Relationship Between Institutional Factors and Foreign Direct Investment Flows of Tanzania in East African Community

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This paper informs of the extent which institutional factors influence Tanzania Foreign Direct Investment (FDI) inflows in the East African Community (EAC). It gives a comparative analysis of the institutional factors that influence Foreign Direct Investment of the states using the indicators from the World Development Indicators t from 2000 to 2018. The paper is built on the gravity model which was used as a framework to predict the relationship between the dependent and dependent variables. The analysis of the data obtained revealed that the rule of law and control of corruption, management of external debts, and Return on Investment (ROI) for both Tanzania and her trading partners in EAC had a positive effect on the Foreign Direct Investment inflows in Tanzania. Gross Fixed Capital Formation as a proxy for the Quality of Infrastructure in other EAC countries harms Foreign Direct Investment inflows to Tanzania; hence, improvement in infrastructure in EAC is critical to the performance for the EAC partners. Further, the Business Regulatory Environment and Return on Investment were found to be positively correlated with FDI inflows. Inflation harmed the FDI. The study thus underscored the importance of stable Business Environment for Tanzania to continue enjoying the lion share of FDI in EAC. Tanzania Foreign Direct Investment performance in EAC is highly correlated with institution and macroeconomic environment in other EAC countries; hence, there is a Hub-ad spoke relationship on FDI inflows in EAC. Therefore, Tanzania should continue pushing for regulatory and macroeconomic reform in other EAC countries to keep on enjoying the lion share of FDI inflows.

Keywords: Foreign Direct Investment, East African Community, institutional factors, domestic production, Preferential Trade Agreements (PTA)

Introduction

Since the mid 1980's, many developing countries have attempted to attract Foreign Direct Investment (henceforth FDI) to their economies using different inward and outward development policies. Among others, the policies included stabilization and structural adjustment measures, trade liberalization, and privatization. Also, the FDI has been attracted through offers and tax holidays and subsidies to foreign investors, and improvement in the regulatory framework and investment climate (Banga, 2005).

One of the recent strategies is the signing of Bilateral, Multilateral, and Preferential Trade Agreements (henceforth PTAs). In the last two decades, almost 700 PTAs have been notified to the World Trade

Organization (henceforth WTO) (Wto, 2011), Since the advent in 1995, the WTO has averagely received 11 notifications per year, i.e., almost one notification per month. According to the (Wto, 2011), averagely, each World Trade Organization (WTO) member has signed 13 PTAs. This proliferation of PTA has expanded in line with creation of the enabling environment for FDI inflows. Figure 1 illustrates the proliferation of PTAs across the global.
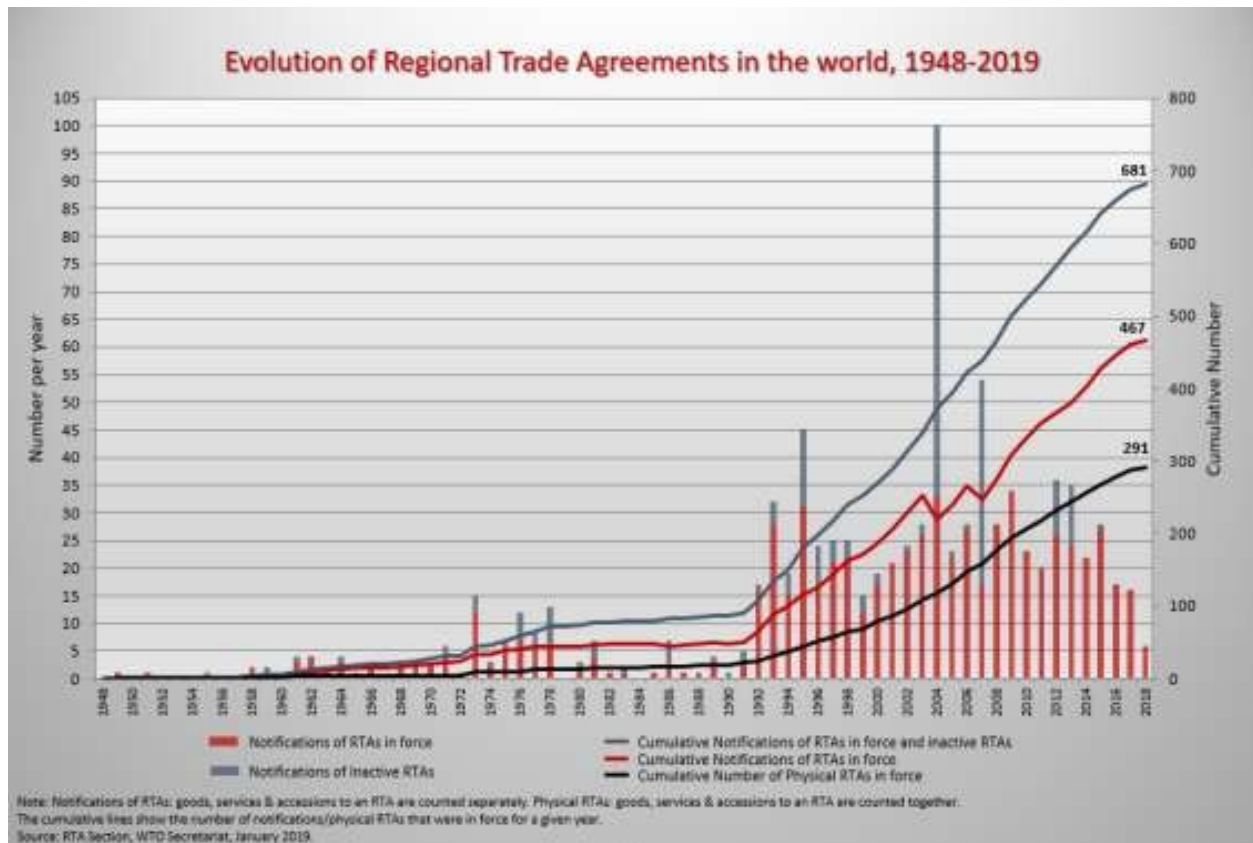

Figure 1. Evolution of regional trade agreements in the world, 1948-2019. Source: WTO, 2019.

The proliferation of PTAs have expanded with and expansive sets of investments related measures in terms of specific FDI policies or investment provision with the PTA trade chapter or model investment framework to guide the treatment, admission, and protection of FDI. For instance in East African Community (EAC), the council of Minister has endorsed three key instruments to guide the admission, protection, and promotion of FDI. This includes double taxation agreements, EAC Investment Code, and EAC model bilateral investment agreements.

The PTAs investment rules provide a framework for the entry, promotion, and protection of FDI in the region and provide fair and equitable treatment to PTAs investors. The rules further tend to provide a mechanism on the treatment and protection of FDI which contribute to an improved trade climate. The expectation is that expansive set of trade and investment in PTA will raise the total of FDI in the region and enhance trade and investment, stimulate trade flows, expand the export market, increase competition, and allow countries to exploit economies of scale (Bollinger & Stover, 1999).

