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Abstract

Countries around the world employ different efforts aimed at attracting more FDI, top most being tax incentives. Appropriate fiscal policy framework establishes tax incentive that improves country's investment climate. However, tax incentives may at times not adequately compensate for poor investment climate in developing countries resulting from poor infrastructure, lack of trade openness, weak judicial system, small market size and most importantly political instability. Therefore, this study sought to determine the moderating effect of investment climate on the relationship between tax incentives and FDI among the East Africa Community partner states. The study was carried out using data relating to the five states in the East Africa Community: Tanzania, Rwanda, Kenya, Burundi, and Uganda. Secondary data covering a period of 16 years from 2002 to 2017 was used. Proxies of tax incentives were tax holidays, period of losses carried forward and investment allowances. Indicators of investment climate were Market size, Electricity supply, Political stability, and Corruption and Trade openness. The study found that corruption negatively and significantly influence the relationship between tax incentives and FDI. However the other indicators of investment climate: Political stability, electricity supply and trade openness did not influence the relationship between tax incentives and FDI among East African countries. The conclusion of the study was that increase in corruption levels in EAC partner state will result in reduction of FDI. Hence, the study recommends that in order to encourage foreign direct investments in the region the leadership of the East Africa Community partner states should work towards eradicating corruption.

Keywords: *Investment Climate, Tax Incentives, Foreign Direct Investment, East Africa Community Partner States*

Introduction

Foreign Direct Investments (FDI) are an essential and effective economic catalyst for stimulating economic development in developing countries. Penev and Marusic (2014) assert that developing countries recognizes FDI as a source of modernization and economic development. FDI boosts economic development of a host country by generating employment opportunities, improving capital formation in the host country, improvement of exchange reserves and enhancement of culture of competition. Developing nations use tax incentives to attract FDI, with the hope that increased FDI will lead to economic growth and development. These countries use the tax incentives as a counterweight to investment disincentives prevalent in developing countries (Brodzka, 2013).

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Bolnick (2004) defines tax incentives as fiscal action by governments to attract both domestic and international investment in particular key sectors of the economy. According to Klemm (2004), tax incentives are all forms of unique tax dealings targeted to particular sectors or activities only, unlike universal tax treatment applied to all. UNCTAD (2000) classifies tax incentives in twelve different ways: investment allowances, tax holidays, losses carried forwards, reduced corporate income tax rate, investment tax credits, deductions for qualifying expenses, tax credits for value addition, zero or reduced tariffs, preferential treatment of long capital gains, credits for foreign hard currency earnings, employment based deductions and reduced taxes on dividends/ interest paid abroad.

Investment climate refers to the regulatory, institutional and policy frameworks that determine economic and financial conditions that act as inducements to private sector investors to invest in a country (Weingast, 1995). The concept of investment climate is broad and wide; it can include all macroeconomic factors prevailing in a country. James (2013) argues that investment climate is dictated by amalgamation of non-tax incentives employed by governments to attract foreign mobile capital. That is macro-economic factors, which cannot be influenced by variation in tax policy. Some of these factors are market size, trade openness, infrastructure, political stability and corruption (Tuomi, 2011).

The effectiveness of tax incentives to attract FDI thus, largely depends on the context. Countries with good investment climate are more effective in luring FDI compared to states with poor investment climate (Bolnick, 2004). Tax incentives may at times not adequately compensate for poor investment climate in developing countries resulting from poor infrastructure, lack of trade openness, weak judicial system, small market size and most importantly political instability (Morisset & Pirnia, 2001). Hence, for tax incentives to be effective in attracting FDI, proper investment climate needs to be in place.

The East African Community (EAC) is a region bloc comprising of countries in Africa great lakes region namely united republic of Tanzania, Kenya, republic Burundi, South Sudan, Republic Rwanda and Uganda. The economic block was formed in 1967 but collapsed 19777. The aim of its formation was to promote investment by increasing international competitiveness of the region (Mugisa, 2009). After the collapse Uganda, Kenya and United republic of Tanzania established a treaty of East African Community in 1999, which was formerly ratified in 2000. Later Rwanda and Burundi joined the community in 2007 and the republic of South Sudan entered the community in 2016. Since ratification of EAC in 2000, significance

progress has been witnessed in the treaty implementing. Some of milestones being the establishment of a customs union in 2005 and a common market in 2010.

There was negligible inflow of FDI in EAC in 1990s. The growth of FDI in EAC started in early 2000s (Penev & Marusic, 2014). The amounts of FDI to EAC vary among different countries, meaning various factors accelerate or decelerate the rate of FDI inflow. A report done jointly by Action Aid and Tax Justice Network Africa (2012) indicated that tax incentive in East Africa benefit the countries differently and in some extreme cases benefit foreign investors at the expense of local governments (Matovu, 2010). EAC partner states have been seeking to harmonize their tax regimes to avoid harmful tax competition, which results to the race to the bottom. The EAC governments have a wide array of tax incentives available to attract FDI such as tax holidays, investment deductions and losses carried forward (Goodspeed, 2002). The rest of the paper is organized as follows: Review of theoretical and empirical literature, the methodology used, the results and the study conclusions.

