

# Choice of location for Foreign Direct Investment by multinational corporations: Does tax burden matter?

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## Article History

Received on 29 June 2021

1<sup>st</sup> Revision on 22 July 2021

2<sup>nd</sup> Revision on 22 September 2021

3<sup>rd</sup> Revision on 13 October 2021

Accepted on 14 October 2021

## Abstract

**Purpose:** This paper investigated the effect of the tax burden on the inflow of FDI into the continent. The study employed a panel data set of 48 SSA countries covering a period of 2009 to 2018.

**Research methodology:** In order to account for the endogeneity problems associated with most financial data, we employed a dynamic panel two-step-system-GMM.

**Results:** The result indicates that tax burden is a negative determinant of the inflow of FDI. In other words, multinational corporations attach a significant premium to countries with low tax burdens than those with a high tax burden. Similarly, an increase in the mobility of labour is a negative determinant of the inflow of FDI into the continent. All the economic and financial freedom indices included in the model have a positive and significant influence on the inflow of FDI into the continent. A sustainable tax policy that will lessen the tax burden on foreign investors should be formulated to enhance the inflow of FDI into the continent.

**Limitations:** This study employed Dynamic System GMM which can produce variant results depending on the choice of instrument.

**Contribution:** This study provides insight on the role of fiscal policy particularly taxation in explaining the inflow of FDI. Policymakers, multinational corporations, and other players in the global FDI market will appreciate the influence that tax exerts on FDI inflow.

**Keywords:** FDI, Financial freedom, Investment freedom, Labour freedom, Monetary freedom, Tax burden

**How to Cite:** Bassey, E., and Amobi, B. N. (2022). Choice of location for Foreign Direct Investment by multinational corporations: Does tax burden matter?. *International Journal of Financial, Accounting, and Management*, 3(4), 349-358.

## 1. Introduction

Government in most countries of the world particularly in Sub-Saharan Africa (SSA) deliberately influences the choice of location for foreign investment by multinational corporations through various measures. To remain competitive in the global foreign direct investment (FDI) market, most countries' government provides various incentive packages, fiscal and non-fiscal measures as well as intentionally shape other location factors to attract foreign direct investment. The fight for FDI by both developed and developing economies is due to the perception that FDI is a significant factor in accelerating economic growth and development. Most developing countries are found to be responsive to changes in the global FDI market as they tend to always maintain a greater competitive advantage over their counterparties because FDI is believed to be a more significant growth determinant in developing countries than that of the developed country ([Hunady and Orviska 2014](#)).

Moreover, the spillover effect of FDI has been largely attributed to the technological and knowledge transfer that FDI embodies. These transfers lead to accelerated growth in the productivity of labour and capital in the economy of host countries mostly in developing nations. Despite the various measures (i.e Favorable business and economic environment, property rights, and other regulations) employed by the government to attract FDI into their country, not all these incentives are very effective.

It is against this background that this paper seeks to investigate the effect of the tax burden on the choice of Africa as a location for FDI by multinational corporations. Africa has remained one of the major destinations of FDI globally, accounting for more than 8% of the inflows to developing economies and 3% of the global inflows in 2019. SSA in particular received over 68% of all the FDI inflows into the continent of Africa in 2019 ([OECD, 2020](#)). However, the Asia continent accounts for more than 71% of the global inflow of FDI into developing countries, while the Latin American continent controls 20% of the global inflows to developing countries. This however suggests that Africa is yet to gain a significant competitive advantage over other continents in the global FDI market. And so, there is a need to understand the intervening effect of tax in explaining the choice of location for FDI by multinational corporations.

The remaining section of this paper will be organized as follows: following this brief introduction is an empirical review of related literature, section three presents the methodology, while the result of the data analysis and interpretations were presented in section four, and the fifth section concludes the work with policy recommendations.

