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Direct Investment among the East Africa Community  
Partner States*

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# **Joint effect of Tax Incentives, International Competitiveness and Investment Climate on Foreign Direct Investments among the East Africa Community Partner States**

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## ***Abstract***

*Developing countries recognizes foreign direct investment as a source of modernization and economic development. Therefore the study objective was to establish the joint effect of tax incentives, international competitiveness and investment climate on foreign direct investment in East Africa Community Partner States. 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. This objective was achieved by running a pooled OLS regression model. The study revealed that, jointly, tax incentives, international competitiveness and investment climate had statistically significant influence on FDI inflow and accounted for 13.48% variations of FDI inflow.*

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

## **Introduction**

Developing countries recognizes foreign direct investment (FDI) as a source of modernization and economic development (Penev & Marusic, 2014). 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. This has led developing countries looks for ways of attracting FDI in their countries. According to Easson (2004) there are various factors which influence foreign investments which include political stability, good communication, good infrastructure network, tax and other investments incentives, free repatriation of profits, satisfactory dispute settlement mechanisms, skilled labour force, lack of bureaucratic obstacles and investments protection agreements that alleviate the risks associated with nationalization.

According to World Bank (2012), FDI is the flow of investments to a nation state different from the investor's home nation with the objective of having lasting interest in the host country. Organization for Economic Co-operation and Development (OECD, 1996) gave a benchmark definition of FDI as "Investment with the objective of acquiring a lasting interest by a resident entity of one economy (direct

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investors) in an enterprise operating in an economic environment other than that of the investor. The lasting interest implies the existence of a long-term relationship between the direct investor and the enterprise and a significant degree of influence on the management of the enterprise.”

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.

International competitiveness of a country is the extent to which, a country in a free and fair market situation, can be the preferred investment destination for a firm that seeks to invest internationally (Knoll, 2012). It refers to the ability of a country to spur economic growth by being the preferred investment destination by multinationals, as opposed to its peers without getting into balance-of-payments difficulties (Fagerberg, 1988). The study has conceptualized international competitiveness as an intervening variable in the relationship between tax incentives and FDI. Consequently, trade related measures of international competitiveness that are triggered by presences of tax incentives are considered in the study. These trade related indicators comprises of export prices, consumer prices and export growth (Swagel, 2012). Export prices measures the extent to which countries gain and lose market share on foreign markets. For instance, if a country’s exports are growing faster than the weighted average demand (imports) of its partners, it is gaining market share (Hunya, 2000). Consumer prices are normally measured using a consumer price index (CPI), which shows the change over time in the price of a fixed basket of goods and services that would be bought by a typical consumer. The consumer price index reflects the annual percentage change of consumer price index to average consumer price index for goods and services (Das, 2017). Export growth is an important indicator of international competitiveness. Export growth focus on the degree to which locally produced goods are sold to foreign countries (Hall & Lee, 2008). Growth in export sales indicates a firm’s desire to enter new international markets using a more conservation approach to diversification, while decrease in export sales may indicate a firm’s desire to withdraw from international markets or convert

from exporting to more capital-intensive strategies for international expansion, such as wholly owned subsidiaries (Hall & Lee, 2008). Growth in exports is normally proxied using the export growth ratio, which is determined by the percentage of growth between the preceding year and the current year (Athanasoglou, Backinezos & Georgiou, 2010).

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 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 1977. 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. 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**

Several factors contribute to the decision by MNEs to invest in a foreign country. Governments world over sort to grow their economies using a mixture of approaches, which include but not limited to fiscal incentives and improvement of investment environment to attract FDI flows. Most studies on the influences of tax reform on FDI ignore the effect of investment climate and international competitive ranking of a country. For instance, a study by Klemm and Parys (2012) investigated the impact of tax incentives in 40 Caribbean, Latin America and Africa countries from 1985 to 2004. The study employed panel data spatial econometric techniques and established that tax holidays and CIT rates were used as tools for tax competition. Moreover, the study used the dynamic panel econometrics, they found that longer tax holidays and lower CIT rates are effective in attracting foreign direct investment but are not effective in boosting economic growth.

