



ROLE OF MACROECONOMIC VARIABLES IN THE PUBLIC DEBT–FOREIGN DIRECT INVESTMENT NEXUS: EVIDENCE FROM EAST AFRICAN COMMUNITY MEMBER COUNTRIES

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Abstract

Macroeconomic variables play an important role in shaping the environment within which public debt and foreign direct investment (FDI) interact. This study examined the mediating effect of macroeconomic variables on the relationship between public debt and FDI among East African Community (EAC) member countries. The study was guided by a positivist philosophy and employed a longitudinal research design using secondary panel data covering 2004–2025. Public debt was disaggregated into external and domestic debt, while macroeconomic variables comprised interest rate, inflation rate, exchange rate, and Gross Domestic Product (GDP). Mediation was assessed using the Baron and Kenny (1986) stepwise regression procedure, with indirect effects further evaluated using Sobel tests. The findings revealed that macroeconomic variables did not significantly mediate the public debt–FDI relationship at the 5% significance level. Interest rate produced no significant indirect effect for either external or domestic debt. Similarly, inflation and exchange rate did not significantly mediate the effects of public debt to FDI. GDP was significantly affected by public debt and significantly influenced FDI; however, its indirect effect was not statistically significant for external debt, while the

domestic debt pathway produced a borderline Sobel result ($Z = -1.99$). Overall, the study concludes that macroeconomic variables do not provide a significant effect between public debt and FDI in the EAC. The findings suggest that the debt–FDI relationship may operate through structural and fiscal factors beyond broad macroeconomic conditions.

Keywords: Interest Rate, Inflation Rate, Exchange Rate, Gross Domestic Product, East African Community

INTRODUCTION

Foreign direct investment (FDI) continues to play an important role in the financing and development of emerging and developing economies. Beyond providing external capital, FDI can contribute to technology transfer, employment creation, productivity improvement, market development, and economic growth. However, the ability of an economy to attract foreign investors is influenced by the broader economic conditions within which investment decisions are made. Macroeconomic stability is particularly important because investors assess the expected returns and risks associated with investment over time. Changes in interest rates, inflation, exchange rates, and economic output can therefore alter investment conditions and influence the attractiveness of a host economy (Awuor et al., 2021; Prah & Ofori, 2022).

Public debt constitutes another important dimension of the economic environment in which FDI decisions are made. Governments in developing economies commonly utilize both external and domestic borrowing to finance infrastructure, public investment, government programmes, and fiscal deficits. When borrowing is directed towards productive expenditure, it may enhance economic capacity and create conditions that support private investment. However, excessive debt accumulation may increase fiscal pressure, weaken investor confidence, and generate concerns regarding future taxation, debt servicing, and macroeconomic stability. Consequently, the effect of public debt on FDI may depend not only on the magnitude and composition of debt but also on the macroeconomic conditions prevailing within the economy (Bedianashvili & Kokhreidze, 2023; Oluwafemi & Xu, 2025).

The importance of macroeconomic variables arises from their potential to influence the channels through which public debt affects foreign investment. Interest rates affect the cost and availability of finance and may consequently influence investment decisions. Inflation reflects the stability of prices and can increase uncertainty regarding future operating costs and investment returns when it becomes persistent. Exchange-rate movements may affect the value of foreign investors' capital, the cost of imported inputs, and the repatriation of investment returns. GDP, on the other hand, reflects the scale and performance of an economy and may

provide foreign investors with information about market size, economic activity, and future growth opportunities. These variables may therefore alter the conditions under which public debt either supports or constrains FDI.

The relationship between public debt and FDI is consequently more complex than a simple direct association. Public borrowing may stimulate economic activity and improve investment conditions when it finances productive infrastructure and other growth-enhancing expenditure. Conversely, debt accumulation accompanied by inflationary pressures, exchange-rate instability, high interest rates, or weak economic performance may intensify perceived investment risks. Evidence from previous studies reflects this complexity. Awuor et al. (2021), for example, examined public debt and FDI in Kenya and found different associations between FDI and various debt and macroeconomic indicators, although their regression results did not establish statistically significant effects. Similarly, Prah and Ofori (2022) found a negative long-run effect of external debt on foreign investment in Ghana, highlighting the potential importance of debt-related pressures in shaping investment outcomes. Bedianashvili and Kokhraidze (2023) also reported evidence of an adverse association between public debt and economic performance in small economies.

The issue is particularly relevant to the East African Community (EAC), where member countries have pursued development programmes requiring substantial public financing while simultaneously seeking to increase FDI inflows. The EAC economies differ considerably in their macroeconomic conditions, fiscal positions, exchange-rate movements, inflationary pressures, interest-rate environments, and levels of economic activity. Such differences imply that similar changes in public debt may not produce identical consequences for foreign investors across member countries. Evidence from the region has also indicated that public debt can have adverse implications for economic performance, while the existing literature has paid comparatively less attention to the macroeconomic mechanisms connecting public debt with FDI.

Recent evidence further demonstrates that the public debt–FDI relationship remains unsettled. Oluwafemi and Xu (2025), examining African economies, emphasize the importance of FDI in understanding the broader consequences of public debt for economic performance. Their findings reinforce the view that the interaction between debt and investment should be considered within the wider economic environment rather than through debt levels alone. Similarly, the empirical evidence reviewed in the present study indicates that differences in methodological approaches, country characteristics, debt composition, and macroeconomic conditions contribute to divergent findings concerning the public debt–FDI relationship.

Despite the relevance of macroeconomic conditions to investment decisions, limited empirical attention has been directed towards their role in the relationship between public debt and FDI within the EAC. Much of the existing literature has concentrated on the direct association between debt and investment, individual-country experiences, or the broader effects of debt on economic growth. For instance, Awuor et al. (2021) focused on Kenya, while Prah and Ofori (2022) examined Ghana. Other studies have examined public debt and economic growth without directly establishing the macroeconomic mechanisms through which debt may influence FDI. This leaves an important regional and conceptual gap concerning whether macroeconomic conditions help explain the relationship between public debt and FDI among EAC member countries.

Accordingly, this study examines the role of macroeconomic variables in the public debt–FDI nexus among EAC member countries. The study focuses on interest rate, inflation rate, exchange rate, and GDP as the principal macroeconomic variables. By examining these variables within a regional panel framework, the study seeks to provide evidence on how macroeconomic conditions influence the relationship between public debt and FDI. The study therefore extends the existing literature beyond the direct debt–FDI relationship and provides a more comprehensive understanding of the economic conditions under which public debt may affect foreign investment in the EAC.

Statement of the Problem

Foreign direct investment is an important source of capital for developing economies, yet its inflows remain sensitive to the economic conditions prevailing in host countries. Although public debt can provide governments with resources to finance infrastructure and other productive investments that may improve the investment environment, increasing debt can also create fiscal and macroeconomic pressures that weaken investor confidence. The effect of public debt on FDI is therefore not necessarily uniform and may depend on the broader macroeconomic environment in which investment decisions are made. Existing empirical evidence has consequently produced mixed findings, with some studies reporting adverse effects of public debt on investment and others identifying positive or not significant relationships (Awuor et al., 2021; Prah & Ofori, 2022; Bedianashvili & Kokhraidze, 2023).

