exposure to external financial shocks and international capital movements.

Total Debt Service

The World Bank (2024) defines total debt service as the sum of principal repayments and interest payments actually made on long-term external debt, short-term debt, and IMF credit during a given year. The International Monetary Fund (IMF, 2023) defines debt service as the scheduled payment of principal and interest on outstanding debt obligations owed to external creditors. The Organisation for Economic Co-operation and Development (OECD, 2023) describes debt service as all contractual payments required to meet external debt obligations over a specified accounting period. Overall, total debt service refers to the annual payments of principal and interest made by a country on its outstanding external debt obligations. In this study, total debt service is measured as total external debt service (current US$).

External Debt Stocks

The World Bank (2024) defines external debt stocks as the total outstanding debt owed by residents of a country to non-residents that requires repayment of principal and interest in the future. According to the International Monetary Fund (IMF, 2023), external debt is the outstanding amount of actual current liabilities that require future payments of principal and/or interest by residents to non-residents. The United Nations Conference on Trade and Development (UNCTAD, 2023) defines external debt as financial obligations owed to foreign creditors by governments, corporations, or private residents of an economy. Therefore, external debt stocks refer to the cumulative amount of outstanding external liabilities owed to foreign creditors. In this study, external debt stocks are measured as total external debt stocks (DOD, current US$).

Official Exchange Rate

The International Monetary Fund (IMF, 2023) defines the official exchange rate as the exchange rate determined or recognized by the monetary authority for official foreign exchange transactions.

The World Bank (2024) defines the official exchange rate as the annual average number of local currency units required to purchase one United States dollar. The Bank for International Settlements (BIS, 2022) describes the official exchange rate as the value of a domestic currency expressed in terms of another currency for official transactions. Ozkaya and Altun (2024). defines exchange rate as the price of one country's currency expressed in terms of another country's currency. Edwards, S. (2019) defines the official exchange rate as the rate adopted by a country's monetary authority to facilitate international trade and financial transactions. the official exchange rate represents the value of a country's currency relative to another currency under official market

arrangements. In this study, it is measured as the annual average official exchange rate (LCU per US$).

Domestic Credit to the Private Sector

The World Bank (2024) defines domestic credit to the private sector as financial resources provided to private enterprises and households through loans, purchases of non-equity securities, trade credits, and other accounts receivable, expressed as a percentage of GDP. The International Monetary Fund (IMF, 2023) defines domestic credit as credit extended by financial institutions to private sector entities for investment, production, and consumption purposes. The African Development Bank (AfDB, 2022) describes domestic credit to the private sector as the volume of financial resources mobilized by financial institutions to support private sector economic activities. Domestic credit to the private sector refers to financial resources made available by financial institutions to private businesses and households to support productive economic activities. In this study, it is measured as domestic credit to the private sector as a percentage of GDP.

Empirical Review

Ezebunwa (2025) examined the resilience of foreign direct investment (FDI) inflows to the global financial crisis relative to other forms of capital inflows in 26 Sub-Saharan African countries. The study employed the Mean Group (MG) and Pooled Mean Group (PMG) estimators on panel data. The findings revealed that FDI was significantly more resilient than foreign portfolio investment during periods of global financial crisis, confirming its position as the most stable source of external finance in the region. The study recommended that policymakers should prioritize strategies that attract and sustain FDI, particularly during periods of global financial uncertainty.