## **2. Literature review**

[Hunady and Orviska \(2014\)](#) investigated the intervening effect of corporate tax in explaining the determinants of FDI among countries in the European Union (EU) and found that corporate tax is not a significant determinant of choice of location for FDI in the EU. The study also reveals that government debt, labour cost, trade openness, and per capita GDP significantly affect the inflow of FDI into the union. Financial and economic crises negatively influence the flow of FDI into the EU. Similarly, [Kubicova \(2013\)](#) found that tax hurts the inflow of FDI in the EU. According to [Wolff \(2006\)](#), different components of FDI inflow are affected differently by taxation. However, when country and time unobserved effects are controlled for, the corporate tax rate of host and source countries negatively explains the inflow of FDI into the EU. Host countries with significantly high tax rates tend to increase the probability of firms to re-invest profit overseas while the countries with a low tax rate lower the probability of investing abroad.

[Hansson and Olofsdotter \(2010\)](#); [Chakrabarti \(2001\)](#) and [Nerudova \(2008\)](#) noted that tax burden and other tax-related issues are very important in explaining the choice of location for FDI among multilateral corporations.

[Bellak and Leibrecht \(2009\)](#) examined the effect of the corporate income tax rate on the inflow of FDI into eight Central and East European countries, employing gravity model on a panel data set covering the period of 1995-2003. The result indicates that tax rate is an important determinant of location decisions for FDI. They also noted that tax rate is as important in explaining location choices as other cost factors. [Hong \(2011\)](#) studied the role of tax benefits on the choice of investment location among UK firms and found that tax incentives are not important in explaining the choice of FDI location among UK multilateral corporations.

[Mercer-Blackman and Camingue-Romance \(2020\)](#) investigated the sensitivity of inward FDI from the US to Asian economies on the corporate tax rate. Employing panel data of country and sectorial level, the study suggests that the effect of tax policies differs across sectors. However, controlling for factors like size of the market, labour cost, trade openness, and investment environment, the effect of corporate tax rate becomes statistically insignificant in explaining the inflow of FDI from the US to Asian economies. [Gao and Liu \(2021\)](#) examined the effect of tax burden and institutional environment on the inflow of foreign direct investment using a sample of 199 countries from 2005 to 2018. They

reported that tax burden has a significant impact on FDI inflow in a small market and low-income countries, while the effect of the tax burden on FDI inflow to a large market and high-income countries is negative but weak compared to that of low-income countries.

[Smith \(2019\)](#) however, noted that country-specific factors are significant determinants of trade promotion among small firms in low and lower-middle-income economies. The researcher further noted that inflation and tax are very detrimental to trade promotion which also influences the flow of direct investment into the country. The need for increased multilateral and bilateral funding for economic and social infrastructure has been underscored by [Chigora, Kapesa, & Svongoro, \(2021\)](#) who noted that economic and social infrastructure are key drivers of economic growth.

In recent studies, [Muhammad Ahmad & Dahalan \(2020\)](#) reported a positive and significant relationship between trade openness and inflow of FDI into Pakistan economy. The study, therefore, noted that as the domestic economy removes all the trade restrictions, multilateral corporation finds the country favourable foreign direct investment. Moreover, [Zulaecha & Murtanto \(2019\)](#) noted that firms controlled by multilateral and bilateral corporation significantly contributes to sustainable performance in Indonesia. [Appiah-Kubi et al \(2021\)](#) examined the relationship between tax incentives and the inflow of foreign direct investment in 40 African countries for the period of 2000-2018. Employing a robust random effect model the study found that foreign direct investment responds positively to lower corporate tax. It was reported that African countries with tax holidays attract a significant amount of foreign direct investment. This, however, indicates that multilateral and bilateral corporations consider tax holidays as a determinant of location choice for foreign investment. In a related study, [Ojeka et al. \(2021\)](#) investigated the effect of the tax rate on the inflow of foreign direct investment to the Sub-Saharan African countries and failed to provide empirical evidence in support of a significant relationship between tax rate and inflow of foreign direct investment, though it showed a positive relationship.