Table 1 below highlights some of the PTA with expansive sets of investment provisions.

Table 1

Selected PTA With Some Investment Provisions

Agreement	Trade in goods	C.E. T*	Standards**	Trade in services	Investment	Labour
United States-Central American Free Trade Agreement (CAFTA) (2004)	Yes	No	Yes	Yes	Yes	Yes
Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) (2004)	Yes	No	Yes	Yes	Yes	No
South Asian Free Trade Area (SAARC) (2004)	Yes	No	No[a]	No	No[a]	No
European Community (EC)-Mediteranean Partners (1995-2004)	Yes	No	No	Yes	Yes	No
United States-Singapore (2003)	Yes	No	Yes	Yes	Yes	Yes
Chile-Republic of Korea (2003)	Yes	No	Yes	Yes	Yes	Yes
Economic Cooperation Organization Trade Agreement (ECO)[1] (2003)	Yes	No	No	No	No[b]	No
European Community (EC)-Mexico (2001)	Yes	No	Yes	Yes	Yes	No
United States-Jordan (2000)	Yes	No	No	Yes	Yes	Yes
European Community (EC)-South Africa (1999)	Yes	No	No	No	Yes	No
Chile-Canada (1996)	Yes	No	No	Yes	Yes	Yes
North American Free Trade Agreement (NAFTA) (1994)	Yes	No	Yes	Yes	Yes	Yes
European Community (EC)-Russian Federation (1994)	Yes	No	Yes	Yes	Yes	Yes
The Southern Common Market (MERCOSUR) (1994)	Yes	Yes	Yes	Yes	Yes	Yes
Commonwealth of Independent States Free Trade Agreement (CIS)[2] (1994)	Yes	Yes[c]	Yes	Yes	No	No
Common Market for Eastern and Southern Africa (COMESA) (1993)	Yes	Yes	Yes	Yes	Yes	Yes
European Free Trade Association (EFTA)-Turkey (1991)	Yes	No	Yes	No	No	No
South Pacific Forum Cooperation Agreement (1980)	Yes	No	No	No	No	No
Southern African Customs Union (SACU) (1969)	Yes	Yes	Yes	No	No	No
Andean Community (1969)	Yes	Yes	Yes	Yes	Yes	Yes
Treaty Establishing the European Community (1957)	Yes	Yes	Yes	Yes	Yes	Yes
East African Community	Yes	Yes	Yes	Yes	Yes	Yes

Source: UNCTAD, 2016.

On the bilateral level alone, the number of investment treaties increased from 385 in 1989 to more than 3,000 in 2017. Furthermore, the signing of the PTA has also become one of the key tools to attract FDI in developing countries. Further, the RTA membership has proven effective in attracting FDI by creating a positive market size effect and a better investment environment favorable to foreign investors. In particular, RTA membership can be a device to ensure commitment to domestic reforms for attracting more FDI.

However, only a few of the developed countries, such as China, Indonesia, Egypt, and Columbia, were successful in attracting FDI. The majority failed to attract a substantial amount of FDI. According to UNCTAD (2016), Indonesia, Egypt, and Columbia received a total of USD 96.4 billion in 2007 while China alone received nearly 31% of the total FDI that flew to the developing countries. A question here is why the inflow of FDI was low in some countries and biased in others. The key factor commonly mentioned in the literature is the poor institutional factors in the countries it fails.

FDI Destination in EAC

There is evidence that Tanzania's share of FDI inflow has been higher than in other countries in the EAC. According to the UN Investment Report of 2015, the share of Tanzania's FDI inflows relative to other EAC countries was 37 percent in 2001, and this was followed by Uganda (24 percent) and by Kenya (15 percent). By 2005, Tanzania's share of FDI in EAC had grown to 54 percent just five years after signing the EAC Treaty. There was a slight decline in 2008 to 40 percent and this increased to 42 percent in 2015 and 2016 while the share of Kenya within this period remained at 17 and 12 percent respectively. The key factors are being mentioned in the literature as the source of FDI differences in the differences in the quality of institutions factors. Moreover, there is a continuing unequal distribution of FDI flows in East African countries. It is not clear what explains this pattern of FDI flows into the East African countries.

Table 2

Summarizes the FDI Inflows in EAC Since the Year 2010

Country	Percentage FDI inflows in Tanzania as the ratio of total FDI in EAC						
	2010	2011	2012	2013	2014	2015	2016
Burundi	1.0	3.0	1.0	7.0	32.0	1.8	0.1
Kenya	178.0	335.0	259.0	514.0	874.1	217.4	394.1
Rwanda	42.0	106.0	160.0	111.0	359.2	1,065.3	409.8
Uganda	544.0	894.0	1,205.0	1,146.0	1,755.0	517.0	541.2
Tanzania	1,813.0	1,229.0	1,800.0	1,872.0	5,502.9	3,449.7	1,365.4
Total	2,578.0	2,567.0	3,425.0	3,650.0	8,523.2	5,033.8	2,710.6
%TA/EAC FDI	70%	48%	53%	51%	65%	69%	50%

Source: UNCTAD (2017).

Table 2 above shows that Tanzania has enjoyed the lion share of the total FDI inflows in EAC since the signing of the Common Market Protocol in 2010.

Despite fact that Tanzania holds the lion share of FDI in EAC, FDI inflows to East Africa had stagnated at around 2% of the total inflows in Africa from 1970 to 1990, after which it rose to 8% in 2000 and then dropped to 4% in 2010 (UNCTAD, 2012). According to UNCTAD's Annual Report (2017), East Africa exhibits the lowest in-flow of FDI when compared to other African recipients. While FDI inflows to Africa reached a record high of than US $88 billion in 2017, the inflow into East Africa represents a mere 5% ($4 billion) of the total, FDI inflows in African Continents.

The report by UNCTAD (2016) pointed out that EAC countries suffer from institutional weaknesses, such as corruption, poor application of the rule of law, political instability, among others, that raise the cost of doing business and thus constrain FDI inflows. Investors have rated institutional weaknesses such as corruption, crime, theft, and disorder as major issues of concern in promoting private sector activities in East African countries like Kenya.

East African countries suffer from institutional weakness such as corruption, poor application of the rule of law, political instability, among others, that raise the cost of doing business and thus constrain FDI inflows. Investors have rated institutional weakness, such as corruption, crime, theft, and disorder as major issues of concern in promoting private sector activities in East African countries like Kenya. There is a great need to assess the extent to which the Institutional FDI Fitness Model may apply in the case of East African countries. This raises the need to examine the relationship between institutional factors and FDI inflows in some of these

developing countries. Therefore, there is a great need to assess the extent to which the Institutional FDI Fitness Model may apply in the case of East African countries.

