



IMPACT OF FOREIGN DIRECT INVESTMENT ON TAX REVENUE OF EAST AFRICA COMMUNITY MEMBER COUNTRIES UNDER LIBERALIZED TRADE ENVIRONMENT

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Abstract

Under liberalized trading system, foreign direct investment (FDI) has emerged as a powerful tool for promoting economic development, offering a unique mechanism for transferring technology, specialized knowledge and other production inputs like capital from developed nations to the least developing nations. However, an important question still lingers on whether foreign direct investment enhances tax revenue through positive spillover effects or whether tax incentives and aggressive corporate tax planning by multinational corporations diminishes tax revenue gains from FDI. This study sought to determine the effect of foreign direct investment on tax revenue of east Africa community member countries. The study utilized descriptive research design and collected secondary data from the year 2000 to 2023. The data was analyzed using panel simple linear regression. The findings revealed that foreign direct investment has a positive and statistically significant relationship with tax revenue of east Africa community member countries. This underscores the urgent need for EAC member states to establish and maintain a favorable environment capable of attracting FDI as a means to boost their tax revenue performance.

Keywords: Foreign Direct Investment, Tax Revenue, East Africa Community Member Countries

INTRODUCTION

Following the implementation of trade liberalization policies, developing countries have been embroiled in a fierce race to lure foreign direct investment (FDI) with expectation that it would help spur economic growth and create employment opportunities by channeling capital into the most productive sectors (Watson, 2023). Remarkably, with acknowledgement of FDI as a tool for economic development, least developing countries have largely sustained this global contest to lure FDI by use of tax incentives. However, despite the widespread belief in the developmental potential of FDI, scholarly opinions remain divided regarding the actual conditions under which these benefits materialize. For instance, while Ha et al., (2020) argues that FDI causes positive spillover effect by enabling wider market access, enhancing managerial skills and fostering innovation in the host countries, Qamri et al., (2022) argued that the extent to which FDI benefit the local economy often depends on the absorptive capacity of local firms and the quality of domestic institutions rather than just mere volume of FDI inflow. On the same vein, Osei and Kim (2020) observed that the benefits of FDI on local economy is more pronounced in countries with robust financial systems than those with undeveloped financial system. However, Dinh Su and Phuc Nguyen (2022) argued that the impact of FDI on the host economy is largely dependent on the skills and capabilities of the workforce, suggesting that human capital is a significant determinant of how well FDI translates into meaningful economic advancement. This by implication suggests that the absorptive capacity of the recipient country largely accounts for the success of FDI in developing the economy.

Moreover, while FDI is often expected to support domestic resource mobilization, its ambiguous effect on tax revenue continues to pose a significant challenge for most developing countries. As a consequence, this ambiguity has led to the emergence of two dominant theoretical perspectives, FDI-led growth theory and growth-led FDI theory. According to FDI-led growth, FDI is viewed as a primary engine for economic expansion by facilitating capital injection, transfer of technology, productivity spillovers and increased employment opportunities. While in support of this FDI-led growth hypothesis, Binh (2021) found a unidirectional and positive relationship running from FDI to economic growth. In contrast, the growth-led FDI theory maintains that it is sustained economic growth which primarily attracts FDI, especially among foreign investors seeking access to new markets and wider consumer demand for their products. Despite these theoretical frameworks, the relationship between FDI and tax revenue remains mixed and hotly contested. For instance, while Camara (2022) argues that FDI has a positive effect on tax revenue, Omodero and Yado (2024) found out a negative relationship between FDI and tax revenue, suggesting that aggressive tax incentives and profit repatriation

practices associated with FDI have potential of eroding government revenue if effective public governance is not put into place.