Similarly, Godspower *et al*. (2025) investigated the effect of exchange rate volatility on foreign direct investment inflows in 14 selected Sub-Saharan African countries between 1996 and 2022. The study utilized pooled regression, fixed effects, random effects, panel cointegration, and Error Correction Model (ECM) techniques. The findings showed that exchange rate volatility significantly discouraged FDI inflows, whereas exchange rate depreciation, economic growth, and trade openness significantly promoted foreign investment. The study recommended improving export productivity and implementing well-managed exchange rate policies that minimize excessive volatility to enhance FDI inflows. Earlier, Acheampong et al. (2023) examined the effect of foreign capital inflows on domestic credit to the private sector in 33 Sub-Saharan African countries over the period 1996–2019. The study employed the System Generalized Method of Moments (System-GMM), Pooled Mean Group (PMG), and Fully Modified Ordinary Least Squares (FMOLS) estimators. The findings established that foreign direct investment significantly enhanced domestic credit to the private sector, while official external credit reduced credit availability. The study recommended strengthening policies that attract FDI while reducing excessive dependence on official external borrowing.

Ogbonna *et al.* (2022) investigated the impacts of global uncertainty and economic governance institutions on foreign direct investment inflows into 46 African countries between 2010 and 2019. Using the System Generalized Method of Moments (System-GMM), the study found that global uncertainty significantly reduced FDI inflows, while weak governance institutions amplified the adverse effects of global uncertainty. Natural resource endowment and market size remained important determinants of FDI. The study recommended strengthening economic governance institutions to mitigate the negative effects of global uncertainty on foreign investment.

Similarly, Azolibe (2022) examined the relationship between external debt accumulation and foreign direct investment inflows in 25 Sub-Saharan African countries from 1990 to 2017. The study employed Fixed Effects and Generalized Method of Moments (GMM) estimation techniques. The findings revealed that external debt accumulation significantly reduced FDI inflows; however, external debt positively influenced FDI when invested in critical infrastructure. The study recommended directing borrowed funds towards productive infrastructure while avoiding excessive debt accumulation that discourages foreign investors. In another related study, Ayenew (2022) investigated the impact of foreign financial inflows on economic growth in 31 Sub-Saharan African countries covering the period 2009–2019. The study adopted the two-step System Generalized Method of Moments (System-GMM) estimator. The findings indicated that foreign direct investment significantly promoted economic growth, whereas external debt and official development assistance negatively affected growth. The study recommended encouraging productive foreign investment while reducing dependence on external borrowing.

Also, Manasseh *et al.* (2022) examined whether governance moderated the relationship between external debt and economic growth in 30 Sub-Saharan African countries from 1997 to 2020. The study employed the Dynamic System Generalized Method of Moments (System-GMM). The findings revealed that external debt and debt volatility significantly reduced economic growth, whereas quality governance moderated these adverse effects. The study recommended strengthening governance institutions, improving debt management practices, and ensuring that borrowed resources are efficiently utilized. Dinga and Fonchamnyo (2021) investigated the effects of macroeconomic instability on foreign direct investment inflows in 31 Sub-Saharan African countries over the period 1990–2017. The study employed the Pooled Mean Group (PMG), Mean Group (MG), and Dynamic Fixed Effects (DFE) panel ARDL estimators. The findings revealed that external debt significantly crowded out FDI in the long run, while exchange rate depreciation significantly encouraged foreign investment. The study recommended channeling external debt into productive infrastructure, maintaining competitive exchange rates, and implementing sound macroeconomic policies to reduce instability.

Joshua *et al.* (2021) examined whether foreign direct investment inflows and external debt contributed to sustaining economic growth in Sub-Saharan Africa. Using the Autoregressive Distributed Lag (ARDL) technique for the period 1990–2018, the study

found that FDI significantly enhanced economic growth, whereas excessive external debt constrained economic performance. The study recommended maintaining political and macroeconomic stability to attract foreign investors and ensuring that external borrowing finances productive investments. Dinga *et al.* (2020) examined the short- and long-run effects of external capital inflows on economic growth in 36 Sub-Saharan African countries covering the period 1995–2018. The study adopted the Dynamic Common Correlated Effects estimator to account for cross-sectional dependence. The findings showed that foreign direct investment positively influenced economic growth, whereas external debt and official development assistance negatively affected growth, particularly in the short run. The study recommended promoting productive foreign direct investment while reducing reliance on debt-financed development. Acheampong (2019) investigated the interaction between foreign capital inflows and financial development on economic welfare in 23 Sub-Saharan African countries. The study employed the System Generalized Method of Moments (System-GMM). The findings showed that financial development significantly enhanced the welfare effects of foreign capital inflows, although the positive effects weakened over time. The study recommended deepening financial sector development to improve the transmission of foreign capital into sustainable economic welfare.