It has also been demonstrated that joining PTA alone is not a panacea. Members may observe a gain in FDI while others, within the PTA, may experience losses in FDI inflows. This depends on the interaction between the motivations of the firms making the FDI and the variation of the institutional factors among the PTA members (Dunning, 1997; Eden, 2002; Eithier, 1998; Feils & Rahman, 2008; Rugman & Verbeke, 2007). The magnitude of the influence of PTA on FDI depends on the change of the investment climate which is connected to the PTA and the advantage of the location of a country. This gives an implication that there is no a clear cut relationship between the institution set up of a country and within the PTA and the extent of FDI inflows to specific PTA members.

The expectation is that, the higher the degree of the investment measures implementation and the location advantage of each PTA member, the higher the degree of FDI inflows to the respective members. In some cases, investment measures can be implemented in the form of region measures; hence, the magnitude of the changes in investment is related to the significance and nature of the trade and investment liberalization embodies at the bloc level. The conclusion is that a stronger environmental change a country has executed relative to other PTA members and her location advantage is likely to lead to intra and extra inflows of FDI from the rest of the regional integration.

The review of the literature shows that previous studies have paid much focus on the EU and NAFTA but less on ASSEAN and EAC. A few of them have paid attention to the nature of the EAC and the inflow of FDI. One of the notable studies is that of Karau (2014) who studied the impact of institutions on the inflow of FDI in the EAC but it neither explains the effects of RTAs on a particular country. On the other hand, scholars such as Willem and Bezemer (2004) have examined the economic factors affecting FDI at length; they have explored political factors much less. At the domestic level, only political instability and political institutions have been examined systematically, mostly in very recent research. Political instability and violence should make a country less attractive for FDI since they render the economical and political context less predictable

Theoretical Literature Review

Factors determining FDI inflows in a country have been explained at length by the Dunning (1980) hypothesis which emphasizes on the location advantage of a country as the key determinant of FDI. Dunning (1980) applied Hymer's (1976) ownership advantages (O), Vernon's (1966) location characteristics (L), and Buckley and Casson's (1976) internationalization advantages (I) as the analytical basis of the Electric Paradigm Theory.

Dunning (1980) maintains that a firm will become an FDI and engage in the international value-adding activities if and only if the three conditions shown in Figure 1 above: The first condition is that the firm must possess certain comparative advantages, which are specific to the nature of the ownership over the local competitors. It means that the firm as an international player must have some ownership advantages to cover for the costs of an international player; it must have some ownership advantages to cover for the cost of international production or outweigh the disadvantage of doing business abroad. The first condition of the Dunning Eclectic Paradigm addresses the WHY questions, the condition answer why the FDIs go abroad, as well as elaborate the core competences that give a competitive advantage over the firms that are already serving a foreign market (Asafo-adjei, 2007).

The second condition is that an international firm can use the internationalization advantages to exploit its competitive advantages over the local firms in the foreign market. This condition addresses the WHERE questions; it elaborates on the location-specific factors which favour overseas production as a firm uses some production resources more effectively than in their home country. The motive of moving offshore is to use the firm-specific advantages in conjunction with factors in a foreign country. The more these factors are utilized, the more the profits are generated by these FDIs. The choice of investment location depends on a complex calculation that includes economic, social, and political factors. The location advantages of various countries are key in determining which countries become the hosts to the investments. Some aspects that can form country-specific advantages for a multinational firm include, but not limited to, large and growing high-income market, low production costs, a large endowment of factors which are scarce in the host country, and an economy that is politically stable, nearness to the port, and participation in the regional integration (Rugman, 2010).

The third condition is that a firm needs to use some specific resources in the foreign country in combination with the ownership and internalization advantages. This condition addresses the HOW question; in other words, how to go abroad. This condition results from internationalizing foreign operations through the control over suppliers or market outlets. The multinational enterprises have various choices of entry mode ranging from vertical to the horizontal mode. The multinational chooses internationalization where the market does not exist or functions poorly so that transaction costs of the external route are high (Fredriksson, 2003). Hence, according to Dunning (1980), for FDI to take place, all the above three conditions must be met.

However, the role of institutions in investment decisions has gained momentum. North (1997) defines institutions as the rules and regulations that structure political, economic, and social interactions. These rules include both informal contracts (sanctions, taboos, customs, traditions, and codes of conduct) and formal rules (constitutions, laws, and property rights). Indeed, issues of property rights, tax laws, and political stability are crucial when one is making investment decisions. For instance, North (1990) and Butler and Joaquin (1998) assert that political risk involves unexpected change of the institutional environment within which business operates. This may alter the operating cash flow of a firm, in such a way that FDI may either avoid the risk altogether, or by insurance, or negotiate with the government prior to investment.

According to Campos and Kinoshita (2003), theoretical and empirical findings suggest that the host country's institutions influence investment decision because they directly affect business-operating conditions. The quality of institutions of a country plays a critical role in determining the location decision of the FDI; hence, differences in the amount of FDI inflows are a result of differences in institutions quality (Wei & Wu, 2001). Moreover, the quality of institutions is an important determinant of FDI activity, particularly for less developed countries for a variety of reasons: First, poor legal protection of assets in these countries increases the chances for the expropriation of a firm's assets, making investments less likely. The quality of institutions, which is necessary for well-functioning markets, increases the cost of doing business if such quality is poor and this should diminish FDI activity. Since poor institutions lead to poor infrastructure, the expected profitability falls in the market so does the FDI.

The cost of investment consists of the economic as well as the non-economic costs, such as bribery and time lost in dealing with local authorities. Moreover, institutions underpin local business operating conditions but they differ from physical supporting factors such as transport and communication infrastructure. The basic notion is that less corruption, a fair predictable and expedient judiciary, and an efficient bureaucracy help to attract FDI (Wei & Wu, 2001).

Although institutions play a very great role in attracting FDI in a country, estimating the actual impact of the institutions on FDI is a cumbersome exercise since measurements of institutions are not accurate. Most measures entail composite index of a country's political, legal, and economic institutions, developed from survey responses from officials or businesspersons who are familiar with the country. Comparability across countries is questionable when the survey respondents vary across countries. Also, institutions are quite persistent so there is a likelihood of having little informative variations over time within a country (Blonigen, 2005). Hence, data limitation has impeded extensive testing of these ideas, constraining the existing studies to focus on just one aspect of the issue, normally corruption.

Campos and Kinoshita (2003) examined the importance of institutions as the determinant of FDI for 25 transition economies in Central Europe and the former Soviet Union. They used the institution variables rule of law and quality of bureaucracy. Their econometric results indicated that countries with good institutions could attract more inflows of FDI. Poor quality of bureaucracy was found to be a deterrent of foreign investors as there is an increase in transaction costs, which adversely affect profitability of the investment project.