With its vast mineral resources and strategic geographic position linking major regional markets, the East African Community (EAC) has emerged as a key destination point for foreign direct investment (FDI). The region has witnessed increasing FDI inflows, particularly in sectors such as energy, infrastructure, ICT and agriculture, as multinational corporations seek to capitalize on high-return opportunities and diverse mineral wealth (Namazzi, 2024). However, this growth in foreign investment has not been purely market-driven but has been shaped by proactive government policies, especially the provision of generous fiscal incentives including tax holidays, duty waivers, investment allowances and other fiscal incentives aimed at enhancing the region's investment appeal. Despite the short-term appeal of these incentives, they have sparked intense debate regarding their long-term implications, especially on domestic tax revenues. Slattery & Zidar (2020) argue that while such tax incentives may bring in foreign capital, they often come at a substantial loss of tax revenue which could otherwise be used by the government to fund critical public services and infrastructure. Furthermore, the competition among EAC countries to offer the most generous incentives may trigger a "race to the bottom," where tax rates are driven so low that they undermine the very development gains in FDI is supposed to support. As a result, policymakers are increasingly being challenged to strike a balance between attracting foreign investment and safeguarding sustainable public finance.

Foreign Direct Investment

Foreign direct investment is a broad concept that is conceptualized and defined in terms of inflows, outflows and net inflows. Foreign direct investment as an inflow refer to the amount of foreign investment that is injected by foreign investors to the host country while foreign direct investment as an outflow refer to the amount of foreign investment that is injected by local investors to the foreign country. Lastly, foreign direct investment as a net inflow refer to the aggregate amount of foreign investment that is injected into the host country by foreign investors after taking into account inflows and outflows where positive net FDI inflows imply that a country is a net recipient of FDI while negative net inflows imply that a country is a net source of FDI. The FDI exist in various forms such as merger and acquisition, green field investments among others. In recent years, policymakers in developing countries have increasingly turned to FDI as a strategic tool for both economic development and domestic revenue mobilization. Oyinola *et al.*, (2020) argue that multinational enterprises (MNEs) create employments in the recipient countries which leads to increased employment, corporate and consumption taxes signifying the critical role foreign direct investment plays in raising the tax revenue of developing

countries. In addition, Camara (2023) also established that FDI positively influences tax revenue in developing countries, with the exception of resource-exporting economies, where overdependence on natural resources diminishes the fiscal impact of foreign investment.

The nexus between foreign direct investment (FDI) and tax revenue remains a contentious issue in academic discourse. For instance, Nguyen et al., (2022) showed a direct relationship between foreign direct investments and economic growth. In a similar vein, Mohamed Sghaier (2022) showed a direct and significant relationship between foreign direct investment and economic growth through capital accumulation. However, the extent to which this growth translates into tax revenue remains debated, particularly in countries with weak tax administration, rampant profit shifting practices by multinational enterprises and generous fiscal incentives. Moreover, Tran (2021) observed that developing countries often fail to realize anticipated tax revenue from foreign direct investments due to tax base erosion and rampant profit shifting by multinational corporations which undermine the potential of FDI in contributing to host country's fiscal capacity. This duality of FDI and tax revenue relationship indicates that the influence on FDI on tax revenue depends on the effectiveness of the tax system, public governance and the regulatory framework of the host country. Undoubtedly, without strong public institutions and sound tax administration, the benefits of FDI on local economy may be significantly diminished. In this study, foreign direct investment was measured by net FDI inflows as a percentage of GDP.

Tax Revenue

Tax refers to the compulsory payment made by the citizens to the government to fund public expenditures and services. These services include infrastructure, education, healthcare, defense and welfare programs. While taxes are mandatory contributions, they are not payments for specific services rendered to the taxpayer. In this regard, taxes are regarded as *quid pro quo* payments and at some time, the taxpayer does not get direct benefit in exchange for the tax paid. Taxes are categorized into direct taxes and indirect taxes. While direct taxes are imposed on corporate profits and income with no chance for the payer to shift to other taxpayers, indirect taxes are charged on goods and services and can easily be shifted to other taxpayers. Typical example of indirect tax is value added tax (VAT) which is transferrable to the ultimate purchaser of goods and services (MA and Raji, 2022). In practice, businesses collect VAT on their sales and offset it against the VAT they paid on inputs, acting as *de facto* tax collectors for the government for this tax purpose. However, it remains the seller's primary responsibility to collect and remit the tax to the relevant tax authority.