[Uwuigbe et al \(2019\)](#) studied the role of taxation and exchange rate on the inflow of foreign direct investment in Nigeria for the period of 1985 to 2015. The study employed the Ordinary Least Square method of estimation and found that the corporate tax rate has a negative and significant effect on the inflow of foreign direct investment in Nigeria for the period under investigation.

[Abdellatif, Eid, and Abdel-Salam \(2021\)](#) in a related study focused on the relevance of supply-side taxation in attracting FDI in Egypt employing data from 1975 to 2017. The result indicates a significant relationship between the inflow of FDI into Egypt and the implementation of supply-side tax policies which helps to reduce the tax burden on multinational corporations. [Morisset and Pirnia \(2001\)](#) noted that financial incentives and low tax rates don't always result in an increased inflow of FDI with long-term perspectives. They provided evidence that shows that a lower tax rate signals government weak spending capacity on infrastructural facilities and education which in turn decreases the attractiveness of the country to multilateral investors. According to [James \(2013\)](#), fiscal incentives like lower corporate tax rates are ineffective in explaining the choice of FDI location in the presence of a poor investment climate. In another study from Morocco, [Ait Soussane and Mansouri \(2020\)](#) examined the impact of tax policy in SSA on the flow of FDI from Morocco. The study however concluded that inward FDI is negatively affected by tax rate on profit but failed to provide a significant association between tax burden and FDI flows in the Moroccan economy.

[Korytin, \(2020\)](#) investigated the tax burden effect on FDI flow by economic industries using data from 29 Russian industries for 2006-2015. The result indicates a significant negative impact of the tax burden on FDI inflow into the industries. [Hines \(2017\)](#) and [Djankov et al \(2010\)](#) in separate studies reported that a high tax burden significantly reduces the attractiveness of a country to multilateral investors. They noted that in the US, a high tax rate together with a worldwide tax base system provides incentives for the multilateral corporation to engage in "corporate inversions". According to [Desai, Foley, and Hines \(2004\)](#), corporate inversion arises when corporations undertake legitimate transactions aimed at changing their tax homes, i.e leaving one country and setting up residency in foreign countries with significantly lower tax rates and tax systems. [Hebous, Ruf, and Weichenrieder](#)

(2010) reported that the outflow of FDI from the US is highly sensitive to changes in local tax rates. Pavel et al., (2020) reported that firms in the EU attempt to leverage tax differences and aggressive tax planning strategies in deciding the choice of location for FDI. They however reported that the elasticity of FDI to the tax rate in the EU ranges between 1.1 to 1.9 for statutory and effective tax rates.

Esteller-Moré et al., (2020) investigated the heterogeneous impact of taxation on FDI, using a data set constructed by Djankov et al (2010). The result indicates a significant negative effect of the tax rate on FDI inflow. They concluded that an increase of 10% in the effective tax rate reduces FDI inflows by 3.4% in non-OECD countries. Meanwhile, Barrios et al. (2012) argued that multilateral corporations operating in countries with a worldwide tax system and high tax rates are less competitive in attracting FDI than the lower rate countries. Studies from emerging market economies reveal that the tax rate is statistically not significant in explaining the inflow of FDI into the country. it, therefore, suggests that once other factors like market size, natural resources, business environment, and potential for demand growth are accounted for, the tax differentials between the host and the source countries become insignificant in explaining the inflow of FDI (Echandi, Krajcovicova, and Qiang 2015). Mudenda (2015) investigated the impact of the corporate tax rate on the inflow of FDI into Southern African Economies, employing a fixed effect and random effect model, the result indicates that corporate tax rate significantly and negatively influences the inflow of FDI into the countries.