Literature Review

Theoretically, the Neoclassical Investment Theory (Jorgenson, 1963), Eclectic Theory (Dunning, 1977) and the New Economic Geography Theory (Krugman, 1991) are the key theoretical frameworks used to study effects of tax incentives on foreign direct investments. The Neoclassical investment theory by Jorgenson (1963) states that the relationship that exist between tax incentives and foreign investment is positive in nature. Tax incentive reduces cost of capital hence increasing the return on capital, which will lead to increased investment (Parys & James, 2010).

The Eclectic theory as conceptualized by Dunning (1977) provides a plausible explanation of emergence of FDI need to include various aspects of economics and needs to bring several elements of theory together to draw a dependable and comprehensive argument on factors which determine location of foreign direct investment. The theory identifies three main causes of global activities by Multinational Enterprises (MNEs) as taking advantage of strategic location, internalization and ownership advantages commonly referred to as the OLI framework (Zlatkovic, 2016). Dunning (1977) argues that a company will follow this OLI framework when determining where to do their investments. The eclectic paradigm supports that MNE would invest in a foreign country to take advantage of things like cheap and unique production technology,

enhancing brand royalty and trademark, and monopoly of a particular product marketing skills (Buettner, 2007).

The new economic geography theory (NEG) by Krugman (1991) holds that business location tends to be influenced by demand for products or by large market, which help them to minimize transportation costs. The theory postulate that locational advantages lead to a core periphery region. In support of the NEG model, Devereux and Mifflin (2007) posit that tax incentives will have more impact in countries that have more investment than countries with less investment. The theory demonstrates that easy access to the market create incentives to firms because of reduction in transport costs and as such determines international competitiveness of a country (OECD, 2008).

Kinda (2010) posits that besides tax incentives, another major determinant of FDI flows is investment climate. Favorable investment climate is characterized by standards of good governance requirements together with the availability of basic Infrastructure, such as cheap reliable electricity, good roads, and effective and efficient transport system as well as communication means. Good governance is characterized by the stability of legal system on property rights depth of political democracy and public accountability. These conditions are essential for ensuring sustained FDI flows, which spur economic growth by creating jobs to the locals besides other benefits such as technological transfers.

Empirically, Mughal and Akram (2011) carried out a study in Pakistan from 1984 to 2008 using time series data and employed cointegration error correction model found that market size was the most important factor in attracting FDI inflows in Pakistan. However, a study by Coleman and Tetty (2008) in Ghana covering period 1970 to 2002 using time series data , co-integration and Error Correction Modelling (ECM) concluded that size of market does not influence FDI decision on whether to invest in Ghana or not. Shah (2014) assessed the importance of availability of infrastructure in developing countries in attracting FDI from 1980 to 2007 and a panel data of 90 developing countries. The study found that infrastructure influences location of FDI while market size had a significant and positive effect on FDI inflows.

Osabutey and Okoro (2015) using 12 political indicators published by political risk services (PRS) carried a study in Nigeria telecommunication industry and found that political risk has a significant link with FDI

inflows while corruption was found to explain about two-third of foreign direct investments inflows. A study carried out by Khan and Akbar (2013) in 94 countries in the 1986 to 2009 on effect of political risk on FDI found that political risk had a negative relationship with FDI. Busse and Hefeker (2005) explored the relationship between political risk and FDI for 83 different countries from 1984 to 2003 employing various econometric techniques. The study found that twelve indicators of political risks were significant in determining FDI inflows.

Alemu (2012) carried out a study in 16 Asian economies to investigate the effects of corruption on FDI inflows from 1995 to 2009. The study found that corruption influences the FDI inflow in a host country. Conversely, a study by Bayar and Alakbarov (2016) to investigated the effect of corruption on FDI inflows for 23 emerging economies and revealed that the level of corruption has no statistically significant effect in attraction of FDI.

Pradhan et al (2017) using panel vector error correction model carried a study in 19 Eurozones countries from 1988 to 2013 and found that trade openness enhances FDI inflows. A study by Babatunde (2011) in Sub Saharan Africa countries between 1980 to 2003 examined the relationship of trade openness, FDI, growth and infrastructure. Using panel data it was observed that trade openness and infrastructural development influences FDI leading to sustainable development.

A study of 77 developing countries across the world using firm-level data on effect of investment climate on FDI was carried out by Kinda (2010). The study found that poor infrastructure, financing limitations, and weak institutions (e.g. judicial system) in developing countries negatively hinder FDI in developing countries. Majeed and Ahmad (2009) in a study done in Pakistan to determine characteristics of a host country that influences FDI flow, found that enabling environment to be essential to investors. A study by Quazi, (2007) assessed whether investment climate affected FDI inflows in Latin America and revealed that investment climate significantly boosted FDI. The study concluded that improved infrastructure and high degree of trade openness increased FDI flow while lack of economic freedom discouraged FDI inflow.