The importance of taxes in developing economy cannot be overemphasized. Tax plays a crucial role in redistribution of income, price stabilization, economic growth, provision of public goods and services and last but not least, it helps in dealing with market externalities such as pollution that burden third parties from consumption of public goods. Moreover, while taxation still remains a critical instrument for funding public sector expenditure and repaying public debt, the extent to which a country can mobilize adequate revenue is fundamentally shaped by the effectiveness of its tax administration in both economic and administrative terms (Tolossa & Melese, 2024). Tax Revenue in this paper was measured in terms of tax to GDP ratio and was expressed as a percentage of GDP.

LITERATURE REVIEW

Theoretical Framework

This study was anchored on institution theory and supported by Heckscher-Ohlin (H-O) model. Institution theory argues that strong institutions as characterized by transparent and stable governance system such as legal systems, regulatory bodies and effective public administration act as a tool for attracting FDI by providing assurance to foreign Investors that business contracts shall be enforced accordingly in an environment devoid of rampant corruption and rent-seeking behavior which often jeopardize tax revenue collection. Notably as argued by Alam (2022), countries with strong institutions are more likely to attract FDI than those with weak institutions of public governance, thus boosting tax revenue. However, the Heckscher-Ohlin (H-O) model provides a useful lens for understanding how foreign direct investment (FDI) flows are influenced by a country's factor endowments such as labor, capital, land, etc. and how, in turn, these FDI flows may affect tax revenue. Under trade liberalization, countries tend to export goods that use their abundant and cheap resources intensively and import goods that use their scarce resources. As a consequence, countries with abundant natural resources such as land, cheap labor, or other productive inputs rank as attractive destinations point for FDI as multinational corporations seek to exploit these advantages at a profit. However, in the context of this trade openness, if a country lacks strong public governance institutions, the entrant of multinational corporations (MNCs) into the local economy may provide an opportunity for these multinationals to exploit institutional weaknesses to minimize their tax obligations. Weak governance allows MNCs to engage in practices such as transfer pricing, where profits are artificially shifted across borders through internal transactions. Moreover, while these multinational corporations may engage in excessive profit shifting where earnings are reported in low-tax jurisdictions, aggressive tax planning involving complex legal arrangements may also be utilized to avoid taxation hence, significantly reducing the taxable

income reported in the host country. As a result, rather than boosting public revenue, FDI may erode the tax base, especially where the tax authorities lack the capacity or legal framework to detect and counter such behaviors. Therefore, in order to ensure that developing countries reap maximum benefits including enhanced tax revenue performance, trade liberalization must be accompanied by sound institutional reforms to ensure that the potential benefits of increased FDI do not come at the expense of domestic tax revenue.

Conceptual Framework

The conceptual framework is a graphical representation of the relationship between the independent and dependent variables. In this study, tax revenue was the dependent variable while foreign direct investment was the independent variable.