Edo et al., (2020) provided empirical evidence from Nigeria on the contribution of corporate tax in explaining the choice of FDI location. Using data from 1983 to 2017, they found that corporate taxes have a negative and significant effect on the inflow of FDI into the country. Parys (2012) examined the effectiveness of tax incentives in attracting foreign investment in developing countries. Employing a panel data set from Latin America and the Caribbean, and Africa, the result indicates that the inflow of FDI is significantly less sensitive to the marginal effective corporate tax rate in the presence of an unattractive investment environment. The study also reveals that lower corporate tax rates and longer tax holidays are significant and positive in explaining the inflow of FDI in Latin America and the Caribbean but not in Africa. The study finally shows that reduced complexity of the tax system and increased legal guarantees contribute significantly in attracting inflow of FDI. Drapkin, (2020) investigated the impact of tax incentives on the flows of FDI among countries. The study employed a gravity model on a dataset of 71 recipients and 91 home countries covering a period of 2001 to 2016. The study reported a negative and significant impact of the tax burden on the inflow of FDI to the countries. A high tax rate according to the study is positively associated with the outflow of FDI from the countries. The study concluded that efficiency-seeking FDI is more sensitive to the tax burden in the recipient countries than market-seeking FDI. In a related study that focused on East African Community, Kiburi et al., (2018) examined the effect of the tax burden on FDI inflows using data from 2000 to 2013. They found that tax burden negatively but insignificantly affects the inflow of FDI into the region. Cung and Hua (2013) investigated the influence of tax burden in explaining the inflow of FDI into the Vietnam economy. Using a data set covering the period of 1999-2011, the result indicates that tax burden is a significant factor in explaining the choice of the multilateral corporation to invest in Vietnam. Other factors like labour cost and inflation were also reported to have a significant impact on the inflow of FDI. Gropp and Kostia (2000) reported that there is strong empirical evidence showing that the host country's tax regimes are significant determinants of the inflow of FDI into the country. Banović et al., (2020) examined the effect of corporate tax on the flows of FDI in EU member countries using a dataset from 1998 to 2017. They found that tax burden is a significant negative determinant of FDI flows in the EU countries. The study, however, noted that GDP is the major determinant of FDI flows in the EU member countries.

It can be observed from the foregoing empirical review that there is no conclusive evidence as to what direction of effect do tax burden exert on the inflow of FDI. More so, a significant number of these studies focused on developed countries with very little emphasis on developing countries in general and Nigeria in particular. It, therefore, indicates that there is a need to further investigate the effect of



the tax burden on the inflow of FDI with a particular focus in Nigeria. The choice of Nigeria is primarily because Nigeria is not only the largest economy in Africa but also attracts the largest volume of FDI into the continent of Africa. Empirical evidence on the influence of tax burden on the inflow of FDI will provide a policy framework that will make the country globally competitive in attracting FDI for economic growth and development.

### 3. Research methodology

This study investigates the effect of the tax burden on the inflow of FDI in Sub-Saharan African (SSA) countries. We employed panel data comprised of 30 countries in SSA from 2009 to 2018. Contain in appendix 1 is a list of all countries for this study. The variables employed in this study include the stock of FDI which is the dependent variable, tax burden, trade openness, globalization, gross fixed capital formation, market size, labour cost, and financial sector development which are all explanatory variables. To estimate the effect of the exogenous variables on the inflow of FDI in SSA countries, the study employs a dynamic panel GMM estimator. The choice of this estimator emanates from the understanding that the current value of FDI is influenced by the prior period values of FDI. This, however, suggests that the lagged value of the FDI inflows matters in explaining the current values. In order to account for the endogeneity problem which is prevalent in a panel data structure of this nature, we employ a panel dynamic model generalized method of moments (GMM) proposed by [Arellano and Bond \(1991\)](#). The differenced GMM attempts to control for the endogeneity problem by using various instrumental variables. On the other hand, differenced GMM estimator has some potential setbacks among which is small sample bias mostly when the dependent variable is highly persistent data and the number of time dimensions is small. Meanwhile, we adopted the system generalized method of moments (GMM) proposed by [Blundell and Bond \(1998\)](#), to overcome the finite sample bias.