Like Vittorio and Ugo (2006), it is clear that institutions may affect FDI inflows through three potential channels. First, the presence of good institutions tends to improved factor productivity and subsequently stimulates investments, whether domestic or external. Second, good institutions will result in a reduction of investment-related transaction costs (i.e., corruption-related costs). Finally, as by definition, FDI generally involves high sunk costs. Therefore, good institutions (i.e., proper property right enforcement, effective legal systems) will give more security to multinational firms.

Wilhelms and Witter (1998) have also added that high level of government fitness requires that the legislature's decision- and law-making processes are transparent, efficient, and reasonably democratic implying that the societal groups that have to support and carry through policies are included in the government decision-making process, thus facilitating policy implementation. As far as the executive level of government is concerned, high government fitness means that policies are implemented transparently, efficiently, and consistently to ensure equitable treatment of all subjects under the law. A transparent, reliable, independent, fair, and equitable judiciary guarantees high government fitness of the legislature and executive branch. High government fitness is expected to increase FDI by decreasing instability and thus investment risk.

From the theoretical framework above, the relation between PTA and FDI is neither self-evident nor straightforward, as the decision for foreign investment depends on lots of factors, including economic, social, and political. The extent to which Tanzania becomes the best location FDI choice relative to other EAC countries will depend on the extent to which Tanzania has integrated EAC investment policy change relative to other EAC countries. As well as the opportunity through which Tanzania will realize from the PTA, due to the aggregating individual country market into a PTA market, additional economic growth associated with PTA formation. The aggregated market will enhance investment climate, stimulate investment inflows, enlarge export market, increase competition and allow countries to exploit economies of scale, and permit them to specialize in the production of goods and services to make them best suited to their resources and factor endowment (UNECA, 2004, Choudhri et al., 2006).

The theoretical framework in this paper is premised on three key variables: the Preferential Trade Agreements (EAC), which are independent/explanatory variables, the Country Risks, and international competitiveness, which are the moderating variables, and FDI inflows to Tanzania are the dependent variable. The independent or explanatory variable has a direct influence on the dependent variable, which has a cause

and effect relationship. The moderating variable "moderates" the cause and effect relationship by influencing the independent variable negatively (through a reduction) or positively (enhancing). According to the theoretical framework, Tanzania ratification and implementation of the EAC community treaty and protocols will influence macroeconomic stability, reform on regulatory authorities, as well as reform on investment liberalization, protection, and promotion. This will increase investor's confidence which will culminate into the increased FDI inflows. The new economic relationships envisioned by the proponents of Preferential Trade Agreements reveal that multilateral and regional trade agreements either act as instruments of development or eventually result to increased investment inflows of the participating countries (Bhagwati, 2007).

The country risk will measure the location advantage of the country, which comprises macroeconomic risks and political risks. While international competitiveness is a function of the real effective exchange rate, relative unit labour cost and the quality of labour of the host country in our case Tanzania, macroeconomic risks are the function of economic risks, financial risk, and currency risks. On the second hand, political risk represents the investment provision which is embodied in the EAC protocols and treaties; these provisions will culminate into investment liberalization, promotion, and protection as a result of Tanzania participation in EAC. Hence, this variable is a function of the removal of the restrictions on the investment inflows in Tanzania. Political risk has a profound impact on the admission and establishment, entry and exit regulations, and standard of treatment to foreign investors. Standard of treatment involves provisions such as National Treatment Principal, most favoured nation treatment, and fair and equitable treatment. The protection of foreign investors involves property rights, nationalization, expropriation, investor's dispute settlement, and provisions related to the repatriation of capital.

In a nutshell, the factors measuring political risk are basically a set of investment issues covered in the 1990's investment agreements; hence, political risk of Tanzania due to her participation in EAC will comprise; investment provisions in the EAC, bilateral investment treaties signed by Tanzania and multilateral investment agreements.

Methodology

The gravity model applied in this paper as the framework of analysis to predict the relationship between the dependent and dependent variables. The gravity model provides an excellent empirical framework of analysing the relationship between the sizes of the economy (GDP) and bilateral FDI flows between two countries. The model answers the questions that have failed to be answered by the previous trade theory such as what is the size of the trade or FDI flows, what is the relationship between trade flows of a country and its economic size, how can the change on the economic size of the country predict the size of trade and FDI inflows and out flows of the said countries.

The Newtonian physics notion is the first justification of the gravity model. In 1687, Newton proposed the law of universal gravitation which states that, the forces of attraction between two objects i and j is given by the equation below:

$$F_{ij} = G \frac{y_i y_j}{D^2_{ij}}$$

(1)

where by F_{ij} is the attractive forces, Y_i and Y_j are the masses, D_{ij} is the distance between the two objects, and G is gravitation constant depending on the units of measurement of mass and force.

Tinbergen (1962) proposed that roughly the same functional form could be applied to international trade flows. The general gravity equation could be to a whole range of what we might call social interaction; the specification model by Tinbergen is as follows:

$$X_{ij} = G \frac{Y_i^{\alpha} Y_j^{\beta}}{D_{ij}^{\phi}}$$

(2)

In Equation (2), X_{ij} is exports from country i to country j, G is a constant, Y_i is the amount of exports which country i is able to supply to country j that depends on the country's economic size measured in terms of GDP, Y_j is the size of the importing country in terms of GDP, and D_{ij} is the geographical distance between country i and country j. In this study, Tanzania FDI and a proportional of GDP represents X_{ij} to the rest of EAC countries; Tanzania is the reference case (exporting country) (i) and the EAC members are Tanzania Trading Partner, and therefore the importing countries (j). Specifically, the general stochastic form of the Tinbergen (1962) in his paper called "Shaping the World Economy" gravity equation has the following equation:

$$X_{ij} = \beta_o Y_i^{\beta_1} Y_j^{\beta_2} N_i^{\beta_3} N_j^{\beta_4} D_{ij}^{\beta_5} A_{ij}^{\beta_6} \mu_{ij}$$

(3)

where:

X_{ij} = Value of total trade (export + import),

Y_i and Y_j = GDP of the exporter and import courtiers,

N_i and N_j = Population of the exporter and importer,

D_{ij} = The distance between the two countries,

A_{ij} = Any of the factors influencing trade between two countries,

μ_{ij} = Error term,

$\beta's$ = The coefficients to be estimated.

By taking the logarithm of Equation (3), the model is expressed in the *log-log* form so that the coefficients are elasticity's of trade flow with respect to explanatory variables. Bilateral trade flows are determined by the predictors' variables in the gravity equation. Since all the EAC countries are small economies, it will be worthwhile to assess how successful these economies are in attracting FDI after taking their size into account. The size of the economy indirectly gives the effect of other factors like macroeconomic stability, industrial competitiveness, the availability of natural and human resources.

