RESEARCH ARTICLE

TOWARDS A SUSTAINABLE FLOW OF FDI TO TANZANIA: DOES POLICY MATTER?

*Robby Timothy Warioba

Lecturer, Department of Economics, St. Augustine University of Tanzania, P O Box 307, Mwanza-Tanzania

ABSTRACT

Despite of its efforts to build and maintain attractive predicable investment climate, Tanzania have been experiencing ups and downs in the trends of the Foreign Direct Investment inflows (FDI). Though the country is reported to be among the major FDI recipients in African region, still much have to be done policy-wise to enable the country overcome the situation and maintain a reasonable share of FDI inflows. Using time series data spanning from 1980-2016, the study tested the significance of the relationship. Infrastructural development, macroeconomic stability and availability of skilled labor were found to significantly determine the flow of FDI to Tanzania. Surprisingly, the level of country openness was found to have an insignificant effect on the inflow of FDI. Natural resources abundance and the size of the market were also found to significantly determine the flow of FDI. The findings of this study are primarily intended to assist Tanzanian policy makers in making reasonable decision when articulating policies aimed at attracting more FDI to the country.

INTRODUCTION

Apart from being a source of external financing for Tanzanian economy, Foreign Direct Investment (FDI) has become a powerful instrument for both human development and economic growth. Given the smallness of the Tanzania economy; the smallness of the revenue collection, FDI plays a greater role of both supplementing domestic saving efforts and narrowing down the resource gaps. With the aim of transforming its centrally planned public owned economy into market driven private sector led economy, Tanzania has gone into several economic transformations since 1986 which includes completion of wide range of structural reforms, achievement of macroeconomic stability and declining in poverty levels (Muganda 2004). To accelerate development and economic growth the government realized its role of facilitating the private sector and other economic agents through putting favorable policies in place, provision of conducive investment environment for local and foreign investment and many other policies (CUTS & ESRF 2003; Ombundo 2018). Like many other countries across the globe, Tanzania has managed to build and maintain attractive and predictable investment climate through several actions. The maintained peace and political stability since its independence and a stable and predictable fiscal investment regime which provide a soft landing to all investors are some of the actions (Lukwaro n.d.). The number of investments both domestic and foreign that were registered by TIC has reported increasing due to attractive laws and foreseeable investment environment.

According to the UNCTAD reports, the stock of foreign direct investment (FDI) in Tanzania has increased steadily by 1,366million USD in the year 2016, as it reached 19,171million USD as compared to 17,805million USD of the year 2015, (Mugizi G., Gebre E., Biro, M., and Deltelbacher 2012; UNCTAD 2011) The World Investment Report published in 2012 (UNCTAD 2012) shows that Tanzania took the lead in attracting Foreign Direct Investment (FDI) in the East African region during the past one year. Steady GDP growth and lower inflation rates which are results of implemented institutional reforms and legal frameworks have been instrumental towards attracting investors to invest in Tanzania. This study is extending on the previously studies by investigating the policy-driven factors that can lead to the attraction of more FDI's to the country. Despite of the increasing figures of FDI inflows yet Tanzania face a number of challenges such as lack of adequate and reliable power, poor infrastructure, lack of designed areas for investment projects(such as farming lands, industrial plots). That makes the trend of the flow of FDI to the country to be not as smooth as required (Figure 1). These challenges require deliberate measures in order to attract more investors and retain the available ones. Figure 1, above illustrates a long term review of Tanzania's FDI performance over the period 1980 to 2016 by looking at FDI inflows in the country. It can be immediately seen that the country's FDI performance has followed closely the developments in its political economy, reflecting the dramatic shift from a centrally planned economy towards a more liberalized one open to foreign investment and increasingly active on the global market. From the early 1980s up till mid-1990s, Tanzania did not manage to make a

Corresponding author: **Robby Timothy Warioba**
Lecturer, Department of Economics, St. Augustine University of Tanzania, P O Box 307, Mwanza-Tanzania

significant breakthrough in attracting FDI to its economy. Suffice to say that in the twenty five years between 1970 and 1994, Tanzania attracted a very unreasonable amount of FDI inflows.
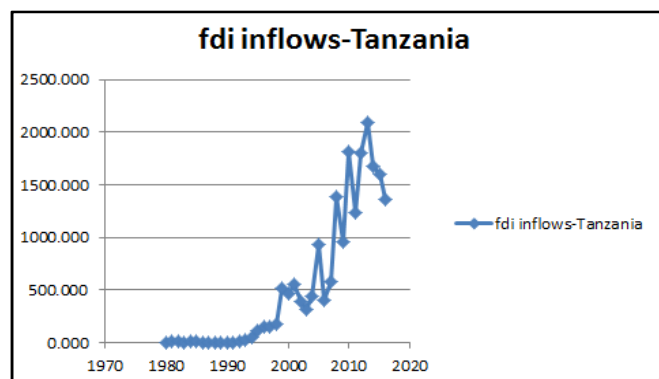
Source: World Development Indicators.