The problem is more pronounced in developing economies where macroeconomic instability can amplify the risks associated with public borrowing. Changes in interest rates can affect financing costs, inflation can influence investment returns and economic uncertainty, exchange-rate movements can alter the value and profitability of foreign investments, while GDP reflects the level of economic activity and potential market opportunities. These conditions

may influence how foreign investors respond to changes in public debt. However, much of the existing research has concentrated on the direct relationship between public debt and FDI, without sufficiently examining the role played by individual macroeconomic variables in this relationship (Oluwafemi & Xu, 2025).

Within the EAC, this issue is particularly important because member countries have experienced substantial changes in public debt alongside differing macroeconomic conditions. Although regional studies have examined public debt, economic growth, and FDI, the evidence remains fragmented. Awuor et al. (2021), for example, examined the relationship between public debt and FDI in Kenya, while Otieno (2024) investigated public debt, FDI, and economic growth within the EAC using a spatial approach. These studies provide useful evidence but do not sufficiently establish how interest rates, inflation, exchange rates, and GDP influence the relationship between public debt and FDI across EAC member countries.

Consequently, a conceptual and empirical gap remains concerning the mechanisms through which macroeconomic conditions may shape the public debt–FDI relationship within the EAC. Without such evidence, policymakers may find it difficult to determine whether changes in public debt alone explain variations in FDI or whether the effects are transmitted through broader macroeconomic conditions. Addressing this gap is important for designing coordinated fiscal and macroeconomic policies capable of maintaining debt sustainability while improving the region's attractiveness to foreign investors.

Therefore, this study examines the role of macroeconomic variables in the public debt–FDI nexus among EAC member countries. Specifically, it investigates the role of interest rate, inflation rate, exchange rate, and GDP in the relationship between public debt and FDI, thereby providing regional evidence on the macroeconomic conditions under which public debt may influence foreign investment.

LITERATURE REVIEW

Theoretical Framework

Debt Overhang Theory provides a central theoretical explanation of how high public debt can influence FDI. The theory was advanced by Krugman (1988), who associated excessive debt with the expected future burden of servicing existing debt obligations. When investors perceive a country's debt burden as unsustainable, they may anticipate higher future taxation, fiscal adjustment, and macroeconomic instability. These expectations can reduce the expected returns from investment and consequently discourage foreign investment.

The theory is particularly relevant to developing economies where fiscal resources are often constrained and a substantial proportion of government revenue may be committed to

debt servicing. Yusuf and Mohd (2021) argue that debt servicing can consume a significant proportion of national income, thereby limiting the resources available for productive economic activities. Similarly, Karadam (2021) observes that increasing debt can adversely affect economic performance through expectations of future taxation and heightened macroeconomic uncertainty. From the perspective of foreign investors, these conditions may increase perceived sovereign risk and weaken confidence in the long-term profitability of investment.

The Debt Overhang Theory also provides an explanation for the possible role of macroeconomic variables in the public debt–FDI relationship. Rising public debt may generate pressures that are reflected in interest rates, inflation, exchange-rate conditions, and overall economic activity. For example, concerns regarding fiscal sustainability may increase the cost of borrowing and contribute to financial uncertainty, while fiscal pressures may also affect exchange-rate stability and inflation. Such changes in the macroeconomic environment can subsequently influence foreign investors' assessment of the attractiveness and risk of a host economy.

The theory is therefore relevant to the present study because it provides a basis for examining whether public debt affects FDI not only directly but also through changes in macroeconomic conditions. This is particularly important within the EAC, where member countries differ considerably in their fiscal conditions, debt structures, and macroeconomic environments. However, the theory has limitations. Its explanation may appear to assume a relatively negative relationship between excessive debt and investment without fully accounting for situations in which borrowed resources are productively invested in infrastructure and other growth-enhancing activities. Furthermore, the effect of debt may vary according to institutional quality, debt composition, economic structure, and the capacity of governments to manage fiscal pressures (Pokou, 2020; Heimberger, 2023). These limitations justify the consideration of complementary theoretical perspectives.

The Crowding-Out Effect Theory provides another explanation of the relationship between public debt and investment by focusing on the effects of government borrowing on financial and economic conditions. The theory suggests that increased government borrowing may place pressure on available financial resources, potentially increasing interest rates and reducing the availability of credit to private-sector investors. Higher borrowing costs can weaken private investment and may consequently affect the attractiveness of an economy to foreign investors.

The relevance of the crowding-out perspective to the present study arises from the possibility that public debt may influence FDI through macroeconomic variables, particularly interest rates. When governments rely heavily on domestic borrowing, increased demand for

domestic financial resources may place upward pressure on interest rates. Higher interest rates can increase the cost of financing business operations and investment projects, thereby potentially reducing the attractiveness of the host economy to foreign investors. Public borrowing may therefore affect FDI indirectly by altering the financial environment in which investment decisions are made.

The crowding-out mechanism may also interact with other macroeconomic conditions. Persistent government borrowing can contribute to concerns regarding fiscal sustainability and may influence expectations concerning inflation, exchange-rate stability, and future economic policy. Consequently, the effect of public debt on FDI may extend beyond the direct fiscal burden of debt and operate through changes in the broader macroeconomic environment. Evidence from the EAC context has linked public debt with negative economic outcomes and interpreted the findings in relation to both debt overhang and crowding-out effects (Otieno, 2024).

Nevertheless, the crowding-out perspective does not imply that government borrowing will always reduce investment. Where borrowed funds are directed towards productive infrastructure and other investments that expand productive capacity, the resulting improvement in economic activity may offset or exceed the potential adverse effects of increased borrowing. The theory therefore provides an important but conditional explanation of how public debt may influence FDI through macroeconomic conditions.

Keynesian Theory of Public Debt provides a contrasting perspective by emphasizing the potential developmental benefits of government borrowing. Keynes (1935) argued that government intervention through expenditure and fiscal policy can support economic activity, particularly during periods of economic weakness. From this perspective, borrowing can provide governments with resources to finance expenditure that stimulates aggregate demand and supports economic recovery.

The Keynesian perspective is particularly relevant to developing economies where governments may face substantial infrastructure and development financing requirements. Debt-financed expenditure on infrastructure, public services, and productive investments can improve the economic environment within which businesses operate. Improved transport networks, energy supply, public services, and productive capacity may reduce business costs and create conditions that are more attractive to foreign investors. Marglin (2020) similarly emphasizes the importance of government expenditure and taxation policies in achieving broader macroeconomic objectives.

The theory therefore suggests that public debt does not necessarily have a negative effect on FDI. The outcome depends partly on how borrowed resources are utilized. Where

borrowing finances productive expenditure, increased government spending may stimulate economic activity, improve employment and strengthen the investment environment. Horton and El-Ganainy (2022) further associate public debt decisions with Keynesian fiscal principles, noting that debt-financed government expenditure can increase aggregate demand and support economic activity. Such improvements may signal opportunities for foreign investors and strengthen investment confidence.

The Keynesian perspective also helps explain why macroeconomic variables may be important in the public debt–FDI relationship. Government borrowing and expenditure can influence economic growth, employment, inflation, interest rates, and other macroeconomic conditions. Improvements in economic activity and productive capacity may increase the attractiveness of an economy to foreign investors, while excessive or poorly managed fiscal expansion may generate inflationary and exchange-rate pressures that undermine investor confidence. Rangarajan and Srivastava (2023) similarly note that excessive government debt can contribute to inflationary and currency-related instability, potentially discouraging investors.