UNCTAD (2012) has classified institution factors that determine FDI into two broad categories, namely: traditional and non-traditional factors. Traditional factors are those that are quantitative and, thus, can be directly measured and expressed numerically. These include factors such as economic growth rate (GDP), public investment, public debt, degree of openness, inflation rate, rate of Return on Investment (ROI) and population. Non-traditional determinants are those factors that are more qualitative, and consequently, are not always susceptible to direct measurement. These factors contribute to what might be called a country's business environment which can generally be gauged through surveys of the investor firms. These non-traditional factors are usually measured indirectly through proxy and dummy variables. These factors include infrastructure, quality of labour, political stability and economic integration.

The model predicts that FDI becomes more dominant relative to domestic production and trade as countries become more similar in terms of relative size and endowments. The model also predicts that relatively similar factor endowments between countries encourage horizontal FDI and vice versa (Carr et al., 2001).

The Model Specification for FDI inflows is as follows:

$$FDIit = \alpha i + \beta 1 GDPit + \beta 2 EXDSit + \beta 3 INFit + \beta 4 LIRit + \beta 5 OPENit + \beta 6 CORRit + \beta 7 GOVEFPit + \beta 8 STABPit + \beta 9 REGQUPit + \beta 10 LAWPit + \beta 11 NETit + \mu it.$$

where FDIit was the ratio of foreign direct investments to nominal GDP in country *i* at time *t*, with GDPit, EXDit, INFit, LIRit, and OPENit being the corresponding GDP growth, debt service on the external debt, inflation rate, lending interest rate, and degree of openness.

Variable applied in the model is specified as follows: governance variables included: CORRit, GOVEFPit, STABPit, REGQUPit, and LAWPit, representing percentile ranks of Control of Corruption, Government Effectiveness, Political Stability and Absence of Violence/Terrorism, Regulatory Quality and Rule of Law. NETit represents internet users per 100 people.

Descriptive Analysis

Return on Investment (ROI) is one of the barometers applied by the investor before they decide to invest in a certain country. The Return on Investment is a performance measure used to evaluate the efficiency of an investment or compare the efficiency of several different investments. ROI tries directly to measure the amount of return on a particular investment, relative to the investment's cost. It is as useful in evaluating the potential return from a stand-alone investment as it is in comparing returns from several investments. This fact is also applied in PTA that countries have signed PTA but the attractiveness of the individual country within the PTA is vital input applied by the investor to PTA members.
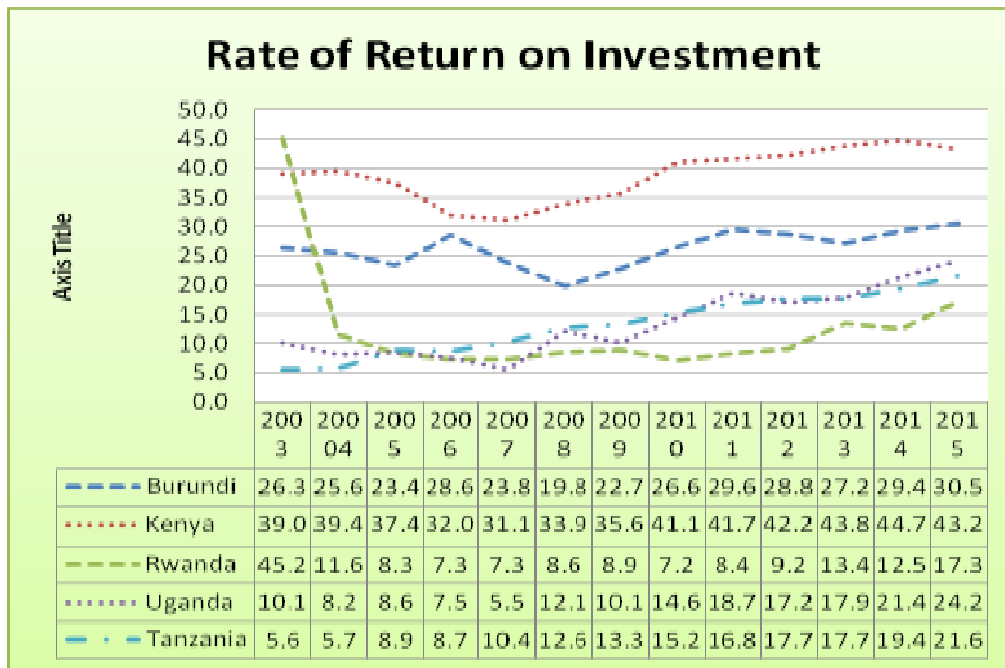

Figure 2. Rate of Return on Investment. Source: Author's calculation based on WDI data (2019).

From Figure 2 above, it is clear that Kenya has the highest return on capital than any other member in EAC. Hence, this stands to be the highest FDI destination in EAC. Practices have shown that although Tanzania has a low rate of investment return compared to Kenya, since the signing of the Common Market Protocol in 2009, Kenya has been enjoying the lion share of the FDI inflows in EAC. Kenya receives an

average of 50 percent of the total FDI coming to EAC countries. A high rate of investment in Kenya is humped by regulatory factors; for instance, in Kenya, the telecom industry regulator requires that foreign firms that invest in the sector preserve 20 percent shareholding for Kenyans within three years of receiving the license while the Mining Act of 2016 restricts foreign participation in the mining sector. This is a similar case in other EAC countries. For instance, foreign companies operating in Tanzania are required to preserve 30 percent shareholding to local citizens while the Electronic and Postal Communications (Licensing) Regulations provides that Content Services License for free-to-air broadcasting requires 51 percent local ownership.

The local content requirement is introduced by Kenya by requiring foreign firms to find Kenyan shareholders and sell them 30 percent shares, a process that was perceived to be costly and time-consuming owing to the due diligence required to secure credible investors. It is difficult for a developing country to support itself with only domestic financial resources because these resources are limited. The dual gap framework identified the need for financial resources from foreign sources to augment available limited domestic financial resources to achieve sustainable economic growth in a country, especially for a developing country. External (foreign) debt and foreign direct investment (FDI) are required by developing nations to attain the economic status that allows them to be relevant for their residents and to compete globally. FDI and external debt tend to supplement domestic financial resources to empower a country to effectually perform her development programmers as well as elevate living standards of her populace. Figure 3 illustrates the external debt of the EAC countries.

Figure 3. Total external debt of the EAC countries. Source: Author's calculation based on WDI data (2019).