Data and Methodology

This study was anchored on positivistic philosophy because it sought to test various theories and a longitudinal descriptive survey was used in this study. The design was appropriate since it involved data

collection over a period of time. The data set of countries in EAC partner states was observed across time, several studies have used this design (Revilla, 2016; Torres-Reyna, 2007). The study was carried out in the five states in the East Africa Community: Tanzania, Rwanda, Kenya, Burundi, and Uganda. South Sudan was excluded because of lack of data. The unit of analysis was the individual partner state. The study employed secondary data covering a period of 16 years from 2002 to 2017. The main sources of the data were published Ernest and Young worldwide tax data, UNCTD, EAC secretariat; World/African Development Indicators of the World Bank, World Resource Institute, tax and finance Acts of the individual countries and Partner states tax Authorities and OECD. The data was analyzed using inferential and descriptive statistics. Descriptive statistics were used to summarize the data into meaningful distribution of scores using the mean, standard deviation, maximum and minimum values among measures of central tendency. The objective of the study was to determine the moderating effect of investment climate on the relationship between tax incentives and FDI in East Africa Community partner states. The moderating effect was determined using the stepwise regression method, which involved two steps as proposed by Baron and Kenny (1986). In the first step (unmoderated), the main effects of the independent variable (tax incentives) on the dependent variable (FDI) was tested. In the second step (moderated), the effect of the moderating variable (investment climate) and the interaction terms between tax incentives and investment climate (TI*IC) on the dependent variable was tested. To create the interaction term, tax incentives and investment climate indicators were centered first and a single item indicator representing the product of the two measures calculated. However, the creation of the new interaction terms by multiplying the scores may lead to the problem of multicollinearity. To address the multicollinearity problem the interaction terms were converted into standardized z scores. The coefficients of the interaction terms indicated the magnitude of the moderating effect and their sign indicate the direction of the moderating effect. The following hypothesis was formulated for testing.

The moderating effect of investment climate in the relationship between tax incentives and FDI in EAC partner states is not significant.

Empirical Models for testing the hypothesis: Moderating effect of Investment climate on the relationship tax incentives and FDI in EAC Partner states.

Moderating effect Supply of electricity on the relationship between tax incentives and FDI

Unmoderated:

$$FDI_{it} = \beta_O + \beta_1 TI_{it} + \varepsilon$$

Moderated:

$$FDI_{it} = \beta_O + \beta_1 TI_{it} + \beta_2 EA_{it} + \beta_3 (TI * EA)_{it} + \varepsilon$$

Where;

FDI denotes foreign direct investment, TI denotes tax incentives, EA denotes electricity access and (TI*EA) is the interaction between tax incentives and electricity access.

Moderating effect of political stability on the relationship between tax incentives and FDI

Unmoderated:

$$FDI_{it} = \beta_O + \beta_1 TI_{it} + \varepsilon$$

Moderated:

$$FDI_{it} = \beta_O + \beta_1 TI_{it} + \beta_2 PS_{it} + \beta_3 (TI * PS)_{it} + \varepsilon$$

Where;

FDI denotes foreign direct investment, TI denotes tax incentives, PS denotes political stability and (TI*PS) is the interaction between tax incentives and political stability.

Moderating effect of corruption on the relationship between tax incentives and FDI

Unmoderated:

$$FDI_{it} = \beta_O + \beta_1 TI_{it} + \varepsilon$$

Moderated:

$$FDI_{it} = \beta_O + \beta_1 TI_{it} + \beta_2 C_{it} + \beta_3 (TI * C)_{it} + \varepsilon$$

Where;

FDI denotes foreign direct investment, TI denotes tax incentives, C denotes corruption and (TI*C) is the interaction between tax incentives and corruption.

4 Moderating effect of trade openness on the relationship between tax incentives and FDI

Unmoderated:

$$FDI_{it} = \beta_O + \beta_1 TI_{it} + \varepsilon$$

Moderated:

$$FDI_{it} = \beta_O + \beta_1 TI_{it} + \beta_2 TO_{it} + \beta_3 (TI * TO)_{it} + \varepsilon$$

Where; FDI denotes foreign direct investment, TI denotes tax incentives, TO denotes trade openness and (TI*TO) is the interaction between tax incentives and trade openness.

Results and Discussions

Descriptive Results

Summary Statistics of the Study Variables

Table 1 shows a summary of the pooled results from the five East Africa Community partners states for the period 2002 to 2017.