Moreover, the additional orthogonality conditions which provide some asymptotic efficiency gains as contained in a system GMM is one of the benefits of the system GMM estimator proposed by [Blundell and Bond \(1998\)](#). According to [Roodman \(2009\)](#) efficiency gain does not come without some costs: an exponential increase in the number of the instrument together with the number of time-period. This gives rise to finite sample bias and as well increases the possibility of obtaining a false positive result and a deviously high pass rate of key specification tests like [Hansen \(1982\)](#) J-test. Complying with [Roodman \(2009\)](#), propositions, we estimated the system GMM model with a collapsed instrument matrix.

However, following the work of [Negeri and Halemariam \(2016\)](#), we estimated a dynamic panel model as shown below:

$$Y_{i,t} = \beta_0 Y_{(i,(1-t))} + \beta_1 X_{i,t} + \beta_2 \alpha_{i,t} + \vartheta_{1(i)} + \vartheta_{2(t)} + \epsilon_{i,t} \dots \dots \dots (1)$$

Where  $Y_{(i,t)}$  is FDI of country  $i$  at time  $t$ ,  $Y_{((i,(1-t)))}$  is the lagged of the dependent variable (FDI),  $X_{(i,t)}$  is the tax burden of country  $i$  at time  $t$ .  $\alpha_{(i,t)}$  is a vector of other explanatory variables,

$\vartheta_{(1(i))}$  and  $\vartheta_{(2(t))}$  represent firm and time-specific effects,  $\epsilon_{(i,t)}$  is an idiosyncratic error term with  $E(\epsilon_{(i,t)})=0$  with respect to  $i$  and  $t$ .

We employed strongly balanced panel data sourced from the World Development Indicators. We adopted variants of the systems GMM model where we first estimated the effect of the tax burden on FDI inflow. Then we controlled for other variables in order to capture the effect of other variables that have a significant effect on the inflow of FDI. The third variant of the model included the interaction terms. We estimate a variant of the [Blundell and Bond \(1998\)](#) equation below:

$$\ln fdi_{i,t} = \beta_0 \ln fdi_{(i,t-1)} + \beta_1 \ln TaxB_{i,t} + \beta_2 \ln GI_{i,t} + \beta_3 \ln PR_{i,t} + \beta_4 \ln FRDI_{i,t} + \beta_5 \ln BFRE_{i,t} + \beta_6 \ln LFRE_{i,t} + \beta_7 \ln MFRE_{i,t} + \beta_8 \ln TFRE_{i,t} + \beta_9 \ln INFRE_{i,t} + \beta_{10} \ln FFRE_{i,t} + \vartheta_0 + \vartheta_{1(i)} + \vartheta_{2(t)} + \epsilon_{i,t} \dots \dots \dots (2)$$

$$\begin{aligned} \ln fdi_{i,t} = & \beta_0 \ln fdi_{(i,t-1)} + \beta_1 \ln TaxB_{i,t} + \beta_2 \ln GI_{i,t} + \beta_3 \ln PR_{i,t} + \beta_4 \ln FRDI_{i,t} \\ & + \beta_5 \ln BFRE_{i,t} + \beta_6 \ln LFRE_{i,t} + \beta_7 \ln MFRE_{i,t} + \beta_8 \ln TFRE_{i,t} \\ & + \beta_9 \ln INFRE_{i,t} + \beta_{10} \ln FFRE_{i,t} + \beta_7 \ln TaxB \times \ln GI_{i,t} + \vartheta_0 + \vartheta_{1(i)} + \vartheta_{2(t)} \\ & + \varepsilon_{i,t} \dots \dots \dots (3) \end{aligned}$$