However, the explanatory power of Keynesian Theory is constrained by the fact that it does not fully distinguish between different forms of borrowing or different uses of government expenditure. Debt-financed productive investment may generate different outcomes from borrowing used to finance recurrent expenditure or persistent fiscal deficits. The effectiveness of Keynesian fiscal intervention may also depend on institutional capacity, fiscal management, and the broader economic structure of developing economies (Jiang et al., 2022; Horton & El-Ganainy, 2022). These considerations are important when applying the theory to the heterogeneous economic conditions of EAC member countries.

Debt Overhang Theory, Crowding-Out Effect Theory, and Keynesian Theory provide complementary explanations of how public debt may influence foreign direct investment through macroeconomic conditions. Debt Overhang Theory emphasizes the adverse consequences of excessive debt, particularly through expectations of future taxation, debt-servicing pressures, sovereign risk, and macroeconomic uncertainty. Crowding-Out Effect Theory focuses more specifically on the financial transmission mechanism through which government borrowing may influence interest rates and the availability and cost of financial resources, thereby affecting investment decisions. Keynesian Theory, in contrast, emphasizes the potential positive effects of public borrowing when debt-financed expenditure is directed towards productive activities that stimulate economic activity and improve the investment environment.

Taken together, the three theories suggest that the effect of public debt on FDI is not necessarily uniform. Public debt may create adverse investment conditions when it generates fiscal uncertainty, financial pressures, and macroeconomic instability, as suggested by Debt

Overhang and Crowding-Out theories. Conversely, borrowing may support FDI when it finances productive expenditure that strengthens economic activity and the investment environment, as proposed by Keynesian Theory.

These theoretical perspectives provide the foundation for examining macroeconomic variables as potential mechanisms through which public debt influences FDI. Specifically, the study considers interest rate, inflation rate, exchange rate, and GDP as macroeconomic variables that may mediate the effects of public debt to foreign investment. The theoretical framework therefore supports the proposition that changes in public debt may alter macroeconomic conditions, which in turn may influence the decisions of foreign investors in EAC member countries. The empirical analysis consequently examines whether these macroeconomic variables significantly mediate the relationship between public debt and FDI.

Conceptual Framework

The conceptual framework in Figure 1 illustrates the expected relationship between public debt, macroeconomic variables, and FDI among EAC member countries. Public debt is represented by external debt and domestic debt and constitutes the independent variable, while FDI is the dependent variable. Interest rate, inflation rate, exchange rate, and GDP constitute the macroeconomic variables through which changes in public debt may influence the investment environment and, consequently, FDI inflows. The framework therefore provides a basis for examining both the direct relationship between public debt and FDI and the indirect pathway through macroeconomic conditions.

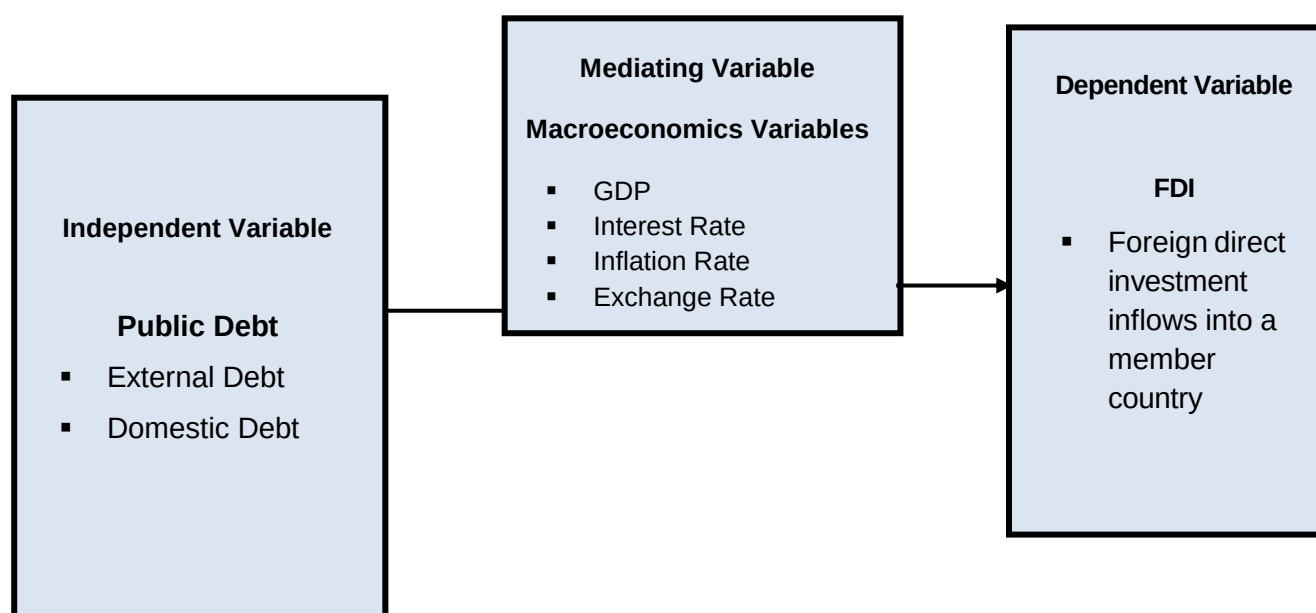


Figure 1: Conceptual Framework

The framework assumes that the level and composition of public debt can influence macroeconomic conditions, which may subsequently affect FDI inflows. External and domestic borrowing may affect interest rates, inflation, exchange-rate conditions, and economic activity differently, while these macroeconomic conditions can influence investors' assessment of the attractiveness and stability of an economy. Thus, the framework allows the study to establish whether macroeconomic variables explain part of the relationship between public debt and FDI, while recognizing that public debt may also have a direct effect on FDI. The four macroeconomic variables are treated separately because each represents a distinct dimension of the economic environment and may operate through different channels.

Empirical Review

Empirical evidence indicates that macroeconomic conditions play an important role in shaping foreign investors' decisions, although the magnitude and direction of their effects vary across countries and economic settings. Interest rates, inflation, exchange rates, and economic growth influence the cost of capital, price stability, expected returns, currency risk, and the size and dynamism of host economies. In the context of the public debt–FDI relationship, these variables may also represent potential channels through which fiscal conditions affect investment flows. Public borrowing can influence macroeconomic stability, while changes in macroeconomic conditions may subsequently affect the attractiveness of an economy to foreign investors. Existing empirical evidence, however, remains inconclusive regarding whether these macroeconomic conditions significantly transmit the effects of public debt to FDI.

Interest rates represent an important component of the investment environment because they influence borrowing costs and the availability of financial resources. Higher interest rates may increase the cost of financing investment projects and potentially discourage foreign investors. However, the effect may differ in developing economies where foreign investors may rely less on domestic borrowing and may be influenced more strongly by market size, institutional conditions, political stability, and expected returns.

Abdi, Sheik-Ali, Mohamed, and Mohamoud (2024) found that interest rate movements may not significantly determine FDI flows in developing economies, suggesting that foreign investors may give greater consideration to structural factors such as market opportunities and policy stability. This evidence is relevant to the present study because it indicates that although public debt may be associated with fiscal and financial pressures, changes in interest rates do not necessarily constitute a significant mediation through which debt affects FDI.