Table 1: Summary Statistics for the Study Variables

Variable	Obs	Mean	Std. Dev.	Min	Max	Skewness	Kurtosis
FDI inflows (Ratio of FDI to GDP)	78	0.0220	0.02	0.00002	0.06	0.21	1.86
Tax holiday (No of years)	75	7.9733	3.92	0.00	10.00	-1.47	3.25
Investment allowances (Rate in percentage)	80	31.2815	8.99	16.73	46.07	-0.02	1.66
Period of losses carried forward (no of years)	74	7.7297	2.58	4.00	10.00	-0.29	1.15
Market size(Log of GDP)	80	23.2048	1.17	21.15	24.79	-0.46	1.74
Electricity supply (Rate in percentage)	75	14.9730	9.65	3.21	56.00	1.57	6.43
Political stability(index)	80	20.4784	13.17	0.53	47.87	0.64	2.30
Corruption (index)	80	28.1433	19.25	1.42	75.48	1.16	3.32
Trade openness (Ratio of exports & imports/GDP)	79	0.4021	0.13	0.11	0.66	-0.25	2.15

The pooled results for the five countries show that FDI inflows to GDP had a mean of 0.0220. The minimum and maximum values were 0.00002 and 0.06 respectively an indication that some countries had very little FDI inflows during the study period. The average number of years for tax holiday was 7.97. The results also depict that the average rate of investment allowances for the five nations was 31.28% with minimum and maximum values being 16.73% and 46.07% respectively while the average number of years for carrying losses forward was 7.73 with minimum and maximum values of 4 and 10 years respectively.

The results of investment climate show that the average value for market size was 23.20 with the minimum and maximum values being 21.15 and 24.79 while the average value for infrastructure was 14.97 with minimum value of 3.21 and maximum value of 56.00 respectively. The results also show that political stability had a mean value of 20.48 with minimum and maximum values of 0.53 and 47.87 while corruption had a mean index of 28.14 and minimum and maximum values of 1.42 and 75.48 correspondingly. Finally,

the mean value for trade openness was 0.40 with minimum and maximum values of 0.11 and 0.66 respectively.

Cross Country Comparisons

Table 2 shows the summary of means of the five East Africa Community partner states.

Table 2: Cross Country Comparisons

Country	**Kenya**	**Uganda**	**Tanzania**	**Rwanda**	**Burundi**
Variable	**Mean**	**Mean**	**Mean**	**Mean**	**Mean**
FDI inflows (Ratio of FDI to GDP)	0.0109	0.0339	0.0342	0.0213	0.0079
Tax holiday (No of years)	10.00	10.00	8.93	0.93	10.00
Investment allowances (Rate in percentage)	40.18	27.25	31.01	20.34	37.63
Period of losses carried forward (no of years)	7.63	10.00	10.00	5.00	5.00
Market size(Log of GDP)	24.40	23.66	24.15	22.43	21.39
Electricity Supply (Rate in percentage)	27.68	13.87	15.12	12.80	5.39
Political stability(index)	12.34	16.71	34.74	31.55	7.05
Corruption (index)	16.74	18.52	33.93	59.70	11.83
Trade openness (Ratio of exports & imports/GDP)	0.49	0.39	0.42	0.38	0.33

The results on Table 2 shows that Tanzania the country with the highest population in the EAC had the highest ratio of FDI inflows to GDP with a mean value of 0.0342 followed by Uganda and Rwanda with values of 0.0339, 0.0213 respectively. Kenya, the biggest economy in the EAC was next in terms FDI inflow to GDP during the study period with a value of 0.0109 and finally Burundi followed with mean value of 0.0079. This shows that Tanzania had the highest amount of FDI inflows to GDP while Burundi recorded the lowest amount of FDI inflows among EAC partner states during the study period. The low amount of FDI inflow to GDP recorded by Burundi could be attributed to the fact that the country was not political stable during the period of the study. The results show that the average value for tax holidays in Kenya, Tanzania and Burundi was 10 years while Tanzania had an average value of 8.93 with Rwanda having the lowest mean value of 0.93. An indication that Rwanda was not giving tax holidays for a long time during the study period. With regard to investment allowances, Kenya had the highest mean value of 40.18% followed by Burundi, Tanzania, Uganda and Rwanda with the least. The results show that the average value of the period of period of losses carried forward in Tanzania and Uganda was 10 years while

the period of period of losses carried forward in Kenya was 7.63 years with Rwanda and Burundi having five years respectively.

The average results of investment climate indicators show that, the market size for Kenya was the largest with a mean value of 24.40 followed by Tanzania, Uganda, Rwanda and Burundi with mean values of 24.15 , 23.66, 22.43 and 21.39 in that order. Concerning supply to electricity, the results show that Kenya had the highest mean value of 27.68 followed by Tanzania with a mean value of 15.12 and then Uganda with a mean value of 13.87 with Rwanda and Burundi having the lowest mean values of 12.80 and 5.39 respectively. This an indication of heavy investment Kenya government has put in infrastructural development. On the other hand, Burundi due to civil war during the study period had little supply of electricity in its economy and indication of poor infrastructural development. The results on political stability show that Tanzania had the highest mean value of 34.74 followed by Rwanda with a mean value of 31.55. Uganda, Kenya and Burundi had mean values of 16.71, 12.34 and 7.05 respectively, which means that Tanzania is the most politically stable country while Burundi is the most politically unstable country among the five EAC partner states. The low index recorded by Burundi on political stability can be attributed to internal armed conflict experienced in the country during the study period.