A study by Cleeve (2008) found that tax holidays are the most effective in luring foreign investments. He carried out a research on success of tax incentives in attracting FDI in 16 countries across Sub-Sahara African region between 1990 and 2000 using pooled data. The study found that tax holidays were the most effective compare to other types of tax incentives and concluded that countries need to be selective in their fiscal incentives.

Additionally, Buettner and Ruf (2007) did a study to access the effect of tax incentives on the decision of German multinationals to have direct investment abroad. The study used firm level panel data provided by the German Bundesbank from 1996 to 2001 was used in the study and found that market size, tax incentives and labor cost have significant effects on German multinationals, cross border investments decisions.

## **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 aided by STATA version 15. 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. Inferential statistics entailed the Pooled OLS regression and correlation analysis. Pooled OLS regression analysis was conducted to establish the relationship between tax incentives and FDI in all five East Africa partner states for years 2002 to 2017. The data was found not to have any panel effects hence, the choice of Pooled OLS regression analysis as advocated by Greene (2012). Correlation analysis was used to determine the nature and the strength of the relationship between the study variable.

### **Operationalization of Study Variables**

The variables of this study included tax incentives, international competitiveness, investment climate and FDI. The construct under this study were operationalized as follows: tax incentives was the independent variable while FDI was the dependent variable. International competitiveness mediated the relationship between tax incentives and FDI while investment climate moderated the relationship between tax incentives and FDI. To measure the dependent variable (FDI) the study used the ratio of FDI inflow to the gross domestic product (GDP) per country 'c' at time 't' as advocated by Billington (1999).

The indicators of tax incentives were tax holidays, investment incentives and the period of period of losses carried forward. Tax holiday was measured using the maximum number of years per countries as used by various authors among the Munongo (2015) & Klemm and Parys (2012). Investment allowances were the second indicator for tax incentives and in most countries, investment allowances are given in different rates for different economic sectors. In that case, multinational firms who are the major contributors of FDI, invest in different sectors including manufacturing, tourism, farming, tourism, technology companies among others. Hence, the rate of investment allowance was determined by averaging all the investment allowances or credits offered to different sectors by a specific country in a specific year. The period of period of losses carried forward was determined by the number of years the loss could be carried forward with a maximum of 10 years being undertaken for countries whom the period period of losses carried forward is indefinite as advocated by Munongo (2015).

**Table 1: Operationalization of Research Variables and Measurement**

<b>Variable</b>	<b>Operational Indicators</b>	<b>Operational Definitions</b>	<b>Supporting Literature</b>	<b>Measurement</b>
Tax Incentive	Tax Holiday	Exemption of corporate income tax payment for a specified period of time	Munongo (2015), Klemm and Parys (2012), Ernst and Young (2017)	Maximum tax holiday given to investors in a given year i.e. the length of the tax holiday
	Investment allowances	Deduction of qualifying capital allowances	Klemm and Parys (2012), Ernst and Young (2017)	Average rate investment allowances offered in various economic sectors per annum per country
	Period of losses carried forward	Allowable deductions in the year in which they arise and in the following specified number of years of income.	Morisset and Pirnia (2001), Munongo (2015), Ernst and Young (2017)	Maximum number of years granted for a loss carried forward
International Competitiveness	Export prices	Value of exported goods and services	Knoll (2012), Swagel, (2012)	Log of export unit value index
	Consumer prices	Cost of consumer goods & services	Swagel (2012), Bolnick, (2004)	Log of the Consumer price index(CPI)
	Export growth	Reflection of changes in export competitiveness	Athanasoglou, Backinezos and Georgiou, (2010)	Export growth ratio
Investment Climate	Market size	Market value of goods and services	Shah (2014), Mughal and Akram(2011), Cleeves (2008)	Log of real GDP
	Electricity supply	Access to electricity	Ogunjimi and Amune (2017). Alarm (2013) Estache and Garsous (2012)	Access to electricity as a percentage of population
	Political stability	Government stability	Klemm and Parys (2012), World Bank (2017)	WGI political stability and absence of violence index (percentile rank)
	Corruption	Public accountability	Ali, Fiess and MacDonald (2010), World Bank (2017)	ICRG corruption index (percentile rank)
	Trade Openness	Extend to which country trades with the outside world	Shah (2014), Cleeves (2008)	Export plus Imports Divided by real GDP
FDI	Value of FDI Inflows	Value of Foreign investment	IEA (2012), Ahmed (2015).	FDI inflows to real GDP per country

International competitiveness was proxied by export prices measured using the log of export unit price index, consumer prices measured using the log of consumer price index and export growth measured using the export growth ratio which was the difference between exports at time ‘t’ and exports at time ‘t-1’ divided by exports at time ‘t-1’ as conceptualized by Swagel (2012).