Evidence from Kenya also provides some indication of the relationship between interest rates and FDI. Awuor et al. (2021) reported a positive correlation between FDI and current

interest rates, although their regression results did not establish statistically significant effects across the explanatory variables. The findings therefore demonstrate that the observed association between interest rates and FDI may not necessarily translate into a statistically significant explanatory relationship. These contrasting findings suggest that the influence of interest rates on FDI remains context-dependent. More importantly, limited evidence directly examines whether changes in public debt influence FDI through interest-rate movements, particularly within the EAC. This creates a basis for examining interest rate as a potential mediation mechanism in the present study.

Inflation is another important macroeconomic condition affecting investment decisions because persistent increases in prices can create uncertainty regarding production costs, expected returns, and the future purchasing power of investment earnings. High inflation may therefore weaken investor confidence and reduce the attractiveness of an economy to foreign investors. At the same time, the relationship between inflation and FDI may depend on the magnitude and persistence of inflation as well as the broader macroeconomic environment.

Jama and Nayan (2022) provide evidence that inflation can exert a direct negative influence on FDI. Their findings suggest that inflation affects investment decisions by increasing uncertainty and reducing expected returns. This supports the view that price instability may discourage foreign investors even when inflation is not necessarily operating through fiscal variables.

The relevance of inflation to the public debt–FDI nexus arises from the possibility that public borrowing may alter macroeconomic conditions. However, evidence from the present study's broader empirical analysis indicates that public debt was negatively associated with inflation, while inflation itself significantly reduced FDI; nevertheless, the resulting indirect effect was not statistically significant. Thus, inflation may influence FDI directly without necessarily mediating the effect of public debt to FDI. This distinction is important because it demonstrates that a significant relationship between a macroeconomic variable and FDI does not, by itself, establish that the variable mediates the effect of public debt. Consequently, examining the indirect relationship is necessary to determine whether inflation constitutes a meaningful mediator between public debt and FDI.

Exchange-rate conditions are also relevant to foreign investment because movements in the domestic currency affect the value of foreign investors' capital, production costs, export competitiveness, and the expected returns from investment. Exchange-rate stability can reduce currency-related uncertainty, whereas substantial volatility may increase the risk associated with investment decisions.

Evidence indicates that exchange rate has a positive relationship with FDI. However, neither external nor domestic debt significantly influence the exchange rate, and the indirect effect through exchange rate was statistically not significant. This suggests that although exchange-rate conditions may contribute directly to FDI attractiveness, they do not necessarily constitute a mediation mechanism linking public debt to foreign investment.

Sultana, Rahman, and Zimon (2024) similarly provide evidence that exchange-rate effects on FDI may operate primarily through direct investment considerations rather than through fiscal conditions such as public debt. The implication is that exchange-rate competitiveness may matter to foreign investors, but its role in the public debt–FDI relationship requires separate empirical verification.

Economic growth, represented by GDP, reflects the size and productive capacity of an economy and is commonly associated with the attractiveness of a host country to foreign investors. A growing economy may provide expanding markets, increased demand, greater investment opportunities, and improved prospects for profitability. Consequently, GDP can influence FDI through both market-size and growth-expectation effects.

The empirical evidence indicates a positive relationship between GDP and FDI. The broader analysis found that public debt had a statistically significant negative effect on GDP, while GDP had a statistically significant positive effect on FDI. These findings provide partial support for the proposition that GDP may constitute a mediation through which public debt affects foreign investment. However, the indirect effect did not meet the conventional 5% significance threshold, meaning that GDP did not significantly mediate the public debt–FDI relationship. This finding is particularly important because it distinguishes between direct economic relevance and transmission effects. GDP may independently contribute to FDI attraction while simultaneously being affected by public debt, but these relationships are not sufficient to establish GDP as a statistically significant mediator connecting public debt to FDI.

METHODOLOGY

Research Design

The study adopted a correlational descriptive research design using longitudinal panel data. The design was appropriate because the study sought to examine the relationship between public debt and FDI and to establish whether macroeconomic variables transmit this relationship among EAC member countries. The longitudinal approach enabled the study to examine variations in the study variables across countries and over time.

The study employed an unbalanced panel dataset covering the period 2004–2025. The unbalanced structure resulted from differences in data availability across EAC member

countries, particularly following changes in EAC membership and the availability of historical observations. The unit of analysis was the EAC member country-year observation.

Data Collection

The study relied exclusively on secondary annual data for the period 2004–2025. Data on public debt, macroeconomic variables and FDI were obtained from internationally recognized and country-level sources, including the World Bank, World Development Indicators (WDI), International Monetary Fund (IMF), UNCTAD, EAC central banks, and national statistical agencies.

Public debt was represented by its two components, external debt and domestic debt. Macroeconomic variables comprised interest rate, inflation rate, exchange rate, and GDP, while FDI was measured as FDI inflows relative to GDP. The use of multiple authoritative sources enhanced the availability and comparability of annual observations across the EAC countries. The variables were retained in their disaggregated form rather than constructing composite indices. This was important because external and domestic debt have different economic characteristics, while the four macroeconomic variables represent distinct dimensions of the macroeconomic environment.

Model Specification

The analysis was based on the research objective, which sought to establish the effect of macroeconomic variables on the relationship between public debt and FDI among EAC member countries. The mediation framework followed the Baron and Kenny (1986) stepwise approach. Public debt was represented separately by external debt and domestic debt, while the macroeconomic variables were examined independently as potential mediators.

The study examined whether public debt significantly influenced each proposed mediating variable:

$$MV_{it} = \beta_0 + \beta_1 ED_{it} + \beta_2 DD_{it} + \varepsilon_{it}$$

Where, MV represents each macroeconomic variable separately: interest rate, inflation, exchange rate, and GDP.

Consequently, the four separate models were estimated to determine whether external and domestic debt significantly predicted each macroeconomic variable.

The study further examined each macroeconomic variable was significantly associated with FDI:

$$FDI_{it} = \beta_0 + \beta_1 MV_{it} + \varepsilon_{it}$$

Where, MV represents interest rate, inflation rate, exchange rate and GDP.

Finally, the study incorporated both public debt and the respective macroeconomic variables into the FDI model:

$$FDI_{it} = \beta_0 + \beta_1 ED_{it} + \beta_2 DD_{it} + \beta_3 MV_{it} + \varepsilon_{it}$$

The significance and change in the public debt coefficients between the direct-effect model and the model incorporating the macroeconomic variable were examined to determine whether the macroeconomic variable affected part of the relationship between public debt and FDI.

The indirect effect was assessed using the product of the relevant coefficients:

$$\text{Indirect effect} = \beta_1 \times \beta_2$$

A statistically significant indirect effect would provide evidence that the respective macroeconomic variable mediates the relationship between public debt and FDI.

The mediation analysis was conducted separately for the four macroeconomic variables. This approach was consistent with the operationalisation of the study variables and avoided combining conceptually distinct macroeconomic indicators into a single index.

Hypothesis

The study's null hypothesis was consequently evaluated as:

H01: Macroeconomic variables have no significant mediating effect on the relationship between public debt and FDI among EAC member countries.