Calderón *et al*. (2019) investigated the determinants of capital flows into Sub-Saharan Africa following the global financial crisis. Using panel regression techniques, the study found that global uncertainty, foreign economic growth, fiscal discipline, exchange rate stability, and institutional quality significantly influenced capital inflows into the region. The study recommended strengthening macroeconomic stability and institutional quality to improve the attractiveness of Sub-Saharan African economies to foreign investors. Gachunga and Kuso (2018) examined the impact of external debt on economic growth in 38 Sub-Saharan African countries between 1990 and 2016 using the Generalized Method of Moments (GMM). The findings revealed that external debt significantly reduced economic growth, with stronger adverse effects observed in middle-income economies than in low-income countries. The study recommended prudent debt management and ensuring that borrowed resources are invested in productive sectors capable of generating adequate returns. Raheem and Adeniyi (2015) investigated the effects of capital inflows, capital outflows, and economic growth in 33 Sub-Saharan African countries from 1970 to 2010. The study employed the System Generalized Method of Moments (System-GMM). The findings showed that foreign direct investment and remittances significantly promoted economic growth, whereas external debt and capital flight negatively affected growth. The study recommended implementing policies that reduce capital flight while creating an investment-friendly environment capable of attracting sustainable foreign capital inflows.

Theoretical Underpinning

This study is anchored on the Debt Overhang Theory, originally developed by Paul Krugman (1988) and further extended by Jeffrey Sachs (1989). The theory posits that when a country's external debt becomes excessively large relative to its repayment

capacity, investors anticipate that future returns on investment will be taxed away or diverted to debt servicing. Consequently, both domestic and foreign investors reduce investment because the expected profitability of new investments declines. Excessive debt also increases macroeconomic uncertainty, raises sovereign risk, and weakens investor confidence. The Debt Overhang Theory is particularly relevant to developing economies where external borrowing is frequently used to finance development projects but may eventually become unsustainable. Under such conditions, high debt-service obligations crowd out productive public expenditure, constrain private sector activities, and discourage foreign capital inflows. The theory provides an appropriate foundation for this study because it explains the relationship between external financial position and foreign direct investment inflows in Sub-Saharan African countries. Specifically, Total Debt Service (TDS) and External Debt Stocks (EDS) capture the debt burden, while Official Exchange Rate (OER) reflects the macroeconomic environment influencing investors' expectations, and Domestic Credit to the Private Sector (DCP) represents financial sector development. According to the theory, rising debt-service obligations are expected to discourage FDI, whereas a stable macroeconomic environment and an efficient financial system enhance the attractiveness of foreign investment. The adoption of the Debt Overhang Theory is justified because it directly explains how external debt sustainability and macroeconomic conditions shape foreign investors' decisions, making it the most suitable theoretical framework for examining the determinants of foreign capital inflows in selected Sub-Saharan African countries.

Data and Methodology

This study examines the effect of external financial position on foreign capital inflows in eighteen selected Sub-Saharan African countries, namely Benin, Burkina Faso, Botswana, Cameroon, Kenya, Lesotho, Mali, Mauritania, Namibia, Niger, Nigeria, Rwanda, Senegal, South Africa, Tanzania, Togo, Uganda, Zambia and Zimbabwe. Annual panel data covering the period 2008–2025 were employed, yielding 315 unbalanced observations. The study uses foreign direct investment (FDI), measured as net FDI inflows, as the dependent variable. The explanatory variables include total debt service (TDS), external debt stocks (EDS), official exchange rate (OER), and domestic credit to the private sector (DCP). Data for all variables were obtained from the World Development Indicators (World Bank, 2025).