$$\begin{aligned} \ln fdi_{i,t} &= \beta_0 \ln fdi_{(i,t-1)} + \beta_1 \ln TB_{i,t} + \beta_2 \ln GI_{i,t} + \beta_3 \ln PR_{i,t} + \beta_4 \ln FRDI_{i,t} + \beta_5 \ln BFRE_{i,t} \\ &+ \beta_6 \ln LFRE_{i,t} + \beta_7 \ln MFRE_{i,t} + \beta_8 \ln TFRE_{i,t} + \beta_9 \ln INFRE_{i,t} + \beta_{10} \ln FFRE_{i,t} \\ &+ \beta_7 \ln PR \times \ln GI_{i,t} + \vartheta_0 + \vartheta_{1(i)} + \vartheta_{2(t)} \\ &+ \varepsilon_{i,t} \dots \dots \dots (4) \ln fdi_{i,t} \\ &= \beta_0 \ln fdi_{(i,t-1)} + \beta_1 \ln TB_{i,t} + \beta_2 \ln GI_{i,t} + \beta_3 \ln PR_{i,t} + \beta_4 \ln FRDI_{i,t} + \beta_5 \ln BFRE_{i,t} \\ &+ \beta_6 \ln LFRE_{i,t} + \beta_7 \ln MFRE_{i,t} + \beta_8 \ln TFRE_{i,t} + \beta_9 \ln INFRE_{i,t} + \beta_{10} \ln FFRE_{i,t} \\ &+ \beta_7 \ln TaxB \times \ln GI_{i,t} + \beta_7 \ln PR \times \ln GI_{i,t} + \vartheta_0 + \vartheta_{1(i)} + \vartheta_{2(t)} \\ &+ \varepsilon_{i,t} \dots \dots \dots (5) \end{aligned}$$

Where i refer to country, t refers to time,  $\ln fdi_{i,t}$  is log of FDI at time t.  $\ln fdi_{(i,t-1)}$  is the lagged value of the log of FDI.  $\ln TaxB_{i,t}$  log of the tax burden at time t.  $\ln open_{i,t}$  log of trade openness at time t.  $\ln growth_{i,t}$  log GDP growth at time t.  $\ln cost_{i,t}$  log of labour cost at time t.  $\ln gfcf_{i,t}$  log of gross fixed capital formation at time t.  $\ln gi_{i,t}$  log of globalization index.

#### 4. Results and discussions

Empirical evidence from the result indicates that tax burden is a significant negative determinant of Multinational corporations' choice of foreign investment. The sign of the result is consistent in all the estimated models. The finding is consistent with [Gao and Liu \(2021\)](#), [Abdellatif, Eid, and Abdel-Salam \(2021\)](#), [Korytin, \(2020\)](#), [Pavel et al., \(2020\)](#), [Esteller-Moré et al., \(2020\)](#), [Edo et al., \(2020\)](#), [Drapkin, \(2020\)](#), [Banović et al., \(2020\)](#), but differ slightly from [Ait Soussane and Mansouri \(2020\)](#), and [Mercer-Blackman and Camingue-Romance \(2020\)](#). The magnitude remained persistent in all the estimated models except for models 4 and 6 where we controlled for some of the interaction effects which reported no significant effect. This result implies that as the tax burden increases the proportion of FDI attracted by the host countries decreases significantly. The result also indicates that government integrity has a significant positive effect on the volume of FDI attracted by the host country. This result remained persistent in the entire model except for model six. It, therefore, suggests that an increase in the integrity of government will positively influence the inflow of FDI into the domestic economy significantly. It, however, means that Multinational Corporation's choice of FDI location is significantly explained by the integrity level of the host countries' government. And so, if the continent of Africa must continue to compete favourably in the global FDI market, effort must be put in place to ensure that government integrity level is increased significantly.

We also find that restriction in property rights has a significant negative effect on the inflow of FDI into the domestic economy. Multinational Corporation tends to prefer investing in countries with relaxed property rights. And so, a country with less stringent property rights tends to attract more FDI than the other. Our findings imply that a more stringent property right leads to a less inflow of FDI. The result from the Freedom index indicates that global freedom of economic social and financial activities has a significant positive effect in explaining the inflow of FDI into the host countries. Freedom index is an index constructed from multiple economic social political and financial factors that measure freedom of movement of the factor of production and other productive resources. It, however, indicates that the higher a country opens up to these freedom indices, the higher the inflow of FDI that will be attracted to the country. In other words, as the countries freedom index increases, the inflow of FDI increases significantly. This result equally suggests that an increase in freedom

index creates ample opportunity for the multinational organization to expand their production plants and assets to other countries with significant productive advantages.