The hypothesis was further examined through the following sub-hypotheses:

- **H01a:** Interest rate has no significant mediating effect on the relationship between public debt and FDI.
- **H01b:** Inflation rate has no significant mediating effect on the relationship between public debt and FDI.
- **H01c:** Exchange rate has no significant mediating effect on the relationship between public debt and FDI.
- **H01d:** GDP has no significant mediating effect on the relationship between public debt and FDI.

Analytical Approach

The study employed descriptive, correlational and inferential statistical techniques to analyze the 126 country-year observations covering the period 2004–2025. Descriptive statistics, including the minimum, maximum, mean, standard deviation, skewness and kurtosis, were used to summarize the distribution and characteristics of the study variables. Trend analysis was also undertaken to illustrate changes in foreign direct investment, public debt and

the selected macroeconomic variables across EAC member countries over the study period. Pearson correlation analysis was subsequently used to establish the direction and strength of the preliminary associations among FDI, public debt and the macroeconomic variables.

Regression analysis was employed to examine the hypothesized relationships underlying the mediation framework. The analysis proceeded in stages. First, separate regression models were estimated to determine whether external debt and domestic debt significantly predicted each of the four proposed mediating variables: interest rate, inflation rate, exchange rate and GDP. Second, separate regression models were estimated to establish whether each macroeconomic variable was significantly associated with FDI. Third, the respective macroeconomic variable was introduced into the FDI model alongside the relevant public debt component to determine whether inclusion of the mediator altered the relationship between public debt and FDI.

The mediating role of the macroeconomic variables was assessed using the stepwise approach proposed by Baron and Kenny (1986). The analysis considered the statistical significance of the relationship between the public debt component and the proposed mediator, the relationship between the mediator and FDI, and the relationship between public debt and FDI before and after inclusion of the mediator. A reduction in the magnitude of the public debt coefficient following inclusion of the mediator, together with evidence of a statistically significant indirect effect, was used to assess partial mediation.

The indirect effect was assessed using the product-of-coefficients approach, whereby the coefficient linking the public debt component to the mediator was multiplied by the coefficient linking the mediator to FDI. The significance of the indirect effect was further examined using the Sobel test. A Sobel test statistic exceeding the critical value of ± 1.96 at the 5% level of significance was considered evidence of a statistically significant indirect effect.

The mediation analysis was conducted independently for interest rate, inflation rate, exchange rate and GDP and separately for external and domestic debt, reflecting the distinct relationships between the debt components, macroeconomic variables and FDI. The results from the regression and Sobel analyses were considered jointly in determining whether the respective macroeconomic variables provided evidence of mediation in the public debt–FDI relationship. All statistical decisions were made at the 5% significance level.

RESULTS AND FINDINGS

Descriptive Statistics

The study used 126 country-year observations covering the EAC countries over 2004–2025. The descriptive statistics are presented in the table 1.

Table 1: Descriptive Statistics

Variable	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis
Foreign Direct Investment Inflows	126	0.3507	9.0014	6.7944	1.8600	-1.461	1.802
Gross Domestic Product	126	6.8244	11.9902	9.6307	1.2964	-0.263	-1.034
Inflation Rate	126	0.2461	6.6922	2.0593	0.9366	1.901	6.964
Interest Rate	126	0.5039	3.0718	1.1736	0.5126	2.705	6.232
Exchange Rate	126	3.8400	8.2201	6.7203	1.2339	-0.908	-0.490
External Debt	126	0.0045	2.1564	0.7188	0.4201	0.759	0.729
Domestic Debt	126	0.0012	2.8490	0.8548	0.5953	1.043	1.571

The descriptive results show that FDI had a mean of 6.7944, while GDP recorded the highest mean among the macroeconomic variables at 9.6307. Domestic debt had a higher mean 0.8548 than external debt 0.7188, indicating greater variation in domestic borrowing across the observations. Inflation and interest rates exhibited positive skewness and relatively high kurtosis, indicating departures from symmetry in their distributions.

Trend Analysis

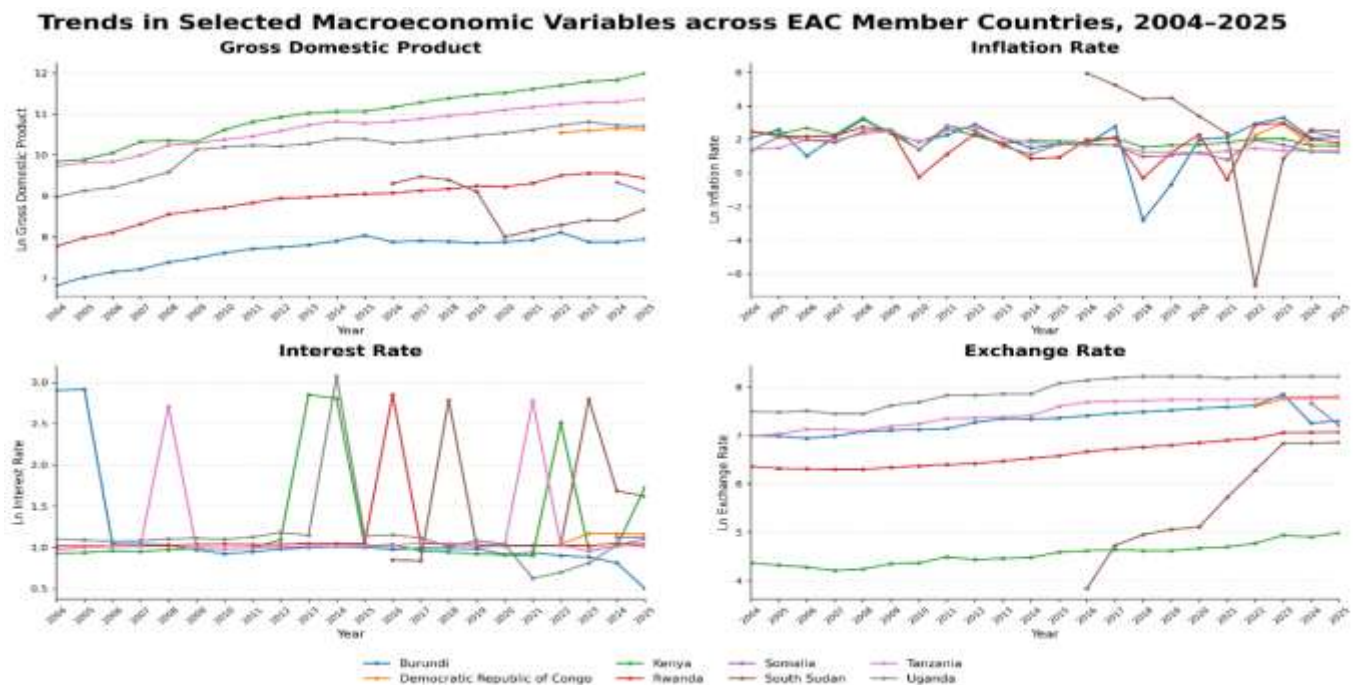


Figure 2: Trend Analysis

Figure 2 presents the trends in selected macroeconomic variables namely GDP, inflation rate, interest rate and exchange rate across EAC member countries over the period 2004–2025.

The trends reveal considerable differences in the macroeconomic conditions of the countries, reflecting variations in economic performance and macroeconomic stability.