Investment climate was proxied using five indicators among them market size which was determined through the log of gross domestic product, electricity supply was measured as a percentage of population as advocated for by Ogunjimi and Amune (2017). Corruption as an indicator of investment climate was measured using ICRG corruption index (percentile rank) while political stability was measured using world governance index (WGI) political stability and absence of violence index (percentile rank) both provided by the World Bank. Finally, trade openness was measured through the ratio of imports and exports to total GDP as advanced by Shah (2014) and Cleeves (2008).

The study’s objective was to establish the joint effect of tax incentives, international competitiveness and investment climate on foreign direct investment in East Africa Community partner states. This objective was achieved by running a pooled OLS regression model. The hypothesis of the study under this section was

*H<sub>1</sub>: The joint effect of tax incentives, international competitiveness and investment climate on foreign direct investment in East Africa Community partner states is not significant.*

The hypothesis was tested using the following equation:

$$FDI_{it} = \beta_0 + \beta_1 TH_{it} + \beta_2 IA_{it} + \beta_3 LF_{it} + \beta_4 EI_{it} + \beta_5 CP_{it} + \beta_6 EG_{it} + \beta_7 ES_{it} + \beta_8 PS_{it} + \beta_9 CN_{it} + \beta_{10} TO_{it} + \beta_{11} MS_{it} + \varepsilon$$

Where: FDI=Foreign Direct Investment in country (i) at time (t)

$TH_{it}$ = Tax holiday

$IA_{it}$ = Investment Allowance

$LF_{it}$ = Period of losses carried forward

$EI_{it}$ = Export Index

$CP_{it}$ = Consumer Prices

$EG_{it}$ = Export Growth

$ES_{it}$ = Electricity supply



$PS_{it}$  = Political Stability

$CN_{it}$  = Corruption

$TO_{it}$  = Trade Openness

$MS_{it}$  = Market Size

$\beta$ 's = Regression coefficients

$\beta_0$  = intercept

$t$  = time period

$\varepsilon$  = Error term

## **Results and Findings**

### **Descriptive Statistics**

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 on international competitiveness indicate that the average value of export prices was 187.83 with a minimum of 81.10 and maximum value of 319.56 and the average value of consumer prices was 102.07 with minimum and maximum values of 41.06 and 188.68 respectively. The results show that the average export growth value of 9.51 with the minimum and maximum values being -35.60 and 84.44 which indicates some country's had negative growth in exports in some of the years within the study period.

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

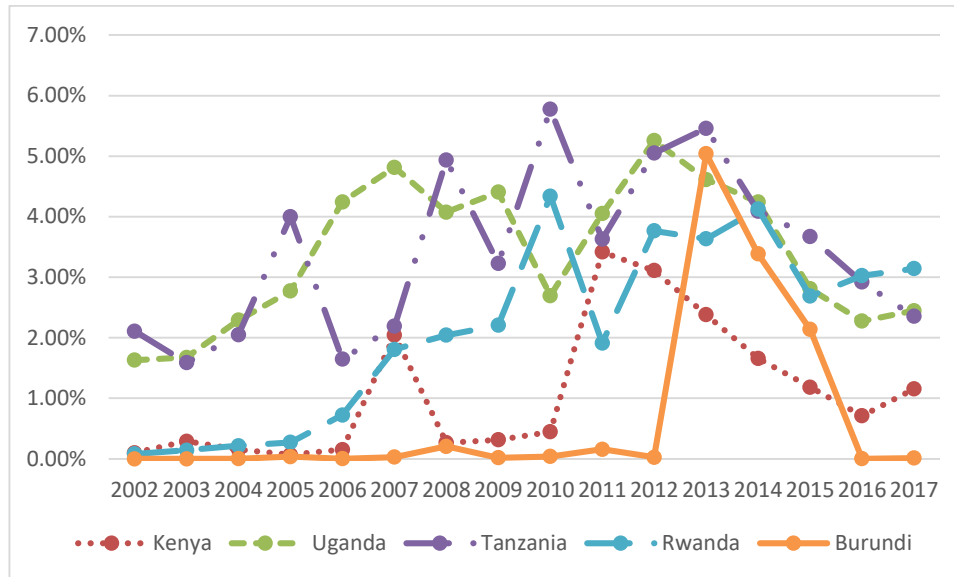
correspondingly. Finally, the mean value for trade openness was 0.40 with minimum and maximum values of 0.11 and 0.66 respectively.