Table1. Result of the two-step System GMM

VARIABLES	(1) Model1	(2) Model2	(3) Model3	(4) Model4	(5) Model5	(6) Model6	(7) Model7	(8) Model8
L.FDI	0.589*** (0.00397)	0.588*** (0.00767)	0.594*** (0.00602)	0.591*** (0.00886)	0.585*** (0.0107)	0.601*** (0.0106)	0.585*** (0.00831)	0.595*** (0.0115)
TaxB	-10.24*** (3.411)	-175.0*** (20.45)	-10.31*** (3.342)	-7.491 (6.960)	-214.1*** (23.69)	-5.220 (7.028)	-69.61** (28.31)	-107.5*** (25.46)
GI	30.96*** (4.893)	510.2*** (45.86)	16.64 (14.65)	81.30*** (7.054)	693.0*** (57.36)	19.76 (27.56)	157.8** (76.64)	370.2*** (78.46)
PR	-12.40*** (2.127)	1.686 (1.938)	-21.51* (11.66)	-1.484 (4.817)	-47.94*** (14.04)	-77.49*** (19.10)	2.194 (3.983)	-77.96*** (19.92)
FRDI	4.790 (12.42)	89.30*** (15.56)	4.278 (17.47)	337.5*** (27.28)	102.7*** (23.65)	396.9*** (37.55)	319.1*** (27.96)	368.0*** (36.94)
BFRE	6.444* (3.300)	12.95*** (3.318)	3.736 (5.093)	33.48*** (6.339)	19.78*** (5.552)	47.02*** (9.590)	33.84*** (5.778)	46.50*** (7.932)
LFRE	-10.42*** (2.621)	-5.685* (3.309)	-11.03*** (3.329)	-11.62** (5.222)	-14.13*** (3.422)	-19.32*** (6.675)	-13.74*** (4.598)	-23.68*** (5.914)
MFRE	5.560* (2.954)	21.65*** (3.926)	4.858 (3.938)	40.72*** (5.126)	27.86*** (4.883)	51.61*** (7.749)	41.96*** (5.107)	52.71*** (7.025)
TFRE	8.987** (3.980)	24.32*** (4.891)	10.01** (4.203)	44.87*** (7.692)	30.11*** (6.023)	53.18*** (7.730)	46.50*** (7.641)	54.28*** (7.316)
INVFRE	46.87*** (2.823)	25.34*** (5.589)	45.74*** (2.975)	34.78*** (5.553)	16.87** (6.719)	29.20*** (7.432)	27.86*** (5.394)	19.96** (7.516)
FFRE	52.82*** (3.859)	45.85*** (5.664)	47.39*** (4.892)	148.4*** (6.310)	32.67*** (7.706)	160.1*** (10.36)	129.8*** (6.266)	131.9*** (10.62)
T_G		7.059*** (0.558)			8.637*** (0.644)		2.978*** (0.937)	4.306*** (0.890)
P_G			0.295 (0.347)		1.520*** (0.441)	2.410*** (0.601)		2.564*** (0.586)
Constant	-1.456*** (260.5)	12.679*** (1,798)	-1.216** (487.6)	458.7 (567.5)	16,786*** (2,325)	3,249*** (986.9)	6,096*** (2,076)	11,661*** (2,152)
Number of ID	47	47	47	47	47	47	47	47
Hansen_test	25.45	21.08	22.88	24.43	18.11	22.09	23.45	20.70
Hansen Prob	0.276	0.454	0.350	0.273	0.580	0.336	0.267	0.354
AR(1)_test	-2.198	-2.224	-2.198	-2.322	-2.216	-2.342	-2.284	-2.290
AR(1)_P-value	0.0279	0.0261	0.0280	0.0202	0.0267	0.0192	0.0223	0.0220
AR(2)_test	-0.914	-0.894	-0.906	-0.987	-0.861	-0.946	-0.953	-0.894
AR(2)_P-value	0.360	0.371	0.365	0.324	0.389	0.344	0.341	0.371
No. of Instruments	34	34	34	34	34	34	34	34