GDP generally exhibited an upward trend across most EAC member countries during the study period. Kenya recorded the highest and most sustained increase in GDP, followed by Tanzania and Uganda, while Rwanda also demonstrated a relatively steady upward trajectory. Burundi recorded a comparatively lower level of GDP but showed gradual improvement over the period. The GDP trends for the DRC, Somalia and South Sudan cover shorter periods because of the availability of observations in the study dataset. Overall, the upward movement in GDP indicates expanding economic activity across most of the countries, although the pace and consistency of growth differed considerably.

The inflation rate displayed greater volatility than GDP. Most countries experienced fluctuations in inflation throughout the study period, with particularly pronounced movements in South Sudan. Inflation also showed periods of sharp increases and subsequent declines in several countries. The variation in inflation across countries indicates differences in price stability and the macroeconomic environment within the EAC. These differences are relevant to FDI because persistent or unpredictable inflation may increase uncertainty and affect the operating environment faced by investors.

The interest rate trends were similarly heterogeneous across countries. Most countries maintained relatively stable interest-rate movements for substantial portions of the study period, although some experienced notable spikes at particular points. South Sudan exhibited particularly pronounced fluctuations, while Kenya, Tanzania, Rwanda and Uganda generally showed comparatively moderate movements. Such differences suggest that the cost and availability of finance varied across the EAC countries over the study period, potentially influencing investment decisions and the transmission of public debt into domestic economic conditions.

The exchange rate generally exhibited an upward trend for most countries, indicating a depreciation of the respective national currencies against the US dollar where the exchange-rate measure is expressed as local currency units per US dollar. Uganda and Tanzania showed relatively gradual increases, while Kenya also experienced a notable upward movement. South Sudan exhibited a much sharper increase in the latter part of the period, reflecting greater exchange-rate movements. The differing exchange-rate trajectories indicate variations in external-sector conditions and currency stability across the EAC.

Overall, the trend analysis demonstrates substantial cross-country and over-time variation in GDP, inflation rates, interest rates and exchange rates within the EAC. This heterogeneity provides an important basis for examining whether macroeconomic conditions

influence the relationship between public debt and FDI. In particular, the contrasting movements in economic output, prices, interest rates and exchange rates suggest that the effect of public debt on FDI may differ depending on the prevailing macroeconomic environment in individual EAC member countries.

Correlation Analysis

Correlation analysis was conducted to establish the preliminary associations among FDI, public debt and the macroeconomic variables. The correlation matrix is based on 126 observations.

Table 2: Correlation Matrix

Variable	FDI	GDP	Inflation	Interest Rate	Exchange Rate	External Debt	Domestic Debt
FDI	1	.461**	-.353**	-.130	.332**	-.258**	-.276**
GDP	.461**	1	-.235**	.021	-.179*	-.074	-.190*
Inflation	-.353**	-.235**	1	-.026	-.323**	-.071	-.045
Interest Rate	-.130	.021	-.026	1	-.088	.166	.112
Exchange Rate	.332**	-.179*	-.323**	-.088	1	.075	.157
External Debt	-.258**	-.074	-.071	.166	.075	1	.364**
Domestic Debt	-.276**	-.190*	-.045	.112	.157	.364**	1

Note: $p < .05$; $p < .01$.

The correlation results show that FDI was positively and significantly associated with GDP ($r = .461$, $p < .01$) and exchange rate ($r = .332$, $p < .01$), while inflation was negatively associated with FDI ($r = -.353$, $p < .01$). External debt and domestic debt were both negatively correlated with FDI, with coefficients of $-.258$ and $-.276$, respectively ($p < .01$). Interest rate was not significantly correlated with FDI.

Model Summary

Table 3: Model Summary

Mediation Pathway / Model	R	R ²	Adjusted R ²	Std. Error of Estimate	F	Sig.
External Debt → FDI	.258	.067	.059	1.804	8.849	.004
Domestic Debt → FDI	.276	.076	.069	1.795	10.212	.002
Interest Rate → FDI	.130	.017	.009	1.851	2.116	.148
Inflation Rate → FDI	.353	.124	.117	1.747	17.616	<.001
Exchange Rate → FDI	.332	.110	.103	1.762	15.312	<.001
GDP → FDI	.461	.212	.206	1.657	33.416	<.001
External Debt + GDP → FDI	.513	.263	.251	1.610	21.920	<.001
Domestic Debt + GDP → FDI	.499	.249	.237	1.625	20.407	<.001

The results show that the explanatory power of the models varies considerably across the macroeconomic variables. Interest rate has the weakest explanatory power, accounting for only 1.7% of the variation in FDI and producing a statistically not significant model ($R^2 = .017$, $F = 2.116$, $p = .148$). In contrast, inflation explains 12.4%, exchange rate 11.0%, and GDP 21.2% of the variation in FDI, with all three models statistically significant at the 5% level. GDP therefore provides the strongest explanatory power among the individual macroeconomic variables. When GDP is introduced alongside public debt, the explanatory power increases to 26.3% for external debt + GDP and 24.9% for domestic debt + GDP. Both models are statistically significant ($p < .001$), indicating that the combined models explain more variation in FDI than the respective debt-only models.

ANOVA

Table 4: ANOVA

Mediation Pathway / Model	Source	Sum of Squares	df	Mean Square	F	Sig.
External Debt → FDI	Regression	28.973	1	28.973	8.849	.004
	Residual	403.548	124	3.254		
	Total	432.521	125			
Domestic Debt → FDI	Regression	32.865	1	32.865	10.212	.002
	Residual	399.531	124	3.222		
	Total	432.396	125			
Interest Rate → FDI	Regression	7.397	1	7.397	2.116	.148
	Residual	425.038	124	3.428		
	Total	432.435	125			
Inflation Rate → FDI	Regression	53.622	1	53.622	17.616	<.001
	Residual	378.449	124	3.052		
	Total	432.071	125			
Exchange Rate → FDI	Regression	47.568	1	47.568	15.312	<.001
	Residual	384.976	124	3.105		
	Total	432.544	125			
GDP → FDI	Regression	91.676	1	91.676	33.416	<.001
	Residual	340.460	124	2.746		
	Total	432.137	125			
External Debt + GDP → FDI	Regression	113.730	2	56.865	21.920	<.001
	Residual	318.828	123	2.592		
	Total	432.559	125			
Domestic Debt + GDP → FDI	Regression	107.676	2	53.838	20.407	<.001
	Residual	324.797	123	2.641		
	Total	432.473	125			

The ANOVA results from Table 4 indicate that the regression models for external debt, domestic debt, inflation rate, exchange rate, and GDP are statistically significant in explaining variations in FDI. External debt significantly predicts FDI ($F = 8.849, p = .004$), as does domestic debt ($F = 10.212, p = .002$). Interest rate, however, does not produce a statistically significant model ($F = 2.116, p = .148$).

The inflation model is statistically significant ($F = 17.616, p < .001$), as is the exchange-rate model ($F = 15.312, p < .001$). The GDP model records the highest F-statistic among the individual mediator models ($F = 33.416, p < .001$), confirming that GDP significantly explains variation in FDI. Importantly for the mediation analysis, the two final models remain statistically significant when GDP is introduced alongside public debt. The external debt + GDP model is significant ($F = 21.920, p < .001$), while the domestic debt + GDP model is also significant ($F = 20.407, p < .001$).