**Table 2: Descriptive Statistics**

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
Export unit value index	80	187.8268	64.25	81.10	319.56	0.17	2.07
Consumer prices Index	80	102.0669	39.36	41.06	188.68	0.28	1.87
Export growth(Rate in percentage)	79	9.5090	17.88	-35.60	84.44	1.47	7.23
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

## FDI Trend Analysis

**Figure 1 FDI Inflows in the Five East Africa Partner States**



**Figure 1: Trend Analysis for FDI Inflows in the Five East Africa 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

The summary results revealed that the mean values for FDI inflow to GDP were 0.0109 for Kenya, 0.0339, in Uganda, 0.0342 in Tanzania, 0.0213 in Rwanda and 0.0079 in Burundi and the overall mean was 0.0220, which indicated that FDI contributes to 2.2% to the GDP of the East Africa partner states. The mean values also show that Tanzania had the highest FDI levels of 3.42% followed by Uganda with 3.39% with Rwanda being third with 2.13% while Kenya had 1.09% and Burundi with 0.79% were fourth and fifth respectively. The remarkable performance of Tanzania in attracting FDI can be attributed to its good investment climate. Tanzania has maintained a stable political environment over the study period as compared to other countries like Uganda, Burundi and Kenya.

With regard to tax holiday Kenya, Uganda and Burundi had not changed their period of tax holidays, which had remained 10 years throughout the study period while Rwanda introduced tax holidays in 2015 with Tanzania changing its tax holiday from 2 years in 2004 to 10 years. On investment allowances, average value for investment allowance was 40.18% for Kenya, 27.25% for Uganda, 31.01% for Tanzania, 20.34% for Rwanda, 37.63% for Burundi and the average rate of investment allowances for the countries was 31.2815% which means on average 31.2815% of investments allowances are offered in various sectors in EAC partner states. Kenya had the highest percentage followed by Burundi, Tanzania, Uganda and then Rwanda in that order. For the period of losses carried forward, the period in Tanzania and Uganda was indefinite while Kenya change from indefinite to 4 years then 9 years with Rwanda and Burundi having a period of 5 years respectively.

The descriptive statistics for international competitiveness show that the average value for export prices were 153.21 for Kenya, 160.56 for Uganda, 209.35 for Tanzania, 227.56 for Rwanda, 188.46 for Burundi and the average export unit price index for the five countries was 187.8268 with Rwanda having the highest value and Kenya the least value. The results show that the mean values for consumer prices were 100.21 for Kenya, 104.61 for Uganda, 106.61 for Tanzania, 95.73 for Rwanda, 103.18 for Burundi and average value of consumer prices in the five countries was 102.0669 with Tanzania having the highest mean value of consumer prices and Rwanda the lowest during the study period. Additionally, the mean values for export growth were 4.31 for Kenya, 10.56 for Uganda, 8.04 for Tanzania, 13.72 for Rwanda, 11.01 for Burundi and the average export growth value for the five countries was 9.5090 with Rwanda having the highest value of export growth and Kenya recording the least respectively.