The results of corruption show that Rwanda had the highest mean value of 59.70 followed by Tanzania, Uganda, Kenya and Burundi with mean values of 33.93 , 18.52 , 16.74 and 11.83 which shows that Rwanda is the least corrupt country among the five EAC partner states while Burundi is the most corrupt. The high corruption index for Rwanda means that Rwanda is the least corrupt country in the region. Meaning that the high the corruption index the better and vice versa. The countries with the lowest corruption index are the most corrupt. Finally, the results of trade openness show that Kenya had the highest ratio of 0.49 followed by Tanzania, Uganda, Rwanda and finally Burundi with mean values of 0.42, 0.39, 0.38 and 0.33 respectively, which means that Kenya had the most trade liberalized economy while Burundi had the most closed economy among the five EAC member states.

Trend Analysis

This section depicts the trend analysis of the FDI inflows over the considered study period for the members of the East Africa Community.

FDI Inflows in the Five East Africa Partner States

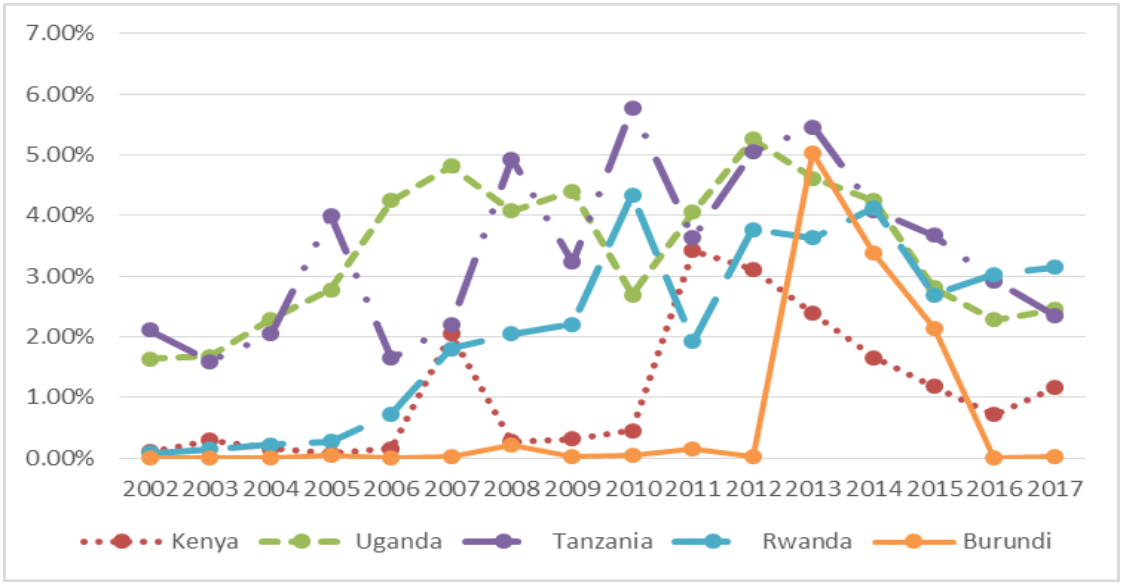

Figure 1 Trend Analysis for FDI Inflows in the Five EAC Partner States

Figure 1 shows that Tanzania recorded a steady increase in FDI inflow during the study period having the highest FDI inflow in the EAC in 2013. On the other hand Burundi reported the lowest FDI inflow among the five partner states with the study period. Kenya and Uganda had huge fluctuations in FDI inflow within the study period. Rwanda reported a steady gradual increase of FDI inflow within the study period.

Correlation Analysis

Correlation analysis was carried out to determine the strength and the nature of the relationship between the study variables. The Karl Pearson correlation coefficient was used in this study to determine the correlation among the study variables. The results on table 3 shows that there is a very weak and positive correlation (0.078) between tax holiday and FDI while investment allowance has a weak and negative correlation (-0.240) with FDI. On the other hand, there is a weak and positive correlation between the periods of losses carried forward (0.279) and FDI inflows. Based on the results on Table 4.8, there is a weak and positive correlation between FDI and market size (0.374) while electricity supply registered a very weak (0.09) correlation with FDI. Political stability shows a moderate association (0.565) with FDI. Corruption has weak correlation (0.237) with FDI at the same time trade openness registered a moderate association with FDI of (0.456).

Table 3: Correlation Matrix

	FDI inflows	Tax holiday	Investment allowances	Period of losses carried forward	Market size	Electricity supply	Political stability	Corruption	Trade openness
FDI inflows	1								
Tax holiday	0.078	1							
Investment allowances	-0.240*	0.663*	1						
Period of losses carried forward	0.279*	0.466*	0.130	1					
Market size	0.374*	0.313*	0.116	0.614*	1				
Electricity supply	0.090	0.195	0.186	0.045	0.720*	1			
Political stability	0.565*	-0.356*	-0.420*	0.114	0.302*	0.091	1		
Corruption	0.237*	-0.728*	-0.525*	-0.249*	-0.049	-0.014	0.723*	1	
Trade openness	0.456*	0.211	0.173	-0.142	0.516*	0.579*	0.315*	-0.006	1

The findings indicate that there is a weak positive correlation between tax holidays and market size (0.313), electricity supply and tax holiday (0.195), trade openness and tax holiday (0.211) but a weak negative correlation between tax holiday and political stability (-0.356). However, there is a strong negative correlation between tax holiday and the corruption index (-0.728). On the other hand, market size (0.116), electricity supply (0.186) and trade openness (0.173) have a very weak correlation with investment allowances. While corruption (-0.525) and political stability (-0.420) have a moderate negative correlation with investment allowances. The findings also found that there is a strong and positive correlation between market size and the period of period of losses carried forward (0.614) while electricity supply (0.045), political stability (0.114) have a very weak and positive correlation with the period of period of losses carried forward. Trade openness has a very weak negative (-0.142) correlation with the period of period of losses carried forward while corruption (-0.249) has a weak and negative correlation with the period of period of losses carried forward.