Regression Results

Table 5: Regression Results

Mediating Variable	Public Debt Component	Debt → Mediator β	Sig.	Mediator → FDI β	Sig.	Debt → FDI β (with Mediator)	Sig.	Mediation Result
Interest Rate	External Debt	.202	.064	-.130	.148	-.258	.004	No mediation
Interest Rate	Domestic Debt	.112	.213	-.130	.148	-.276	.002	No mediation
Inflation Rate	External Debt	-.071	.427	-.353	<.001	-.258	.004	No mediation
Inflation Rate	Domestic Debt	-.045	.616	-.353	<.001	-.276	.002	No mediation
Exchange Rate	External Debt	.075	.404	.332	<.001	-.258	.004	No mediation
Exchange Rate	Domestic Debt	.157	.079	.332	<.001	-.276	.002	No mediation
GDP	External Debt	-.074	.411	.461	<.001	-.225	.004	No mediation
GDP	Domestic Debt	-.190	.034	.461	<.001	-.196	.015	Partial mediation

The findings in Table 5 indicate that macroeconomic variables generally did not mediate the relationship between public debt and FDI, except for GDP in the case of domestic debt. Interest rate, inflation rate, and exchange rate did not satisfy the required mediation conditions because neither external nor domestic debt significantly predicted these mediating variables.

Although inflation rate and exchange rate significantly predicted FDI, the absence of a significant relationship between the respective public debt components and these mediators means that mediation was not established.

GDP also did not mediate the relationship between external debt and FDI because external debt did not significantly predict GDP ($\beta = -.074$, $p = .411$). In contrast, domestic debt significantly predicted GDP ($\beta = -.190$, $p = .034$), while GDP significantly predicted FDI ($\beta = .461$, $p < .001$). The results therefore indicate that GDP partially mediates the relationship between domestic debt and FDI. The remaining direct effect of domestic debt on FDI was statistically significant ($\beta = -.196$, $p = .015$), supporting partial rather than full mediation. Therefore, H02 receives partial support. Specifically, GDP demonstrates a mediating role in the domestic debt–FDI relationship, whereas interest rate, inflation rate, exchange rate, and GDP in the external debt pathway do not demonstrate significant mediation.

Sobel Test

Table 6: Sobel Test

Mediator	Debt component	Indirect Effect (a × b)	Sobel Z	Decision
Interest Rate	External Debt	-0.0949	-1.15	Not significant
Interest Rate	Domestic Debt	-0.0451	-0.95	Not significant
Inflation Rate	External Debt	0.1113	0.78	Not significant
Inflation Rate	Domestic Debt	0.0497	0.50	Not significant
GDP	External Debt	-0.1452	-0.82	Not significant
GDP	Domestic Debt	—	-1.99*	Weak/borderline

The Sobel test results provide further evidence on the indirect effects of the macroeconomic variables in the relationship between public debt and FDI. The indirect effects through interest rate and inflation rate were not statistically significant for either external or domestic debt, as indicated by the Sobel Z values of -1.15 , -0.95 , 0.78 and 0.50 , respectively. Therefore, these variables do not provide evidence of a significant indirect pathway between public debt and FDI. Similarly, the indirect effect of external debt through GDP was not statistically significant (Sobel Z = -0.82), indicating that GDP does not significantly mediate the relationship between external debt and FDI.

For domestic debt through GDP, the Sobel test produced a Z value of -1.99 , which is close to the conventional critical value of ± 1.96 . This provides borderline evidence of an indirect effect at the 5% significance level. However, because the result is very close to the critical threshold, it should be interpreted cautiously rather than presented as strong evidence of mediation.

Combined, the Sobel test provides limited evidence of mediation, with the strongest indication occurring for GDP in the domestic debt–FDI relationship. This result is broadly consistent with the four-step regression results, which identified partial mediation by GDP for domestic debt, while no significant mediation was established for interest rate, inflation rate, exchange rate, or GDP in the external debt pathway.

DISCUSSIONS

The findings of this study provide important evidence on the role of macroeconomic variables in the relationship between public debt and FDI among EAC member countries. The results indicate that the macroeconomic variables do not uniformly transmit the effects of public debt to FDI. Rather, the mediation pathway differs according to the specific macroeconomic variable and the composition of public debt. Of the four macroeconomic variables examined—interest rate, inflation rate, exchange rate, and GDP—only GDP demonstrated evidence of mediation, and this occurred in the relationship between domestic debt and FDI.

The findings show that interest rate did not significantly mediate the relationship between either external debt or domestic debt and FDI. External debt did not significantly predict interest rate ($\beta = .202, p = .064$), while domestic debt also failed to significantly predict interest rate ($\beta = .112, p = .213$). Although the coefficient for interest rate in the FDI model was negative ($\beta = -.130, p = .148$), the relationship was statistically not significant.

These findings suggest that variations in public debt among EAC member countries do not translate into sufficiently strong changes in interest rates to subsequently influence FDI through this channel. This may reflect differences in monetary policy frameworks, financial-market structures, sources of government financing, and the degree to which domestic borrowing competes with private-sector credit.

The finding does not support the expected mediation mechanism in which increased government borrowing raises interest rates and subsequently discourages investment. It therefore provides limited support for the crowding-out argument within the specific public debt–FDI relationship examined in this study. The result also suggests that the effect of public debt on FDI in the EAC cannot be adequately explained through interest-rate movements alone.

Inflation also failed to demonstrate a mediating role. External debt did not significantly predict inflation ($\beta = -.071, p = .427$), while domestic debt likewise had no significant effect on inflation ($\beta = -.045, p = .616$). Although inflation had a statistically significant negative relationship with FDI ($\beta = -.353, p < .001$), the absence of a significant debt-to-inflation relationship means that the mediation condition was not satisfied. The negative association between inflation and FDI indicates that higher inflation may be associated with a less attractive

investment environment. Persistent price instability can increase uncertainty regarding production costs, reduce the predictability of investment returns, and complicate long-term investment decisions. However, the results indicate that such inflationary conditions cannot be attributed sufficiently to variations in public debt within the mediation framework of this study.

This finding therefore provides an important distinction between an explanatory relationship and a mediating relationship. Although inflation significantly explains variation in FDI, it does not transmit the effect of public debt to FDI. Consequently, the results do not support inflation as a significant mediator through which public debt affects foreign investment in the EAC.

The exchange rate similarly failed to mediate the relationship between public debt and FDI. External debt did not significantly predict exchange rate ($\beta = .075$, $p = .404$), while domestic debt also failed to reach statistical significance ($\beta = .157$, $p = .079$). Nevertheless, exchange rate had a significant positive relationship with FDI ($\beta = .332$, $p < .001$). The significant relationship between exchange rate and FDI suggests that exchange-rate conditions are relevant to foreign investors' decisions. However, because public debt did not significantly predict the exchange rate, the exchange-rate channel does not constitute a significant mediation mechanism in this study.

This finding is particularly relevant to the EAC because member countries differ in exchange-rate regimes, external financing structures, trade exposure, and vulnerability to external shocks. Such differences may weaken the extent to which changes in public borrowing are transmitted uniformly to exchange-rate conditions across the region. Thus, although exchange-rate conditions matter for FDI, they do not appear to be the principal mechanism through which public debt affects FDI.