Following the debt overhang theory and the foreign investment literature (Joshua *et al.*, 2021; Azolibe, 2022; Dinga & Fonchamnyo, 2021), the functional form is

$$FDI=f(TDS,EDS,OER,DCP) \quad (1)$$

While equ 1 empirical model is specified as:

$$FDI_{it} = \beta_0 + \beta_1 TDS_{it} + \beta_2 EDS_{it} + \beta_3 OER + \beta_4 DCP_{it} + \mu_i + \varepsilon_{it} \quad (2)$$

Where;

FDI = Foreign direct investment, net inflows in country i at time t

TDS = Total debt service in country i at time t
EDS = External debt stocks, total (DOD, current US$) in country i at time t
OER = Official exchange rate (LCU per US$, period average) in country i at time t
DCP = Domestic credit to private sector (% of GDP) in country i at time t
(i) denotes country, (t) denotes time, $_{i}m$ captures country-specific effects, and $_{it}e$ is the error term.

A priori, TDS is expected to exert a negative effect on FDI because higher debt servicing reduces investor confidence. EDS may exert either a positive or negative effect depending on whether borrowed funds are productively utilized. OER is expected to have an ambiguous effect due to the competing effects of exchange rate competitiveness and exchange rate uncertainty, while DCP is expected to positively influence FDI by improving financial intermediation.

Estimation Technique
The analysis commenced with descriptive statistics and correlation analysis to examine the distribution and relationships among the variables. Panel unit root tests comprising the Levin-Lin-Chu (LLC), Im-Pesaran-Shin (IPS), ADF-Fisher, and PP-Fisher tests were subsequently employed to determine the stationarity properties of the variables. The results indicate that all variables are stationary at levels, I(0), justifying estimation using static panel techniques.

The empirical model was estimated using both the Fixed Effects Model (FEM) and Random Effects Model (REM). The Hausman specification test was employed to determine the appropriate estimator. Since the Hausman statistic was significant ($\chi^2 = 55.867$, $p < 0.01$), the null hypothesis of random effects was rejected in favour of the fixed effects estimator. Furthermore, the Breusch–Pagan LM and Pesaran cross-sectional dependence tests were conducted to assess cross-sectional dependence among the panel units. All estimations were performed using EViews 12, while statistical significance was evaluated at the 1%, 5%, and 10% levels

Variables Description

Table 1: Variables Description and Measurements

Variable	Acronym	Description	Measurement	Source
Foreign Direct Investment (Dependent Variable)	FDI	Net foreign direct investment inflows representing long-term foreign investment in the host economy.	Foreign direct investment, net inflows (current US$)	World Development Indicators (World Bank, 2025)
Total Debt Service	TDS	Total annual payments of principal and interest on external debt obligations.	Total debt service (current US$)	World Development Indicators (World Bank, 2025)
External Debt Stocks	EDS	Total outstanding external debt owed by residents to non-residents.	External debt stocks, total (DOD, current US$)	World Development Indicators (World Bank, 2025)
Official Exchange Rate	OER	Annual average official exchange rate of the domestic currency against the United States dollar.	Official exchange rate (LCU per US$, period average)	World Development Indicators (World Bank, 2025)
Domestic Credit to the Private Sector	DCP	Financial resources provided by financial institutions to the private sector.	Domestic credit to private sector (% of GDP)	World Development Indicators (World Bank, 2025)

Source: Researcher's Compilation, 2026

Results and Discussion

Based on your results, *do not include a cointegration section*, because *all variables are stationary at level, I(0)*. Also, since the Hausman test rejects the Random Effects model (Prob. = 0.0000), the *Fixed Effects Model (FEM)* is the appropriate estimator. Below is a concise, publication-quality Results and Discussion section suitable for an international journal.