The descriptive results for Investment climate show that the average values for market size as measured using GDP were 24.4 for Kenya, 23.66 for Uganda, 24.15 for Tanzania, 22.43 for Rwanda, 21.39 for Burundi and the average value for the five countries being 23.2048 with Kenya having the highest values and Burundi the least value. The average values for electricity supply were 27.68 for Kenya, 13.87 for Uganda, 15.12 for Tanzania, 12.80 for Rwanda, 5.39 for Burundi and the average value for electricity supply for the five countries was 14.9731 with Kenya having the highest mean value and Burundi the least mean value. The average values for political stability index were 12.34 for Kenya, 16.71 for Uganda, 34.74 for Tanzania, 31.55 for Rwanda, 7.05 for Burundi and the mean value of 20.4784 with Tanzania being the most politically stable country and Burundi being the least stable. The average values for corruption index

were 16.74 for Kenya, 18.52 for Uganda, 33.93 for Tanzania, 59.7 for Rwanda, 11.83 for Burundi and the mean index of 28.1433 for the five countries with Rwanda being the least corrupt country and Burundi being the most corrupt country among the East Africa partner states. The mean values for trade openness were 0.49 for Kenya, 0.39 for Uganda, 0.42 for Tanzania, 0.38 for Rwanda, 0.33 for Burundi and the average value was 0.4021 being the average value for the five countries with Kenya having the highest mean value and Burundi having the lowest mean value.

The results of correlation analysis revealed that tax holiday, period of losses carried had weak positive correlation with FDI while investment incentive had a weak negative correlation with FDI. Export prices, consumer prices market size, electricity supply, political stability, corruption and trade openness had a positive correlation with FDI while export growth had a negative correlation with FDI inflows. Export prices and export growth had a weak negative correlation with tax holidays while consumer prices had a weak positive correlation with tax holidays. Investment allowances and period of period of losses carried forward had a weak negative correlation with international competitiveness.

The findings indicate that tax holidays had a weak positive correlation with market size, electricity supply and trade openness but a weak negative correlation with political stability. However, there is a strong negative correlation between tax holiday and the corruption index. On the other hand, investment allowances had weak positive correlation with market size, electricity supply and trade openness. Corruption and political stability had a moderate negative correlation with investment allowances. The findings also found that period of losses carried forward had a strong and positive correlation with market size. According to the current study the electricity supply and political stability have a weak and positive correlation with the period of period of losses carried forward. Trade openness and corruption had a weak negative correlation with the period of period of losses carried forward.

The findings indicate that export prices had a weak negative correlation with market size while electricity supply had a weak positive correlation with export prices. Political stability and corruption had moderate positive association with export prices, while trade openness had strong positive correlation with export prices. The results further shows that market size had a weak positive correlation with consumer prices. Electricity supply had a moderate positive correlation with consumer prices while trade openness had a strong positive correlation with consumer prices. On the other hand, political stability had a weak positive

association with consumer prices. There was weak, negative correlation between consumer prices and corruption. Finally, the results indicates that there is weak, negative correlation between market size, electricity supply and trade openness with export growth. A weak and positive correlation between political stability and corruption with export growth was established.

**Table 3: Correlation Matrix**

	FDI inflows	Tax holiday	Investment allowances	Period of losses carried forward	Export Prices	Consumer prices	Export Growth	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								
Export Prices	0.425*	-0.196	-0.161	-0.347*	1							
Consumer prices	0.329*	0.178	-0.089	-0.185	0.668*	1						
Export Growth	-0.046	-0.087	-0.046	-0.065	-0.044	-0.231*	1					
Market size	0.374*	0.313*	0.116	0.614*	-0.006	0.242*	-0.169	1				
Electricity supply	0.090	0.195	0.186	0.045	0.092	0.481*	-0.175	0.720*	1			
Political stability	0.565*	-0.356*	-0.420*	0.114	0.556*	0.181	0.021	0.302*	0.091	1		
Corruption	0.237*	-0.728*	-0.525*	-0.249*	0.381*	-0.073	0.099	-0.049	-0.014	0.723*	1	
Trade openness	0.456*	0.211	0.173	-0.142	0.645*	0.671*	-0.096	0.516*	0.579*	0.315*	-0.006	1

## Regression Analysis

To determine the joint effect of tax incentives, international competitiveness and investment climate on foreign direct investment in East Africa Community Partner States a pooled OLS regression model was used.