Moderating Effect of Investment Climate on the Relationship between Tax Incentives and FDI

The study estimated the moderating effect of electricity supply on the relationship between tax holiday and FDI and found that the coefficient of the interaction between electricity supply and tax holiday (B=-.0000383) was statistically insignificant implying that electricity supply did not affect the relationship between tax holiday and FDI. That is increase or decrease of electricity supply in EAC partner states did not influence the relationship between tax holiday and FDI. Additionally, electricity supply did not have a direct effect on the FDI when controlling for tax holiday (see table 4 below).

Table 4: Moderating Effect of Electricity Supply on the Relationship between Tax Holiday and FDI

	Unmoderated	**Moderated**
Variable	**Coefficient**	**Coefficient**
Tax Holiday	-.000227 (.0003642)	.0002808 (.0006276)
Electricity Supply		.0002296 (.0004038)
Interaction between Electricity supply and Tax Holiday		-.0000383 (.0000432)
Constant	.0025586 (.003054)	0.0000018 (.005198)
F Test	0.39	0.68
R-Squared	0.0044	0.0165
Number of Observations	68	68

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

The study estimated the moderating effect of electricity supply on the relationship between investments allowances and FDI and found that the coefficient of the interaction between electricity supply and investments allowances (B= -.000015) was statistically insignificant implying that electricity supply did not affect the relationship between investment allowances and FDI. That is increase or decrease of electricity supply in EAC partner state did not lead to an increase or decrease of FDI inflow. Additionally, electricity supply did not have a direct effect on the FDI when controlling for investment allowances (see table 5 below).

Table 5: Moderating Effect of Electricity Supply on the Relationship between Investments Allowances and FDI

	Unmoderated	Moderated
Variable	**Coefficient**	**Coefficient**
Investments Allowances	.0007606***	.0009958***
	(.0002097)	(.0002165)
Electricity supply		-.0001652
		(.0001454)
Interaction between Electricity supply and Investments Allowances		-.000015
		(.0000201)
Constant	.000793	.0034562
	(.0014863)	(.0030243)
F Test	13.16***	9.50***
R-Squared	0.0430	0.0612
Number of Observations	73	68

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

The study estimated the moderating effect of electricity supply on the relationship between period of losses carried forward and FDI and found that the coefficient of the interaction between electricity supply and period of losses carried forward (B= -.0000478) was statistically insignificant implying that electricity supply did not influence the relationship between period of losses carried forward and FDI. That is variations in electricity supply did not have any effect on the relationship between period of losses carried forward and FDI inflow in the EAC partner states. Additionally, electricity supply did not have a direct effect on the FDI when controlling for period of losses carried forward (see table 6 below).

Table 6: Moderating Effect of Electricity Supply on the Relationship between Period of Losses Carried Forward and FDI

	Unmoderated	Moderated
Variable	**Coefficient**	**Coefficient**
Period of losses carried forward	-.000181	.0006748
	(.0006233)	(.00131)
Electricity supply		.0001601
		(.0004564)
Interaction between Electricity supply and Period of losses carried forward		-.0000478
		(.0000568)
Constant	.0021266	-.0010054
	(.005236)	(.0105741)
F Test	0.08	1.14
R-Squared	0.0013	0.0208
Number of Observations	70	65

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

The study estimated the moderating effect of political stability on the relationship between tax holiday and FDI and found that the coefficient of the interaction between political stability and tax holiday (B= -0.00000408) was statistically insignificant implying that political stability did not influence the relationship between tax holiday and FDI. That is increase or decrease of political stability in the EAC partner states does not influence the relationship between tax holiday and FDI inflow. Additionally, political stability did not have a direct effect on the FDI when controlling for tax holiday (see table 7 below).

Table 7: Moderating Effect of Political Stability on the Relationship between Tax Holiday and FDI

	Unmoderated	**Moderated**
Variable	**Coefficient**	**Coefficient**
Tax Holiday	-.000227 (.0003642)	-.0001253 (.0008527)
Political Stability		.0000241 (.0003361)
Interaction between Political Stability and Tax Holiday		-0.00000408 (.0000407)
Constant	.0025586 (.003054)	.0018551 (.0073301)
F Test	0.39	0.27
R-Squared	0.0044	0.0047
Number of Observations	68	68

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

The study estimated the moderating effect of political stability on the relationship between investment allowances and FDI and found that the coefficient of the interaction between political stability and investment allowances (B= .0000473) was statistically insignificant implying that political stability did not moderate the relationship between investment allowances and FDI. That is increase or decrease of political stability in EAC partner state does not influence the relationship between investment allowances and FDI inflow. Additionally, political stability did not have a direct effect on the FDI when controlling for investment allowances (see table 8 below).