Results and Discussion

Cross-Sectional Dependence Test

Before estimating the panel regression model, the study examined whether cross-sectional dependence existed among the selected Sub-Saharan African countries. The results are presented in Table 2.

Table 2: Residual Cross-Sectional Dependence Test

Test	Statistic	Probability
Breusch-Pagan LM	447.817	0.0000
Pesaran Scaled LM	16.8536	0.0000
Bias-corrected Scaled LM	16.3242	0.0000
Pesaran CD	3.7055	0.0002

Source: Authors' Computation using EViews 12 (2026).

The cross-sectional dependence tests consistently reject the null hypothesis of cross-sectional independence at the 5% significance level. This indicates that the sampled economies are interconnected through common macroeconomic and financial shocks, regional integration, and international capital market linkages. Consequently, shocks affecting one country may transmit to others within the panel. Having established cross-sectional dependence, the study proceeded with panel unit root testing.

Panel Unit Root Test

The Levin-Lin-Chu (LLC) panel unit root test was employed to determine the order of integration of the variables. The results are summarized in Table 3.

Table 3: Levin-Lin-Chu Panel Unit Root Test

Variable	LLC Statistic	Probability	Order of Integration
FDI	-2.1081	0.0175	I(0)
TDS	-1.8206	0.0343	I(0)
EDS	-6.0992	0.0000	I(0)
OER	-7.5793	0.0000	I(0)
DCI	-7.1971	0.0000	I(0)

Source: Authors' Computation using EViews 12 (2026)

The unit root results indicate that all variables are stationary at levels, implying that they are integrated of order zero, I(0). Therefore, there is no need to conduct panel cointegration tests since cointegration analysis is applicable only when variables are integrated of order one, I(1). The stationarity of the variables permits estimation using standard panel regression techniques.

Hausman Specification Test

To determine the appropriate panel estimator, the Hausman specification test was conducted. The result is reported in Table 4.

Table 4: Hausman Specification Test

Test	Chi-square	Probability	Decision
Hausman Test	55.8673	0.0000	Fixed Effects

Source: Authors' Computation using EViews 12 (2026)

The Hausman test produced a Chi-square statistic of *55.8673* with a probability value of *0.0000*, leading to the rejection of the null hypothesis that the Random Effects estimator is consistent. Consequently, the Fixed Effects Model was adopted for the empirical analysis because it adequately controls for country-specific heterogeneity.

Fixed Effects Regression Results

Following the Hausman test, the Fixed Effects Model was estimated to examine the impact of external financial position on foreign direct investment inflows. The results are presented in Table 5.

Table 5: Fixed Effects Regression Results
Dependent Variable: FDI

Variable	Coefficient	Std. Error	t-Statistic	Probability
TDS	-5.92000	2.65000	-2.2397	0.0259
EDS	8.88000	3.65000	2.4338	0.0155
OER	6.21000	7.48000	0.8309	0.4067
DCP	-1.33000	2.77000	-4.7786	0.0000
Model Statistics:				
Statistic	Value			
R-squared	0.4393			
Adjusted R-squared	0.3991			
F-statistic	10.9308			
Prob(F-statistic)	0.0000			
Durbin-Watson	1.9360			

Source: Authors' Computation using EViews 12 (2026)

The Fixed Effects estimates reveal that *total debt service (TDS)* exerts a *negative and statistically significant* influence on foreign direct investment at the 5% level, implying that rising external debt servicing obligations discourage foreign investment inflows. In contrast, *external debt stock (EDS)* has a *positive and significant* effect on FDI, suggesting that external borrowing, when effectively utilized, can improve investment opportunities and attract foreign capital. The coefficient of the *official exchange rate (OER)* is positive but statistically insignificant, indicating that exchange rate movements did not significantly influence FDI inflows during the study period. Meanwhile, *domestic credit to the private sector (DCP)* exhibits a *negative and highly significant* relationship with FDI, implying that greater domestic credit availability may substitute for foreign capital or reflect inefficiencies in domestic financial intermediation. The model explains approximately *43.9%* of the variation in foreign direct investment, while the overall F-statistic confirms that the explanatory variables jointly have a statistically significant effect on FDI. Furthermore, the Durbin-Watson statistic of *1.936* indicates the absence of serious autocorrelation, suggesting that the estimated model is statistically reliable.