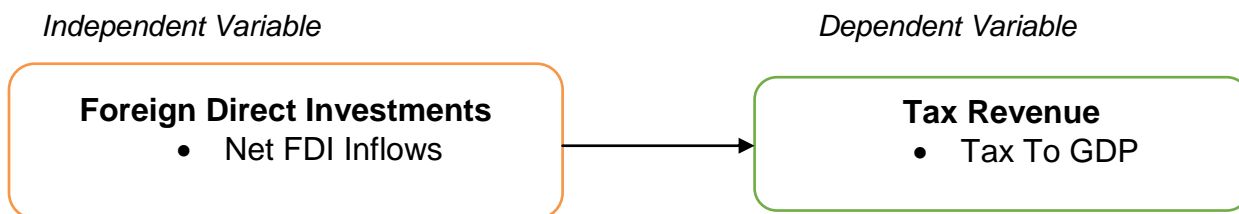


Figure 1: Conceptual Framework

Empirical Review

Omodero and Yado (2024) did a study on the effect of trade liberalization on Foreign Direct Investment Inflows. The study employed a quantitative research design, using panel data analysis covering a sample of emerging economies over the year between 2000 to 2022. Key variables included measures of trade liberalization such as tariff reductions and import/export ratios, FDI inflows and indicators of business regulatory environment. Data was sourced from reputable international financial databases such as the World Bank and UNCTAD. The study utilized fixed effect and random effect regression models to assess the relationship between trade liberalization and FDI inflows, while controlling for governance quality, infrastructure, and macroeconomic stability. The findings revealed that trade liberalization has a statistically significant and positive effect on FDI inflows in emerging economies. Particularly, the study noted that easing trade restrictions and reducing tax-related barriers improved investment climate by lowering entry costs for foreign investors. The study also observed that countries which had implementing liberal trade policies attracted more multinational corporations due to improved ease of doing business than those that adopted trade protectionist policies. However,

the study emphasized the need for strong institutional frameworks to ensure that the benefits of increased FDI are not undermined by regulatory loopholes.

Dlamini & Rocha (2022) carried out a study on the effect of trade liberalization on tax revenue Performance in emerging economies from the year between 2000 to 2020. The study employed panel regression techniques, including fixed effect and generalized method of moments (GMM), to examine the relationship between trade liberalization measured through trade openness indicators such as import/export ratios and tax revenue performance measured as a percentage of GDP. The analysis controlled for macroeconomic variables such as GDP growth, inflation, and institutional quality. Data sources included the World Bank, IMF, and UNCTAD databases. The study found that increased trade liberalization negatively affects tax revenue in emerging economies. This negative relationship was attributed to the reduction in tariff revenues, overdependence on unstable indirect taxes like value-added tax (VAT), and intensified tax competition among countries attempting to attract foreign investment. Dlamini & Rocha (2022) also argued that these outcomes create fiscal vulnerabilities, especially in countries with weak tax administration systems underscoring the urgent need for comprehensive tax reforms, including strengthening domestic tax bases and enforcement mechanisms, to adapt to the realities of a liberalized trade environment.

METHODOLOGY

This study used descriptive research design and collected secondary data from published public records provided by IMF and world bank. To empirically examine the relationship between foreign direct investment (FDI) and tax revenue of east Africa community member countries, a panel simple linear regression analysis was conducted using data for six countries from 2000 to 2023. This time period was chosen because of various reasons. First, the year 2000 marked the year when east Africa community regained their operations after collapse in 1977. Secondly, this period reflected a time when nearly all EAC member countries experienced declining tax revenue amid the clarion call to fully adopt trade liberalization for purposes of fostering regional integration. To test the null hypothesis, p-value was used and the null hypothesis was rejected if the P value calculated was less than 5%. The following model was used in estimation:

$$TR_{it} = \alpha + \beta_1 X_{1it} + \epsilon$$

Where: β_1 = Regression coefficients, X_1 =FDI, TR = Tax revenue, ϵ = Error terms.

ANALYSIS AND FINDINGS

Regression Analysis

Regression analysis is a statistical technique used to analyze the relationship between two or more variables.

Table 1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.318 ^a	.101	.095	3.72774572
a. Predictors: (Constant), Foreign Direct Investment				

The findings revealed that the study model could explain about 10.1% of the total variations in the value of the tax revenue. Moreover, the correlation between foreign direct investment and tax revenue was weak and positive implying that increasing foreign direct investment would result to an increase in tax revenue.

Table 2: ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	222.689	1	222.689	16.025	.000 ^b
	Residual	1973.245	142	13.896		
	Total	2195.933	143			
a. Dependent Variable: Tax Revenue b. Predictors: (Constant), Foreign Direct Investment						

The findings revealed that model was statistically significant implying that the model was reliable for making predictions on the effect of FDI on tax revenue of east Africa community member countries.