Table 8: Moderating Effect of Political Stability on the Relationship between Investments Allowances and FDI

	Unmoderated	Moderated
Variable	**Coefficient**	**Coefficient**
Investments Allowances	.0007606*** (.0002097)	-.0002311 (.0012913)
Political Stability		-0.00000818 (.0001418)
Interaction between Political Stability and Investments Allowances		.0000473 (.0000566)
Constant	.000793 (.0014863)	.0008193 (.0031658)
F Test	13.16***	9.81***
R-Squared	0.0430	0.0479
Number of Observations	73	73

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

The study estimated the moderating effect of political stability on the relationship between period of losses carried forward and FDI and found that the coefficient of the interaction between political stability and period of losses carried forward (B= 0.00000262) was statistically insignificant implying that political stability did not moderate the relationship between period of losses carried forward and FDI. That variation in political stability did not influence the relationship between period of losses carried forward and FDI inflow. Additionally, political stability did not have a direct effect on the FDI when controlling for period of losses carried forward (see Table 9 below).

Table 9: Moderating Effect of Political Stability on the Relationship between Period of losses carried forward and FDI

	Unmoderated	Moderated
Variable	**Coefficient**	**Coefficient**
Period of losses carried forward	-.000181 (.0006233)	-.0002437 (.0013004)
Political Stability		-0.00000522 (.0004168)
Interaction between Political Stability and Period of losses carried forward		0.00000262 (.0000579)
Constant	.0021266 (.005236)	.0022722 (.0103302)
F Test	0.08	0.04
R-Squared	0.0013	0.0015
Number of Observations	70	70

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

The study estimated the moderating effect of corruption on the relationship between tax holiday and FDI and found that the coefficient of the interaction between corruption and tax holiday (B= -.0001652) was statistically significant implying that corruption has negative moderating effect on the relationship between tax holiday and FDI. That is varying levels of corruption influences the relationship between tax holiday and FDI inflow. Such that high level of corruption will lead to decrease in FDI inflow when providing tax holidays in EAC partner states. Additionally, corruption did not have a direct effect on the FDI when controlling for tax holiday (see table 10 below).

Table 10: Moderating Effect of Corruption on the Relationship between Tax Holiday and FDI

	Unmoderated	**Moderated**
Variable	**Coefficient**	**Coefficient**
Tax Holiday	-.000227 (.0003642)	-.0000554 (.0003561)
Corruption		.0006929 (.0004168)
Interaction between Corruption and Tax Holiday		-.0001652*** (.0000555)
Constant	.0025586 (.003054)	.0006533 (.0029921)
F Test	0.39	3.33**
R-Squared	0.0044	0.0849
Number of Observations	68	68

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

The study estimated the moderating effect of corruption on the relationship between investment allowances and FDI and found that the coefficient of the interaction between corruption and investment allowances (B= -.0000176) was statistically insignificant implying that corruption did not moderate the relationship between investment allowances and FDI. Implying that varying levels of corruption do not influence the relationship between investment allowances and FDI. Additionally, corruption did not have a direct effect on the FDI when controlling for investment allowances (see table 11 below).

Table 11: Moderating Effect of Corruption on the Relationship between Investments Allowances and FDI

	Unmoderated	Moderated
Variable	**Coefficient**	**Coefficient**
Investments Allowances	.0007606***	.0007929
	(.0002097)	(.0006868)
Corruption		-.0002206
		(.0003625)
Interaction between Corruption and Investments Allowances		-.0000176
		(.000119)
Constant	.000793	.0008319
	(.0014863)	(.0015113)
F Test	13.16***	30.92***
R-Squared	0.0430	0.0486
Number of Observations	73	73

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

The study estimated the moderating effect of corruption on the relationship between period of losses carried forward and FDI and found that the coefficient of the interaction between corruption and period of losses carried forward (B= -.0003224) was statistically significant implying that corruption negatively moderates the relationship between period of losses carried forward and FDI. The study reveals that increase in corruption levels will lead to decrease in FDI inflow in the presence of period of losses carried forward. Additionally, corruption had a direct significant and positive influence on FDI when controlling for period of losses carried forward (see table 12 below).

Table 12: Moderating Effect of Corruption on the Relationship between Period of Losses Carried Forward and FDI

	Unmoderated	Moderated
Variable	**Coefficient**	**Coefficient**
Period of losses carried forward	-.000181	-.0000781
	(.0006233)	(.0006122)
Corruption		.0020023***
		(.0006862)
Interaction between Corruption and Period of losses carried forward		-.0003224***
		(.0000962)
Constant	.0021266	.0013188
	(.005236)	(.0052084)
F Test	0.08	4.22***
R-Squared	0.0013	0.0875
Number of Observations	70	70

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

The study estimated the moderating effect of trade openness on the relationship between tax holiday and FDI and found that the coefficient of the interaction between trade openness and tax holiday (B= .0187272) was statistically insignificant implying that trade openness did not moderate the relationship between tax holiday and FDI. This means that increase or decrease in levels of trade openness does not influence the relationship between tax holiday and FDI inflow in EAC partner states. Additionally, trade openness did not have a direct effect on the FDI when controlling for tax holiday (see table 13 below).