Figure 1. Trend of Net FDI inflows as a percentage of GDP in Tanzania

It was only thereafter, from 1995 onwards that Tanzania started being successful in attracting FDI to its economy. 1995 represents an important turnaround year for foreign investment attraction in the country as this year was characterized by a strong momentum in the economic reform process and formal World Trade Organization's (WTO) membership. Thereafter, the implications of the Mining Policy in 1996, the invigorated investment policy and Act of 1997 and other promotional efforts by Government, are noticeable through the sharp increase of FDI transactions from 1998 up to 2016. At the same time the political shocks of an infant democracy related to the October 2000 general elections may have affected the FDI inflows during that period, prompting investors to adopt 'a wait and see' approach to the continuation of the economic reform process. Overall, it can be argued that in the late 1990s a certain momentum in FDI flows has been registered as a result of a relatively successful investment policies enacted by the Government of Tanzania. Foreign investors become convinced about Tanzania's resolve towards liberalization and the country's potential as host to FDI activity. Several studies have been done on the impact of FDI on Economic growth worldwide and proved enough evidence that FDI inflows have a significant contribution to the economic growth (Adeolu 2007; Ahmad, Draz, and Yang 2018; Christopher 2014; Johnson 2006; Pegkas 2015).

It is commonly perceived that, FDI is largely driven among others, by natural resources, infrastructure and market size. Considering the instabilities in the trends of the flow of FDI to the country (Magombeyi, M. T. and Odhiambo 2016; Malanga 2017), and the variations in the conclusion regarding the relationship with its determinants (Asiedu 2006; Daniela and Natalija 2017; Demirhan and Masca 2008; Kumari and Sharma 2017; Mahmood 2018; Narayanamurthy, Sridharan, and Rao 2010), this study empirically analyze the impact of policy variables in determining the flow of FDI to Tanzania. The study will also find out the extent to which these variables determine FDI inflow to the country. The research question to be answered by this study is does policy variables determine FDI inflows in Tanzania? This adds up to the existing knowledge as policy makers will know exactly where to put more efforts when constructing policies that will lead to attracting more FDI inflows to the country. The rest of the

study is organized as follows: Section two provides theoretical and empirical literatures reviewed from both inside and outside Tanzania. Data and research methodology is described in section three. Section four provides the estimation results and discussion of the results. Section five gives the conclusion and policy implications of the estimated results.

Literature Review

Foreign Direct Investment (FDI) is defines as the flow of capital or assets from an investor's home country into a foreign country in the form of acquisition or merger with an organization (Samsudin, Bakar, and Hashim 2012). (UNCTAD 2002) describes FDI as an undertaking which includes a continuous association reflecting continual benefits and control by a foreign citizen engaged into a business in an economy other than that of the citizen's. Similarly, (World Bank n.d.) described FDI as the created investment with the aim of achieving a permanent management profits (usually at least 10 % of stock) in a venture operating in a state separate from the investor's country. Literature sites four different reasons as to why firms should invest abroad. The reasons include market seeking, efficiency seeking, natural resource seeking and strategic asset seeking (Ogunkola and Jerome 2006). Under market-seeking investment, a market attracts foreign investors as it is large enough to create demand for their products. For the case of efficiency-seeking investment, FDI considers location where production cost (or cost of doing business) is lower (Bayraktar-Sağlam and Sayek Böke 2017). For that case, factors such as the cost, labor force quality and the level of development of infrastructure become very important (Och, Baerbig, and Jadamba 2017). Natural-resource seeking investment looks at the natural resource endowment of the expected destination. That makes countries endowed with huge deposits of mineral resources to be more likely to attract FDI. Lastly, strategic-asset seeking investment takes into important factors that include manufactured assets, as embodied in extremely-qualified and dedicated labor force, images and brand names, shares in certain markets, and so on (Ogunkola and Jerome 2006).