Discussion of Findings

The empirical results demonstrate that external financial position plays a significant role in shaping foreign direct investment inflows into the selected Sub-Saharan African countries, although the magnitude and direction of the effects differ across the explanatory variables. The coefficient of total debt service (TDS) is negative and statistically significant, indicating that increasing debt servicing obligations reduce foreign direct investment inflows. Specifically, higher debt repayment commitments increase fiscal pressure and heighten investors' concerns about sovereign risk and macroeconomic sustainability, thereby discouraging foreign investment. This finding is consistent with the a priori expectation, which predicted a negative relationship between debt service and FDI because debt repayment obligations reflect external vulnerability rather than productive investment capacity. The result also corroborates the findings of Dinga and Fonchamnyo (2021), Azolibe (2022), Gachunga and Kuso (2018), Raheem and Adeniyi (2015), and Manasseh *et al*. (2022), all of whom reported that excessive external debt obligations discourage foreign investment and economic performance in Sub-Saharan Africa.

The estimated coefficient of external debt stock (EDS) is positive and statistically significant, suggesting that external borrowing contributes positively to foreign direct investment inflows. This implies that external debt, when effectively mobilized and invested in productive sectors such as infrastructure, energy, transportation, and institutional development, enhances the investment climate and attracts foreign investors. Although the a priori expectation suggested a mixed relationship, with many studies anticipating a negative effect due to debt overhang, the positive outcome supports the theoretical argument that productive utilization of borrowed resources can complement foreign investment. This finding is consistent with Azolibe (2022), who reported that external debt positively influences FDI when channelled into productive infrastructure, but contradicts the findings of Dinga and Fonchamnyo (2021), Gachunga and Kuso (2018), and Raheem and Adeniyi (2015), who concluded that external debt crowds out foreign investment through increased macroeconomic risk.

The coefficient of the official exchange rate (OER) is positive but statistically insignificant, implying that exchange rate movements did not exert a significant influence on foreign direct investment during the study period. This suggests that foreign investors in the selected countries may be more concerned with exchange rate stability, institutional quality, and the broader macroeconomic environment than with the absolute level of the exchange rate itself. This outcome is consistent with the a priori expectation, which anticipated an ambiguous effect because exchange rate volatility generally matters more than the exchange rate level. The finding, however, contrasts with Godspower *et al.* (2025) and Dinga and Fonchamnyo (2021), who reported that exchange rate conditions significantly influence foreign investment decisions across Sub-Saharan Africa.

The estimated coefficient of domestic credit to the private sector (DCP) is negative and highly significant, indicating that increases in domestic private sector credit reduce

foreign direct investment inflows. This suggests that domestic financial resources may substitute for foreign capital or that inefficiencies in domestic financial intermediation reduce the complementary role between domestic finance and foreign investment. The result aligns with the a priori expectation, which predicted a mixed relationship between domestic credit and FDI. While greater financial development can attract foreign investment by improving access to finance, excessive domestic credit may reduce firms' dependence on foreign capital. This finding is inconsistent with Acheampong *et al.* (2023) and Acheampong (2019), who found that financial development complements foreign capital inflows and enhances investment performance. Nevertheless, the result supports the substitution hypothesis, whereby improved domestic financing reduces the need for foreign capital. Overall, the findings indicate that debt quality matters more than debt quantity in attracting foreign direct investment. While rising debt servicing obligations discourage foreign investors, productive external borrowing has the potential to improve investment attractiveness. The results further suggest that strengthening debt management, ensuring productive utilization of borrowed funds, improving financial sector efficiency, and maintaining macroeconomic stability are essential for sustaining foreign direct investment inflows across Sub-Saharan Africa.