Reading through Figure 3, it is clear that Kenya has a very high external debt when compared to other EAC countries. The fact is that both FDI and external debt are the source of capital to developing countries and

they tend to complement each other. Hence, a country with very high external debt but low FDI inflows signals to have a problem in the institutional and governance issues. Most EAC countries have resolved into external borrowing as a means of cubing the deficit in their budget but the manor on which the money borrowed has been spent, and has harm on FDI inflows. Since EAC countries are prone to debt overhang problem due to mismanagement of external debt, also, they experience capital flight which limits the chances of FDI to contribute to economic growth. The expectation is that capital flows from external debt and foreign direct investment should bridge the gap between the desired investments and savings mobilized internally but these have not been the case in the EAC. Likewise, the external debt and FDI are assumed to be beneficial, but inherent problems in Nigeria. These include capital flight, poor governance, macroeconomic instability, corruption, currency (Naira) depreciation, and weak export base among others, which make the effects of external debt and foreign direct investment in EAC ineffective measure of cubing budget deficit inherent in EAC countries.

Figure 4 provides the situation of inflation rate in EAC countries from 2003 to 2015. The reviewed literature has indicated three theoretical rationales which explain the impact of inflation on FDI: (1) Nnadi and Soobaroyen (2015) and Andinuur (2013) observed that inflation is a measure of macro-economic instability and that higher inflation rate could chase away prospective and already existing foreign investors, (2) inflation rate increase in host country reduces FDI as it erodes the value of the profits made by foreign firms (Sayek, 2009), and (3) low inflation reduces nominal interest rates and consequently pushes down the cost of capital for foreign investors. On the contrary, Obiamaka et al. (2011) noted that it is possible that inflation in the host country can have a positive impact on FDI inflows on condition that it does not exceed a certain threshold level. Overwhelmingly, literature shows that inflation harms FDI (Nnadi & Soobaroyen, 2015; Sayek, 2009; Andinuur, 2013; Xaypanya et al., 2015).

Furthermore, one of the greatest risks to FDI inflows in EAC is the rate of inflation to the host country. A high inflation rate tends to affect the productivity and the predictability of the investment returns. The expectation is that monetary policy is supposed to shape the economic environment that is conducive in at attracting FDI into host countries. However, the characteristics of monetary policy present the impossible trinity, a trilemma problem where trade-offs must be done to maintain economic stability. Two of these anchors are inflation autonomy and exchange rate variability. These trade-offs can impact on the host country's attractiveness on FDI inflow. Hence, a country within the PTA with a high inflation rate is likely to receive low FDI when compared to a PTA member with low inflation. Figure 4 below provides the summary of the inflation rate for the EAC countries from 2003 to 2015.

Reading through Figure 4, it is clear that, on average, all the EAC countries have maintained the inflation from 5 to around 10 percent with ups and downs in some years. Kenya and Burundi had the highest inflation rate in EAC in 2007 and 2008. From the data above it suggests that there is a very low deviation of the inflation rate among the EAC countries but the deviation in terms of FDI inflows is very high. Tanzania has proved to be dominant in terms of FDI inflows since the signing of the Common Market Protocol in 2010. EAC countries need FDI to assist in alleviating some of its socio-economic problems, such as unemployment, high level of unskilled labour, and finance capital deficits (Akinboade, Siebrits, & Roussot, 2006) as well as volatility in the inflation rate.
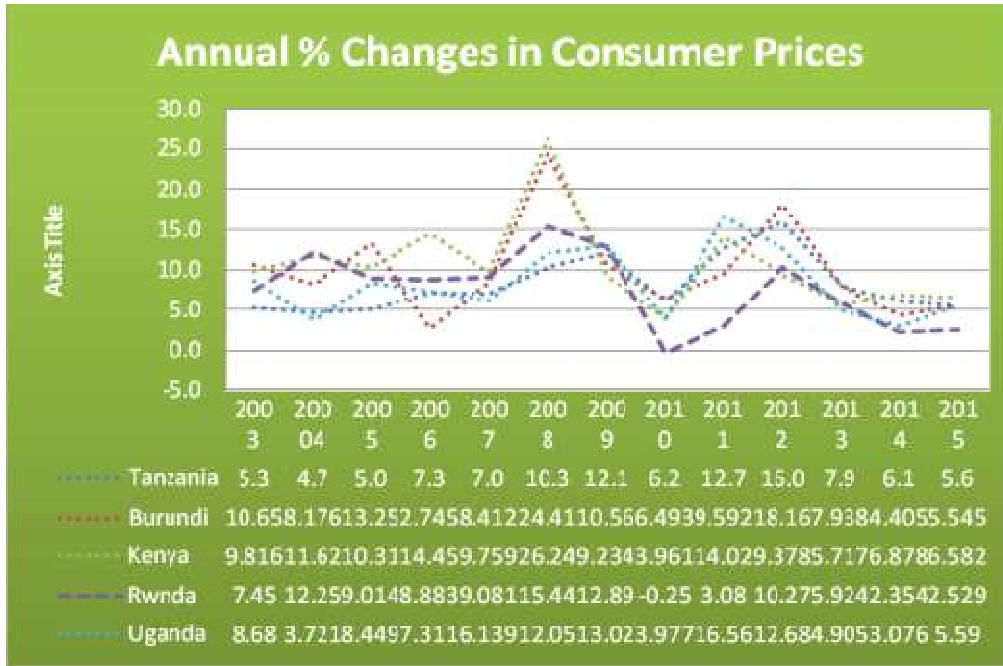
Figure 4. Annual % changes in consumer prices. Source: Author's calculation based on WDI data (2019).

Table 3

Overall Summary of Descriptive Statistics for the Variables

Variable	Obs	Mean	Std. Dev.	Min	Max
loggdpii	52	-1.738205	0.3302058	-2.302585	-1.203973
loggdpjj	52	-1.96973	0.3507418	-2.302585	-1.609438
logfdigdp	52	7.23703	2.002267	1.280934	9.223237
logbre	52	1.293785	0.1806211	0.9162908	1.504077
logrrit	52	2.938003	0.6197987	1.704748	3.811097
logrritz	52	2.507973	0.4340191	1.722767	3.072693
logintt	52	1.099017	1.305787	-1.609438	2.890372
logintz	52	0.8636324	0.7726363	-0.356675	2.302585
logcorrt	52	1.143876	0.0991803	0.9162908	1.252763
logcorr	52	1.02199	0.1921599	0.6931472	1.252763
logpsetp	52	1.10187	0.186815	0.4054651	1.386294
logpset	52	1.181616	0.0775967	1.098612	1.252763
logrlw	52	1.077015	0.1569599	0.6931472	1.252763
loggdprtz	52	1.858326	0.1456671	1.504077	2.04122
loggdpr	50	1.659397	0.642983	-1.609438	2.415914
logiftz	52	2.024654	0.3814822	1.547562	2.772589
logifj	52	2.086401	0.5564272	0.8563244	3.267278
logexdt	52	18.77805	0.4788842	18.10357	19.68028
logexdtp	52	18.08742	1.373553	15.29137	20.94874
logdisij	52	2.300285	0.2303149	1.90806	2.459589
logctci	52	6.945909	0.1889087	6.710523	7.140453
logctcj	52	7.822527	0.3202905	6.956545	8.253227
loggfcj	51	2.881562	0.6080633	0.751416	3.457893
logcbspi	52	4.91405	0.621059	3.94739	5.933041
logcbspj	52	4.214312	0.9181845	1.547562	5.485626

Regression Result

The regression analysis was done using three estimation models, i.e., fixed effects, pooled effects, and random-effects model. The emerging assumption is that either the fixed effect or random effect could be used for the interpretation or publication. In this, the pooled model is estimated only for comparison purposes. On the decision whether a fixed effect or random effect should be selected for estimation, a Hausman test was conducted. The Hausman result shows that the fixed effect model is adopted for the estimation of our model. Hence, the key assumption in is that the value of the intercept is not the same across the variable and the intercept does not vary over time, and they are time-invariant. The dependent variable is the model FDI inflows of Tanzania as a percentage of GDP.