Among the important roles played by foreign direct investment (FDI) is the growth dynamics of developing countries. At least three development gaps namely, investment gap, foreign exchange gap and tax revenue gap can be filled by FDI (Anyanwu 2012). Firstly, by providing capital for investment, the Investment gap is filled. The foreign exchange gap is filled through investments and export earnings by providing foreign currency. And finally, the resulting tax revenue from economic activities fills the tax revenue gap. FDI can also facilitate transfer of technology and sharing of managerial skills, create modern job opportunities, enhance local market operations, boost global market access for export commodities, etc. Also, FDI leads to the promotion of host countries' transport and communication infrastructures. Furthermore, multinational corporations (MNCs) that conduct FDI are taken as an Instruments of rivalry, managerial skills and know-how, in that case the performance and efficiency of local firms in host economies is improved (Bengoa and Sanchez-robles 2003; Romer 1993) With a greater attraction of FDI inflows, it is then easier for the countries to implement their investment related missions for the sake of achieving economic growth and development. The role played by FDI investment in both the developing and developed world is among the motives of this analysis.

Table 1. Variables Description

Variable	Description	Measurement	References
Dependent variable			
fdi	Foreign Direct investment, net inflaw	Measured as a percentage of GDP in billion US$	(Kumari and Sharma 2017)
Policy variables			
hcaptl	Human Resource capabilities	Measured by Literacy rate	(Dae-Bong 2009; Le, Gibson, and Oxley 2005)
macrstb	Macroeconomic Stability	Measured by Inflation rate	(Asiedu 2006; Kumari and Sharma 2017)
infrust	Infrastructure development	Measured by Fixed Tellephone subscriptions (per 100 people)	(Asiedu 2006)
open	Level of country openness	It's a total trade volume as a percentage of GDP (Exp+Imp/GDP)	(Asiedu 2006)
Control variables			
natres	Natural Resources Endowment	Measured by total natural resources rents (Oil rents + Natural Gas rents + mineral rents + forest rents)	(Bokpin, Mensah, and Asamoah 2015)
mrktsize	Market size	Measured by Gross Domestic product (in billion US$)	(Kok and Ersoy 2009; Kumari and Sharma 2017)

Table 2. Descriptive Statistics

	Mean	Median	Std. dev.	Min.	Max.	N
FDI	521.202	172.306	647.842	0.01	2087.261	37
Policy Variables						
Human Capital	87.475	67.801	132.755	47.378	871.753	37
Macroeconomic Instability	17.822	16.001	11.288	4.736	36.146	37
Telephone Subscriptions	0.324	0.301	0.082	0.211	0.51	37
Country Openness	0.524	0.501	0.117	0.335	0.756	37
Control Variables						
Natural Resources	11.025	10.16	2.04	9.03	15.353	37
Market Size	16.934	11.337	13.649	4.258	48.197	37

Note: FDI is measured in billion US$, natres is measured in 1,000 hectors and mrktsize (GDP) is measured by billion US$. hcaptl is measured by literacy rate, infrust is measured telephone subscriptions (per 100 people), open is a total trade volume as a percentage of GDP, (Exp + Imprt /GDP) and macrstb is measured by inflation rate.

Literatures on economic growth have proved the existence of a positive relationship between FDI and economic growth (Azam and Ahmed 2015; Encinas-ferrer 2015; Mahembe and Odhiambo 2016; Tahir, Khan, and Shah 2015). Among others FDI can affect a country's output and income by increasing the labor force trough job creation and human capital enhancement through technology and knowledge transfers. In line with the various studies on the relationship between FDI and Economic growth, and 2025 Tanzania's development vision**:** this study seeks to investigate on the determinants of FDI inflow to Tanzania. In recent years, Tanzania has managed to attract influx of foreign resources in various sectors both foreign and domestic direct investment. According to (UKEssays.com 2018), the influx was huge in the mining sector though its contribution was smaller during the pre-reform period. The mining sector, particularly natural gas and petroleum, are currently considered to attract much FDI inflow. Given the importance of FDI to the Economic growth, there is no vast research on the determinants of FDI. Based on various literatures on the determinants of FDI in developed countries, Tanzania being among them, this study investigates the determinants of FDI inflow in Tanzania as it was also suggested by (Liargovas 2012; Narayanamurthy et al. 2010) in their study on FDI and trade openness, where it was found that apart from trade openness, there were some other factors such as political stability, market size, exchange rate stability which had an influence on FDI. (Cheng and Kwan 2000; Wang and Swain 1995; Yasmin, Hussain, and Chaudhary 2003) in their studies on the volumes and distribution of FDI in developing countries, have discovered that political stability determine FDI inflow. Either, (Bayer, Y. and Alakbarov 2016; Mengistu and Adhikary 2011) concluded that good business environment in a country, lower level of corruption and better administrative policies attract FDI inflow. On the other hand, macroeconomic variables such as market size, trade openness,