Table 3: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	12.939	.497		26.023	.000
	FDI	.599	.150	.318	4.003	.000
a. Dependent Variable: Tax Revenue						

The findings revealed that foreign direct investment has a significant and positive effect on tax revenue of east Africa member countries, suggesting that an improvement in foreign direct investments would result to an increase in tax revenue. Specifically, a unit increase in FDI would result to 0.599 increase in value of tax revenue of east Africa community member countries

CONCLUSIONS

The positive and significant impact of foreign direct investment (FDI) on tax revenue of East African Community (EAC) member countries underscores the need to foster an enabling environment capable of attracting FDI for productive and sustainable investment. However, for FDI to translate into meaningful and consistent tax gains, governments must implement sound tax policies, limit overly generous tax incentives and strengthen institutional capacity particularly in areas such as tax administration, regulatory oversight, and anti-corruption frameworks to curb tax leakages.

Moreover, recognizing that the quality of public governance influences the extent to which FDI contributes to tax revenue underscores the need for EAC member countries to build strong and accountable institutions of governance. Such institutions would be crucial for the effective enforcement of tax laws and enhancement of investor confidence for stable and transparent FDI investment flows. Moreover, by aligning FDI attraction strategies with broader fiscal policy goals, East African Community member countries would not only increase their tax revenue collection but would also support inclusive economic development. This would however require a deliberate focus on attracting FDI into high-value and growth-enhancing sectors, fostering transparency in tax reporting, and promoting regional cooperation to curb tax avoidance and profit shifting practices by multinational corporations. In a nutshell, by strengthening institutional frameworks and fostering cooperation across EAC affiliated countries, the region would sustain a beneficial relationship that would enable FDI to contribute effectively towards tax revenue and ultimately support inclusive and long-term economic development.

RECOMMENDATIONS

The finding that FDI has a significant and positive effect on tax revenue in East African Community (EAC) member countries underscores the fundamental role foreign direct investment plays in broadening the region's tax base. However, to maximize this benefit, governments should prioritize strengthening their tax policy, tax enforcement laws, administrative capacity and anti-corruption frameworks to curb against foreseeable tax

leakages. This would also include enhancing the capacity of tax collection officers through frequent trainings to monitor multinational corporations, enforcing robust transfer pricing rules, and addressing profit-shifting practices. In addition, developing countries should consider digitalizing tax systems to improve tax compliance and reduce tax revenue leakages associated with informal sector activities and cross-border transactions.

Governments should also critically review their tax incentive regimes to ascertain their effectiveness in tax revenue generation. While tax incentives are often used to attract FDI, excessive or poorly targeted exemptions and tax holidays can undermine potential tax revenue generation. In this regard, the EAC member countries should adopt performance-based tax incentives where every tax incentive should be tied to a measurable economic outcome such as job creation, local sourcing, or technology transfer. Secondly, the EAC member countries should harmonize tax policies across the region to prevent harmful tax competition in order to promote fairer distribution of foreign investment amongst all the member countries. Lastly, EAC member countries through EAC trading framework should collaborate when performing joint audits and sharing information so as to enhance their collective bargaining power when dealing with large multinational investors.

EAC member countries through their respective governments should promote FDI in sectors with high value addition and long-term fiscal sustainability such as manufacturing, ICT and services. These sectors would not only enhance productivity but would also generate more formal employment, which in turn would support increased income tax and consumption-based tax revenue. EAC member countries should also encourage economic partnership between local and foreign investors through joint ventures and supplier development programs to ensure that a larger share of FDI-related profits remains within the domestic economy.

Moreover, anti-corruption institutions such as EACC in Kenya and Rwanda, within EAC member countries should also be well resourced in terms of man power and funding to fight against vices such as corruption which adversely reduce tax revenue. Lastly, EAC affiliated member countries should consider amending the existing legal framework regarding transfer pricing or enacting a new legislation in case there is none in place to regulate the whole practice of transfer pricing in order to reduce the temptation of multinational corporations using it as a tool for transferring huge profits from local economy to other low tax jurisdiction often considered as tax haven. It is worth noting that in the absence of strong public institutional frameworks and effective tax enforcement plan, multinational corporations may exploit loopholes through practices like profit shifting and transfer pricing to the detriment of tax collection by the host country.

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