In the estimation process, the following variables were found significant, while variables not listed here were found insignificant or have no effect to the dependent variables: logbre (Business Regulatory Environment), logrrit (Rate of Return on Investment for Tanzania Trading Partner in EAC), logrritz (Rate of Return on Investment for Tanzania Trading Partner in EAC), logcorr (Percentile Rank of Control of Corruption in Tanzania Trading Partners in EAC), logpset (Percentile Rank of Government Effectiveness for Tanzania), logrlw (Percentile Rank of Rule of Law for Other EAC Countries), logiftz (Annual % Changes in Consumer Prices for Tanzania Trading Partner in EAC), logifj (Annual % changes in Consumer Prices for Tanzania Trading Partner in EAC), logexdtp (Total External Debt for Tanzania Trading Partners), logdisij (Bilateral Distance Between Tanzania and Trading Partners as a Prox for Investment Cost), logctcj (Gross Fixed Capital Formation for Tanzania).

Table 4

Regression Result

logfdigdp	Tanzania FDI as a proportional of GDP	Coef.	Std. Err.	z	P > z
loggdpii	Annual % Change in GDP at Constant Prices for Tanzania	-1.10734	1.27829	-0.87	0.386
loggdpjj	Annual % Change in GDP at Constant Prices for Tanzania Trading Partner in EAC	-0.57708	0.669032	-0.86	0.388
logbre	Business Regulatory Environment	20.40309	5.77273	3.53	0.000***
logrrit	Rate of Return on Investment for Tanzania Trading Partner in EAC	0.884437	1.121141	0.79	0.43*
logrritz	Rate of Return on Investment for Tanzania Trading Partner in EAC	4.574382	1.446	3.16	0.002**
logintt	Internet Users per 100 People for EAC Countries Other Than Tanzania	0.097388	0.47426	0.21	0.837
logintz	Internet Users per 100 People for Tanzania	0.948739	1.324329	0.72	0.474
logcorrt	Percentile Rank of Control of Corruption in Tanzania	-0.08261	4.658015	-0.02	0.986
logcorr	Percentile Rank of Control of Corruption in Tanzania Trading Partners in EAC	5.808024	2.398961	2.42	0.015*
logpsetp	Percentile Rank of Government Effectiveness for Other EAC Countries	12.63672	4.516536	2.8	0.005**
logpset	Percentile Rank of Government Effectiveness for Tanzania	7.95043	4.036499	1.97	0.049*
logrlw	Percentile Rank of Rule of Law for Other EAC Countries	-19.2511	5.409238	-3.56	0.000***
loggdprtz	GDP Growth Rate of Tanzania	1.730567	1.153568	1.5	0.134
loggdpr	GDP Growth Rate of Tanzania Trading Partner	-0.3578	0.257379	-1.39	0.164
logiftz	Annual % Changes in Consumer Prices for Tanzania Trading Partner in EAC	2.390305	1.042094	2.29	0.022*
logifj	Annual % Changes in Consumer Prices for Tanzania Trading Partner in EAC	-1.93026	0.536814	-3.6	0.000***
logexdt	Total External Debt for Tanzania	-0.97126	0.689432	-1.41	0.159

Table 4 to be continued

logexdtp	Total External Debt for Tanzania Trading Partners	-1.04398	0.468787	-2.23	0.026*
logdisij	Bilateral Distance Between Tanzania and Trading Partners as a Prox for Investment Cost	12.26453	6.486401	1.89	0.059*
logctci	Gross Fixed Capital Formation for Tanzania	-3.15648	3.01561	-1.05	0.295
logctcj	Gross Fixed Capital Formation for Tanzania	-1.8691	0.68159	-2.74	0.006**
loggfcj	Gross Fixed Capital Formation for Tanzania Trading Partner	-0.1304	0.172193	-0.76	0.449
_cons		-1.0805	45.20597	-0.02	0.981

Notes. ***, **, and * indicate significance levels 1%, 5%, and 10% level, respectively.

The coefficient of Business Regulatory Environment (logbre) is positive and significant at 1% level; this implies that there is a positive relationship between Tanzania Business Environment and her counterparts in EAC. This implies that when Business Regulatory Environment of Tanzania Trading Partners in EAC changes by 1 unit, Tanzania regulatory environment changes by 20 units. This might be one of the factors accounting for the lion share of Tanzania FDI in EAC. Tanzania enjoyment of the lion share of FDI in EAC does not come without pre-conditions. Just like any other business people, foreign investors are driven by profits. They go to places where the net profitability is highest, not inevitably where costs are lowest; and they transmit the best practice when it is advantageous for them to do so, not necessarily when host countries need it.

This finding is consistent with the study by Haozhen Zhang (2015) who applied three sets of econometric models to examine the effects of business regulations on foreign direct investment (FDI) by using FDI statistics from 12 source countries to 64 host countries in 2000. The regression results suggest that FDI inflows are strongly correlated with business regulatory costs in the FDI host countries. By using endogenous threshold models and the rolling-regression techniques, we find evidence of a nonlinear threshold effect in the relationship between FDI inflows and regulatory costs. When a host country's regulatory costs are sufficiently low, a further decrease in regulations may not stimulate and may even decrease FDI inflows. On the other hand, beyond some threshold, FDI inflows significantly rise as the regulatory costs fall. Also, we find that the marginal effect of business taxes on FDI depends on the level of regulatory costs; i.e., as regulatory costs rise, the marginal effect of taxes on FDI inflows falls. Our results suggest that the regulatory competition between FDI host countries may have different impacts on countries with different regulatory cost levels. While a fall in the costs can directly stimulate FDI inflows in heavily regulated countries such as Brazil and China, it might not affect, or harm FDI inflows in low-cost countries such as Canada and the United States. In the low-regulatory-cost countries, tax incentives might be more effective to attract FDI than those in heavily regulated countries.