**Table 4: Joint Effect of Tax Incentives, International Competitiveness and Investment Climate on Foreign Direct Investment**

VARIABLES	(1) Coefficient
Tax Holiday	-0.0001 (0.0006)
Investment Allowances	0.0007** (0.0003)
Period of Period of losses Carried Forward	-0.0004 (0.0009)
Export Index	-0.0000 (0.0000)
Consumer Price	0.0001 (0.0006)
Export Growth	-0.0001 (0.0001)
Electricity Supply	-0.0001 (0.0002)
Political Stability	0.0000 (0.0002)
Corruption	-0.0002 (0.0004)
Trade Openness	0.0721* (0.0404)
Constant	0.0076 (0.0085)
R-squared	0.1348
F test	1.81*
Observations	65

The study found that the R squared was 0.1348 suggesting that 13.48% of variations in FDI were explained by variations in tax incentives, international competitiveness and investment climate. The F test statistic was 1.81 and was significant at 10% suggesting that jointly tax incentives, international competitiveness and investment climate influenced FDI inflow East Africa Community partner states. Further, the study found that investment allowances and trade openness positively and significantly influenced FDI inflow in EAC countries. Tax holiday, period of losses carried forward, export prices, consumer prices, export growth, electricity supply, political stability and corruption did not significantly and directly affect FDI (see table 5.40). The hypothesis was tested using 65 as opposed to 80 data points because data was not available for some variables.

**Table 5: Summary of Hypothesis 4 Results**

Hypothesis	Study findings	Hypothesis test results
The joint effect of tax incentives, international competitiveness and investment climate on foreign direct investment in East Africa Community partner states is not statistically significant	The F test statistic was 1.81 and was statistically significant at 10% suggesting that jointly tax incentives, international competitiveness and investment climate influenced FDI inflows in East Africa Community partner states.	Reject Null

### Results and Discussion

The study established that 13.48% of variations of FDI were explained by variations in tax incentives, international competitiveness and investment climate. The study F test was 1.81 which was significant at 10% implying that jointly, tax incentives, international competitiveness and investment climate influenced FDI. Further, the study found that investment allowances positively and significantly influenced FDI in EAC countries holding other things constant. The results were consisted with previous studies such as Olaleye (2016); Munongo (2015); Effiok, Tapang and Eto (2013) and Lee (2012). However this is inconsisted with studies such as: Njoroge (2016); Peters and Kiabel (2015); Tuomi (2011) and Chai and Goyal (2008). Additionally, trade openness positively and significantly influenced FDI in EAC countries holding other things constant. The study results confirms those of Babatunde (2011), but contradicts those obtained by Tsaurai (2015) and Anitha (2012). Tax holidays did not have statistically significance influence



on FDI. The results were in agreement with some previous empirical studies such as a study by Fahmi (2012), Oleksiv (2000) and Porcano and Price (1996). Period of losses carried forward, were also found not to have any statistically significance influence on FDI this confirms results by Munongo (2015). However it contradicts the results obtained by Olaleye (2016) and Drebler and Overesch (2013). Jointly export prices, consumer prices, export growth, electricity supply, political stability and corruption did not significantly and directly affect FDI.

### **Summary and Conclusions**

The study's objective was to establish the joint effect of tax incentives, international competitiveness and investment climate on foreign direct investment in East Africa Community partner states. This objective was achieved by running a pooled OLS regression model. The study found that the R squared was 0.1348 suggesting that about 13.48% of variations in FDI were explained by variations in tax incentives, international competitiveness and investment climate. The F test statistic was 1.81 and was significant at 10% suggesting that jointly tax incentives, international competitiveness and investment climate influenced FDI.

The study also found that investment allowances and trade openness positively and significantly influenced FDI in EAC countries. Tax holiday, period of losses carried forward, export prices, consumer prices, export growth, electricity supply, political stability and corruption did not significantly and directly affect FDI. Therefore, the study concluded that provision of investment allowance, as a form of tax incentive will lead to increased FDI. Further, it was concluded that countries with more open economy within EAC are able to attract more FDI compared to countries with closed economy.

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