physical infrastructure, interest rate, skilled labor force and others were also seen to attract FDI in a country, (Liu and Qiu 2012; Vijayakumar, N., Sridharan, P. and Rao 2010). Either, (Kandiero, Tonia and Chitiga 2006) stressed on the positive effect of the flow of FDI to Africa resulted from the increased openness in the economy. In their results further trade liberalization was predicted to increase FDI inflows to service sectors such as finance, banking, telecommunications, transportation, business, insurance, retail as well as legal services. (Leitão and Faustino 2010) examined the effect of trade openness, labor cost, market size and economic stability on the flows of FDI to Portugal. In their analysis market size and trade openness was found to be the important factors explaining the flow of FDI into Portuguese economy. Using time series data for the period 1980-2013, (Mohammad and Gharaibeh 2015) examined the major determinants of FDI inflows to Bahrain. Country welfare, economic stability inflation rate, trade openness, labor force, population and public education were found to be the major determinants of FDI inflow into Bahrain.

METHODOLOGY

Data and Variables Description: The analysis is based on annual Time series data from 1980 to 2015. The Eviews software was used for analysis. Data were obtained from UNESCO, knoema and World Bank websites. The dependent variable is the net inflow of the FDI as a percentage of GDP in billion US$. Explanatory variables for this study are divided into two groups namely Policy variables and Control variables (See Table 1 for variables description and measures). The major concern of this study is on Policy variables which are considered as the ones that can be altered by policy makers directly. The variables selection was determined by data availability. The study includes four policy variables as

indicated in table 1. The coefficients of the assessed variables (hcaptl, infrust, and open) are predicted to be positive since a sufficient and appropriate skilled work force is expected to have a positive impact on the flow of FDI (Asiedu 2006; Yussof and Ismail 2002); a higher level of infrastructure development is expected to increase the flow of FDI to the country and a country open to trade is likely to increase the FDI inflows. For the variable macrstb, a negative sign is expected since with higher inflation rates the economy is expected to be unstable, and hence reduce the FDI inflow (Asiedu 2006). Under the control variables category, the study uses two variables which are natural resources availability measured by the total natural resources rent and market size measured by Gross Domestic product (in billion US$). The coefficients of these assessed variables are predicted to be positive since the more availability of resources and big market size are expected to increase FDI inflow.

Data Analysis

As it is well known that the main objective of foreign investors is to maximize profit from their investments, they are usually interested to invest in a country with promising bright prospects of reasonable profits. In general foreign investors will prefer to invest in countries with sound macroeconomic indicators, stable government, good infrastructures, adequate skilled man power, political stability, low levels of corruption, and many other factors. Based on the literatures reviewed (Asiedu 2006; Kumari and Sharma 2017; Narayanamurthy et al. 2010)the following model was specified to analyze the determinants of FDI inflow in Tanzania.

$$fdi_t = \beta_0 + \beta_1 hcaptl_t + \beta_2 macrstb_t + \beta_3 \, inf \, rust + \beta_4 open + \beta_5 natres_t + \beta_6 mrktsize_t + v_t \, (1)$$

Where;
fdi_t = foreign direct investment
$macrstb_t$ = macroeconomic stability
$hcaptl_t$ = human resource capabilities
$inf \, rust$ = Infrastructure
$open$ = country openness
$natres$ = natural resources availability
$mrktsize$ = country's market size

The study model above expresses FDI inflows as a function of: human resource capabilities (hcaptl), Macroeconomic Instability (macrstb), infrastructure development level (infrust), Level of country openness (open), Natural Resources (natres), and Market size (mrktsize). The study uses E-view version 10 software to estimate the model of the study by using ordinary least squared (OLS) technique. The results of the initial descriptive statistics suggested the normalization of all of the explanatory variables, which lead them to appear in natural logarithm. Table 2 gives the Descriptive statistics of the data used for analysis.