Table 13: Moderating Effect of Trade Openness on the Relationship between Tax Holiday and FDI

	Unmoderated	**Moderated**
Variable	**Coefficient**	**Coefficient**
Tax Holiday	-.000227 (.0003642)	-.0006625 (.0004588)
Trade Openness		-.1243369 (.1412879)
Interaction between Trade Openness and Tax Holiday		.0187272 (.0144585)
Constant	.0025586 (.003054)	.0060409 (.0041664)
F Test	0.39	3.55**
R-Squared	0.0044	0.0710
Number of Observations	68	68

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

The study estimated the moderating effect of trade openness on the relationship between investment allowances and FDI and found that the coefficient of the interaction between trade openness and investment allowances (B= .0037564) was statistically insignificant implying that trade openness did not moderate the relationship between investment allowances and FDI. This means that increase or decrease in levels of trade openness does not influence the relationship between investment allowances and FDI inflow in EAC partner states. Additionally, trade openness had a direct positive significant effect on the FDI when controlling for investment allowances (See table 14 below).

Table 14: Moderating Effect of Trade Openness on the Relationship between Investments Allowances and FDI

	Unmoderated	**Moderated**
Variable	**Coefficient**	**Coefficient**
Investments Allowances	.0007606*** (.0002097)	.0007602*** (.0002752)
Trade Openness		.0536795** (.021661)
Interaction between Trade Openness and Investments Allowances		.0037564 (.0097478)
Constant	.000793 (.0014863)	.0000148 (.0013305)
F Test	13.16***	12.77 ***
R-Squared	0.0430	0.0964
Number of Observations	73	72

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

The study estimated the moderating effect of trade openness on the relationship between period losses carried forward and FDI and found that the coefficient of the interaction between trade openness and period of losses carried forward (B= -.0045448) was statistically insignificant implying that trade openness did not moderate the relationship between period of losses carried forward and FDI. Meaning, variations in trade openness levels do not influence the relationship between period of losses carried and FDI inflow in EAC partner states. Additionally, directly trade openness insignificantly influences FDI when controlling for period of losses carried forward (see table 15 below).

Table 15: Moderating Effect of Trade Openness on the Relationship between Period of losses Carried Forward and FDI

	Unmoderated	**Moderated**
Variable	**Coefficient**	**Coefficient**
Period of losses carried forward	-.000181 (.0006233)	-.0001585 (.0005623)
Trade Openness		.0940116 (.0586527)
Interaction between Trade Openness and Period of losses carried forward		-.0045448 (.0086105)
Constant	.0021266 (.005236)	.0012106 (.0048525)
F Test	0.08	3.77 **
R-Squared	0.0013	0.0633
Number of Observations	70	69

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

Table 16: Moderating Effects for all variables and interactions

Variables	Coefficients
Tax holiday	-0.0010
	(0.0018)
Investments allowance	-0.0001
	(0.0056)
Losses carried forward	0.0005
	(0.0026)
Access to electricity	0.0001
	(0.0012)
Political stability	-0.0002
	(0.0007)
Corruption	0.0021*
	(0.0011)
Trade openness	-0.1793
	(0.2677)
Interaction between tax holiday and access to electricity	0.0000
	(0.0001)
Interaction between Investment allowances and infrastructure	-0.0000
	(0.0001)
Interaction between losses carried forward and infrastructure	-0.0000
	(0.0001)
Interaction between tax holiday and political stability	0.0000
	(0.0001)
Interaction between Investment allowances and political stability	0.0001
	(0.0002)
Interaction between losses carried forward and political stability	0.0000
	(0.0001)
Interaction between tax holiday and corruption	-0.0001
	(0.0001)
Interaction between investment allowances and corruption	-0.0001
	(0.0002)
Interaction between losses carried forward and corruption	-0.0003
	(0.0002)
Interaction between tax holiday and Trade Openness	0.0330
	(0.0257)
Interaction between Investment Allowances and Trade Openness	-0.0054
	(0.0315)
Interaction between Losses Carried Forward and Trade Openness	-0.0137
	(0.0123)
Constant	0.0102
	(0.0197)
Observations	65
R-squared	0.2347

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Summary of the Results

The study found that corruption negatively and significantly influences the relationship between tax holiday and FDI. Corruption also negatively and significantly influences the relationship between period of losses carried forward and FDI inflow. This implies that increase in levels of corruption in EAC partner states will lead to decreased FDI inflows when providing tax holidays and period of losses carried forward. However, corruption does not influence the relationship between investment allowances and FDI. The study revealed that Political stability, electricity supply and trade openness do not influence the relationship between tax incentives and FDI among East African countries.

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