Standard errors in parentheses  
\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Evidence from our empirical analysis indicates that labour freedom is a negative determinant of the inflow of FDI into the domestic economy in Africa. It, however, means that as labour freedom increases, cheap labour from densely populated countries in Africa tend to migrate to more developed economies of the world hence reducing the attractiveness of the domestic economies as a major destination for foreign direct investment. Freedom of labour which is synonymous with labour mobility creates an opportunity for both skilled and unskilled labour to move freely, not only from city to city but from country to country. Therefore, multinational firms seeking availability of labour as the only reason for investing overseas may consider attracting the class of labour force needed into their own country, thereby decreasing the volume of FDI inflow into the domestic economy. However, previous studies have reported that the availability of cheap labour is one of the major determinants of FDI in most developing economies. The increasing amount of remittance inflow into the African continent is an indication that a significant percentage of the continent's skilled working population live outside the continent of Africa.

Our result also indicates that monetary freedom is a significant factor in explaining the inflow of FDI into the host economy. This however suggests that as countries liberalize monetary flow, it increases the inflow of FDI into the country's economy. It equally indicates that multilateral and bilateral corporation favours liberalized economy in making an investment decision as to where to invest

among increasing alternative choices of investment location. This result is consistent across the majority of the estimated models signifying the robustness of the result. Trade freedom was also reported as a significant positive determinant of the inflow of FDI into the host countries' economy. The importance of the free flow of goods and services in economic growth and development has led to the introduction of trade liberalization among many trading partners. Liberalization policies no doubt account for the increasing flow of FDI from source countries to host countries which have impacted positively on the economic development of the receiving country. It is on this premise also that we reported a positive and significant relationship between investment and financial freedom on the inflow of FDI into the host country. Our findings indicate that all the proxies employed in measuring a different aspect of economic and financial freedom exert a positive significant effect on FDI inflow. The result of the interaction term indicates that the interacted variables also have a significant effect in explaining the inflow of FDI into the host country.

Test for instrument validity was conducted using the Hansen test and the result indicates that only the valid instrument was included in the estimation. Similarly, the result AR(1) indicates that there is the presence of the first-order Autocorrelation in the model. This condition is a required condition for the estimation of System GMM. Secondly, the result of the second-order autocorrelation AR(2) indicates that there is no autocorrelation of order two in the model. These conditions are necessary for the forecasting power of the model.

## 5. Conclusion

We investigated the effect of the tax burden on the inflow of FDI into the host economies with a particular focus on SSA. The study employed a two-step-system-GMM on a data set that covers the period of 2009 to 2018. Based on the empirical report of our findings we conclude that multinational corporations invest in an economy to take advantage of tax benefits. It further suggests that a more friendly tax policy that will minimize the tax burden faced by foreign investors will significantly improve the inflow of FDI into the continent. The argument that foreign investors choose a country with cheap labour could not be substantiated with increased mobility of labour. And so, most skilled labourers in the African continent prefer working in the western world than grapple with increased poverty and poor infrastructural facility in the continent. The economic and financial freedom variable included in the model suggests that increased liberalization and free flow of financial and monetary assets contributes significantly in explaining the choice of foreign investors to invest in Africa. Based on the foregoing, we recommend sustainable tax policies that will reduce the tax burden on foreign investors as this will enhance the inflow of FDI into the continent of Africa. Efforts should be made by the government of various countries in Africa to provide adequate infrastructural facilities and stable economic growth to prevent the increasing outflow of skilled labourers. SSA member countries should ensure increased economic and financial liberalization to attract more inflow of FDI into the continent.

## Limitation and study forward

This study employed Dynamic System GMM which can produce variant results depending on the choice of instrument. We also did not consider the effect of distance and size of the economy in explaining the choice of location for FDI by the multinational corporation. And so, further study could incorporate these determinants of FDI by employing the gravity model.

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