Conclusion and Recommendations

The paper examined the effect of external financial position on foreign direct investment inflows in selected Sub-Saharan African countries over the period 2008–2025 using a panel fixed effects estimation technique. The findings revealed that total debt service, external debt stocks, and domestic credit to the private sector significantly influenced foreign direct investment inflows, while the official exchange rate exerted a positive but statistically insignificant effect. Specifically, total debt service and domestic credit to the private sector significantly reduced foreign direct investment inflows, whereas external debt stocks significantly increased foreign direct investment. Overall, three out of the four explanatory variables were found to be important determinants of foreign direct investment in the selected Sub-Saharan African countries.

The findings have important policy implications for Sub-Saharan African economies. The significant negative effect of debt servicing suggests that maintaining sustainable debt obligations is essential for preserving investor confidence. The positive contribution of external debt stocks indicates that external borrowing can complement foreign investment when efficiently utilized for productive development projects. Conversely, the negative influence of domestic credit highlights the need for financial sector reforms that improve credit allocation without displacing foreign capital. Finally, although exchange rate movements were not statistically significant, maintaining macroeconomic and exchange rate stability remains an important prerequisite for sustaining long-term foreign direct investment inflows across the region. Therefore, the following recommendations are proposed based on the empirical findings:

i. Since total debt service significantly reduced foreign direct investment inflows, the Ministry of Finance, Debt Management Office, and Central Bank should

strengthen debt sustainability and debt servicing strategies by improving fiscal discipline, restructuring existing external obligations through renegotiation of repayment terms, and reducing excessive debt repayment burdens that discourage foreign investors. Specifically, the Debt Management Office should implement medium-term debt management strategies that prioritize concessional borrowing, lengthen maturity profiles, and align debt servicing schedules with foreign exchange earnings capacity to minimize the crowding-out effect on foreign investment.

ii. Given that external debt stocks significantly increased foreign direct investment inflows, the Ministry of Planning, Ministry of Infrastructure, Ministry of Energy, and Ministry of Trade and Industry, in collaboration with the Ministry of Finance, should channel external borrowing towards productive infrastructure, energy, transportation, and industrial projects capable of improving the investment climate and attracting additional foreign capital. Specifically, these ministries should ensure that borrowed resources are allocated to projects with high economic returns, clear investment multipliers, and demonstrated capacity to enhance private sector productivity and export competitiveness.

iii. Since domestic credit to the private sector significantly reduced foreign direct investment inflows, the Central Bank, Ministry of Finance, and Financial Sector Regulatory Authorities should improve the efficiency and allocation of domestic credit by ensuring that private sector financing complements, rather than crowds out, foreign investment through comprehensive financial sector reforms and credit market development. Specifically, the Central Bank should implement policies that enhance financial intermediation efficiency, reduce non-performing loans, strengthen credit risk assessment frameworks, and ensure that domestic credit supports productive investment that attracts rather than substitutes for foreign direct investment. Financial sector regulators should also promote inclusive financial systems that facilitate access to credit for small and medium-sized enterprises without displacing foreign capital.

iv. Although the official exchange rate exhibited a positive but statistically insignificant relationship with foreign direct investment, the Central Bank and Ministry of Finance should continue to maintain exchange rate stability and predictable macroeconomic policies to sustain investor confidence and minimize exchange rate uncertainty. Specifically, the Central Bank should adopt a managed floating exchange rate regime supported by adequate foreign exchange reserves, implement transparent foreign exchange market operations, and coordinate monetary policy with fiscal authorities to avoid excessive exchange rate volatility. The Ministry of Finance should ensure that fiscal policies complement exchange rate management by maintaining prudent public expenditure and avoiding excessive domestic borrowing that could pressure the exchange rate.

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