The coefficient of the Return on Tanzania Investment (logrrit) is significant at the 10% level. This suggests that when Tanzania Returns on Investment change by 1 unit, FDI inflows increase by 0.9. The fact that Tanzania return investment is positive and significant stands as a magnet to attract FDI. Some of the reason that might account for the positive Investment Return for Tanzania is the stability of inflation rate and the discovery of oil and gas. This finding is in line with Sun, Yang, and Xiao (2016) who have also examined the impact of high investment rate in China and concluded high investment rate and the rapid growing foreign-invested economy in China was attributed for by government investment, investment from the private sector, foreign direct investment, which are typical key factors that contribute to China's high investment rate, low cost of production factors, huge market demand, and economies of agglomeration are principal elements that attract FDI flows into China. Likewise, the reason that China continues to top in the investment rate is the

high return to capital in the country. During the period with high return to capital in the US and Japan, their investment rates were significantly higher than today. The comparatively higher return to capital brings surging FDI into China. The high investment rate and return to capital will sustain for at least 10 years.

Return on Investment for Tanzania Trading Partner in EAC (logrritz) is positive and significant at 5% level. This also suggests that there is a positive relationship between the Investment Return for Other EAC Country and Tanzania. It follows that when the FDI inflows of Tanzania Trading Partner change by 1 unit, Tanzania FDI increases by 4.5 units. This might also suggest that at every five investors coming to EAC four choose Tanzania as their best destination. This might be also suggesting that Tanzania has a better investment location advantage than her Trading Partners in EAC.

Percentile Rank of Control of Corruption in Tanzania Trading Partners in EAC (logcorr) had the expected positive sign and its coefficient was statistically significant at 10%. An increase in the percentile rank in control of corruption by 1 unit was likely to increase FDI inflows as a percent of GDP by about 5.4 units. According to the World Bank (2004), corruption was regarded as a threat to foreign investment for several reasons: It distorted the economic and financial environment; it reduced the efficiency of government and business by enabling people to assume positions of power through patronage rather than ability; and last but not least, it introduced an inherent instability into the political process. Foreign lenders and investors would find it difficult to conduct business effectively in countries where there is widespread financial corruption in the form of demands for special payments and bribes connected with import and export licenses, exchange controls, tax assessments, police protection, or loans.

Logrlw is negative but significant at 1% level. This suggests that the manner which issues the perceptions of the extent to which agents have confidence in and abide by the rules to other EAC countries can negatively affect Tanzania FDI inflows. Hence the choice of the investor to Tanzania economy is influenced by the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence in other EAC countries. The Institutional FDI Fitness Model predicts that all else equal countries with high Institutional Fitness experience higher inflows of foreign direct investment than countries with low Institutional Fitness. High Institutional Fitness means that a country's institutions are transparent, well-functioning, reliable, and predictable. Countries with high quality institutions provide an environment for both investment attraction and expansion of existing firms since it attracts a favourable environment for operation for foreign investors. Institutional reforms that change laws, rules, and regulations create a better investment climate in an economy by reducing transaction costs, hence, creating opportunities that attract FDI.

Three variables determine macroeconomic and investment cost: Annual % Changes in Consumer Prices for Tanzania Trading Partner in EAC (logifj), Total External Debt for Tanzania Trading Partners (logexdtp), Gross Fixed Capital Formation for Tanzania (logctcj). The three institutions conditions were significant but with negative relationship on Tanzania investment inflows. Hence the predictability of Tanzania FDI inflows is highly affected.

Inflation for Other EAC Countries (logifj) harmed Tanzania FDI inflows. The coefficient was statistically significant at 1% level. The model shows that a 1 unit increase in inflation would lead to a 1.9 units decrease in FDI inflows as a percent of GDP in Tanzania. This implies that macroeconomic stability for EAC countries is crucial in enhancing FDI inflows in Tanzania. Inflation reduces not only the level of business investment, but also the efficiency with which productive factors are put to use. It is thus necessary for the EAC Partner Sates

to maintain price stability to attract FDI. The higher the level of macroeconomic-instability, the higher the risk premium on investment and the lower the level of investment would be.

Conclusion and Policy Implication

Overall the study it found out that the perception people had on the rule of law and control of corruption, management of external debts, and Return on Investment for both Tanzania and her trading partners in EAC had a positive effect on the FDI inflows in Tanzania. Gross Fixed Capital Formation as a proxy for the Quality of Infrastructure in other EAC Countries has a negative implication of FDI inflows to Tanzania; hence improvement in infrastructure in EAC is critical in explaining FDI performance for both Tanzania and her counterpart in EAC.

Business Regulatory Environment and Return on Investment were found to be positively correlated with FDI inflows. Inflation harmed FDI. The study thus underscored the importance of a stable Business Environment for Tanzania to continue enjoying the lion share of FDI in EAC.

EAC Council of Minister has endorsed three key instruments to guide investment inflows: double taxation agreements, EAC Investment Code, and EAC model bilateral investment agreements. The EAC Code presents an earlier attempt by the EAC region to harmonies aspects about investment among member countries. The Code was to guide partner states on engaging with foreign investment and investors without any binding effect on any partner states. However, the study has noted that there is a very little integration of the investment instrument at the EAC level to investment policies at the partner states level. This will create a lot of contradiction to the predictability of the investment environment in the region.

The study also found Tanzania FDI performance in EAC is highly correlated with institution and macroeconomic environment in other EAC. High correlation implies that there is Hub-ad spoke relationship on FDI inflows between Tanzania and other EAC. Hence Tanzania should continue to push for regulatory and macroeconomic reform in other EAC countries to maintain enjoying the lion share of FDI inflows.

Finding from this paper also suggests that Tanzania should continue with her objective of promoting regional trade agreements. This is due to the fact that as the integration process has a positive influence on Tanzania FDI inflows, this is depicted with the positive correlation of Tanzania rate of investment return and other EAC countries. Given the fact that the common institutions which are responsible for implementing EAC Common Market have not been established in EAC Partner States, except at the EAC head quarter in Arusha, this also has stimulated high divergence between common investment policies and domestic investment measures. We need institutions that protect and promote the EAC integration vision, and are able to drive the Common Market agenda.

In order for Tanzania and the EAC Partner States to enjoy and reap the full benefit of the Custom Union and Common Market, the establishment of the Common Policies is a voidable. Common policies will also reduce the transaction and compliance cost and hence eliminate the practice of applying and implementing investment measures in a piece meal fashion. The overriding objective of common policies is to tackle invisible barriers by ensuring that there are no non-tariff barriers of any nature embedded in national legislation or national practices.

Regional integration is not a series of events characterized by the conclusion and signing of legal instruments "per se". It is a gradual process carefully undertaken. To minimize the chances of opting to a Non-Tariff Barrier an optimum situation Tanzania and other EAC countries need to ensure that the Common

Market is being built onto an established Customs Union in a well sequenced manner. That way a Common Market can be built deliberately and at a safe pace of integration process.

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