GDP produced the strongest evidence of a mediating pathway among the macroeconomic variables examined. External debt did not significantly predict GDP ($\beta = -.074$, $p = .411$), and therefore GDP did not mediate the relationship between external debt and FDI. In contrast, domestic debt significantly reduced GDP ($\beta = -.190$, $p = .034$). GDP, in turn, had a significant positive effect on FDI ($\beta = .461$, $p < .001$). The finding that domestic debt significantly reduces GDP suggests that domestic borrowing may constrain economic performance under certain conditions. Where domestic borrowing absorbs resources from the domestic financial system, increases financing costs, or places pressure on available resources, it may limit the expansion of productive economic activity. Reduced economic output can subsequently weaken the attractiveness of the economy to foreign investors.

The positive effect of GDP on FDI is consistent with the argument that foreign investors are attracted to economies with stronger productive capacity and better prospects for market

expansion. A growing economy may provide larger markets, stronger demand, improved infrastructure, and greater opportunities for profitability. More importantly, when GDP was introduced alongside domestic debt, GDP remained statistically significant ($\beta = .424$, $p < .001$), while the coefficient of domestic debt remained negative and statistically significant ($\beta = -.196$, $p = .015$). This reduction in the magnitude of the domestic debt coefficient, together with the significant indirect pathway, provides evidence of partial mediation. The Sobel test further produced a value of approximately $Z = -1.99$, providing borderline evidence of an indirect effect.

The result therefore suggests that domestic debt affects FDI partly through its influence on economic output, while also retaining a direct effect on FDI. This is an important finding because it indicates that the public debt–FDI relationship is not transmitted through a single macroeconomic channel. Rather, economic performance constitutes one pathway through which domestic debt can influence foreign investment. Overall, the findings demonstrate that macroeconomic conditions do not operate as uniform mediators of the public debt–FDI relationship in the EAC. Interest rate, inflation rate, and exchange rate did not satisfy the mediation conditions, despite inflation and exchange rate individually exhibiting significant relationships with FDI. GDP was the only macroeconomic variable that demonstrated evidence of mediation, and this was limited to the domestic debt–FDI relationship.

The findings therefore provide partial support for H02, which state that macroeconomic variables have no significant mediating effect on the relationship between public debt and FDI in EAC member countries. The null hypothesis cannot be rejected for interest rate, inflation rate, exchange rate, or the external debt–GDP pathway. However, evidence of partial mediation through GDP in the domestic debt–FDI relationship indicates that the null hypothesis is not supported universally. These findings support the argument that the effect of public debt on FDI depends not only on the amount of borrowing but also on the type of debt and the economic conditions through which its effects are transmitted. In particular, the distinction between domestic and external debt is important because domestic debt demonstrated a significant pathway through GDP, whereas external debt did not. This provides a more nuanced understanding of the public debt–FDI nexus in EAC economies.

CONCLUSIONS

This study examined the role of macroeconomic variables in the relationship between public debt and FDI among EAC member countries. The study specifically assessed whether interest rate, inflation rate, exchange rate, and GDP mediate the effects of external and domestic debt to FDI. The findings demonstrate that macroeconomic variables do not uniformly mediate the relationship between public debt and FDI. Interest rate, inflation rate, and exchange

rate did not provide statistically significant mediation pathways for either external or domestic debt. Although inflation rate and exchange rate were individually associated with FDI, public debt did not significantly predict these variables. Consequently, they could not be established as significant channels through which public debt affects FDI.

GDP, however, demonstrated a different pattern. External debt did not significantly influence GDP, and therefore GDP did not mediate the relationship between external debt and FDI. In contrast, domestic debt significantly reduced GDP, while GDP had a significant positive relationship with FDI. The continued significance of domestic debt after GDP was introduced into the model indicates that GDP partially mediates the relationship between domestic debt and FDI. The Sobel test provided additional, although borderline, evidence of this indirect pathway.

Overall, the findings indicate that the relationship between public debt and FDI in the EAC is partly transmitted through economic output rather than through interest rate, inflation, or exchange-rate channels. The distinction between domestic and external debt is therefore important, as the mediating effect of GDP was evident for domestic debt but not for external debt.

Thus, the study concludes that macroeconomic variables have a limited and differentiated role in the public debt–FDI relationship in EAC member countries. In particular, GDP represents the most important macroeconomic transmission mechanism identified in the study, with its mediating role confined to the relationship between domestic debt and FDI. This finding highlights the importance of maintaining economic growth and productive economic activity when managing domestic public borrowing, given the potential implications for the ability of EAC economies to attract FDI.

SCOPE FOR FURTHER STUDIES

Future studies could extend the present analysis by examining additional institutional and governance factors that may influence the relationship between public debt and FDI in EAC member countries. Variables such as governance quality, corruption, investor protection and institutional effectiveness could provide further insight into the factors that shape the transmission of public debt into FDI outcomes. Future research could moreover undertake country-specific analyses to establish whether the relationships observed at the EAC level differ across member countries due to variations in debt structures, macroeconomic conditions and investment environments.

Further studies could also extend the period of analysis and employ alternative panel estimation techniques to examine whether the observed relationships remain consistent over longer periods and under different economic conditions. Comparative studies involving other

regional economic blocs could additionally help establish whether the findings are specific to the EAC or are applicable to other developing economies.

RECOMMENDATIONS

EAC member countries should strengthen domestic debt management by ensuring that domestic borrowing is directed towards productive and growth-enhancing activities. Since domestic debt was found to have a significant negative effect on GDP and GDP partially transmitted its effect on FDI, governments should minimize excessive domestic borrowing that may constrain productive economic activity and weaken the investment environment.

Governments in EAC member countries should ensure that borrowed resources are allocated to productive sectors that enhance economic output, including infrastructure, energy, transport, technology, and other activities that improve productive capacity. Strengthening GDP is particularly important because the findings identified economic output as the principal macroeconomic channel through which domestic debt influences FDI.

Although interest rate, inflation, and exchange rate were not found to significantly mediate the public debt–FDI relationship, inflation and exchange-rate conditions were individually associated with FDI. EAC governments should therefore continue implementing policies that promote price stability, exchange-rate stability, and predictable financial conditions to maintain an attractive environment for foreign investors.

Debt-management strategies should consider the potential effects of borrowing on economic performance and investment conditions rather than focusing solely on the size of public debt. Governments should assess the likely effects of new domestic borrowing on economic growth and private-sector activity before undertaking additional debt.

Fiscal authorities, debt-management institutions, central banks, and investment-promotion agencies should coordinate their policies to ensure that public borrowing supports rather than undermines the conditions required for attracting FDI. Such coordination would help align debt-financed expenditure with broader economic growth and investment objectives.

Given the differences in debt structures and economic conditions among EAC member countries, regional institutions should encourage the sharing of effective debt-management and investment-promotion practices. Greater policy coordination can help member countries address common fiscal pressures while maintaining conditions conducive to FDI.

Policymakers should monitor the relationship between domestic borrowing, economic output, and FDI more closely. Since GDP was found to partially mediate the domestic debt–FDI relationship, policies aimed at maintaining productive economic activity may help reduce the adverse investment implications associated with excessive domestic borrowing.

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