RESULTS AND DISCUSSION

To establish the factors determining the flow of FDI to Tanzania, multiple regression analysis is used by this study as a statistical tool to estimate the relationships between FDI and explanatory variables. Durbin-Watson statistics, adjusted R-square, and P- value were used for decision making criteria. In this study P-value is used for testing the statistical hypotheses.

It is the criterion that helps decide whether to accept or to reject the proposed hypothesis.

Results: Using ADF unit root tests, the variables in this study were first tested for the presence of unit roots starting from the level form. This test aimed to check if the variables are integrated of the same order. The null of the unit root was rejected when first differenced for all variables, indicating that all variables are first differenced stationary or integrated of the same order, that is all are I(1). Table 3 below represent ADF unit root test for the two levels. The stability of the dependent variable was tested using CUSUM test. Since the cumulative sums are located within the two standard deviation bands, this shows that all the residuals are stable and variables are cointegrated, hence, the model is stable and correctly specified. The results are presented in Figure 2 below; Having established that all variables in the study are integrated of order two I(1), the variables were then tested for granger causality for a group of all the variables in the study. Surprisingly, the result didn't show any evidence of causality among all the variables except for the two variables.

Table 3. Unit Root Test Results

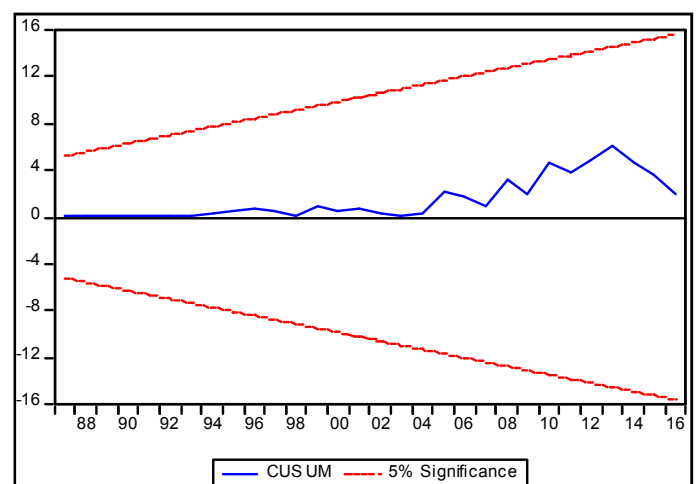| ADF (Intercept)		
Variable	Level	1st Difference
fdi	0.9162	0.0000*
lhcaptl	0.7087	0.0000*
lmacrstb	0.7417	0.0000*
linfrust	0.5047	0.0000*
lopen	0.1767	0.0004*
lnatres	0.5056	0.0001*
lmrktsize	0.8378	0.0012*

Figure 2. CUSUM Test (Dependent Variable Stability Test)

It suggests that only human capital and natural resources granger cause FDI. Proxies used for these variables might be the reason. This also calls up for further research on the measures of the explanatory variables used in different studies. The result for the regression output is presented in table 5 below; Variables were then estimated to see the long run equilibrium relationship. Before reporting the regression results, the ADF test without a constant was performed to see whether the residuals from this regression are stationary. Rejection of the null evidenced that the series are indeed cointegrated. See appendix 1 for the test output. Serial correlation in the errors was checked to confirm the validity of the goodness-of-fit measures. Residuals were then tested for serial correlation.

Table 4. Granger Causality Test Results

Pairwise Granger Causality Tests
Date: 04/10/19   Time: 10:06
Sample: 1980 2016
Lags: 2

Null Hypothesis:	Obs	F-Statistic	Prob.
LHCAPTL does not Granger Cause FDI	35	6.71096	0.0039
LMACRSTB does not Granger Cause FDI	35	1.08765	0.3499
LNATRES does not Granger Cause FDI	35	3.27775	0.0016
LMRKTSIZE does not Granger Cause FDI	35	1.88356	0.1696

Table 5. OLS Results

Dependent Variable: Foreign Direct Investment (fdi)

Independent variables	Coefficient	Std. error	t-Statistic	Prob.
Log (human capital)	155.31	39.82	3.91	0.0023
Log (macroeconomic Instability)	-191.19	53.33	-3.59	0.0011
Log (infrastructure)	535.72	217.75	2.46	0.0019
Log (openness)	36.25	238.08	0.15	0.8800
Log (natural resources)	319.79	77.60	4.12	0.0004
Log (Market size)	313.81	75.94	4.13	0.0003
Constant	-443.38	78.09	-5.68	0.0000
R^2	0.94			
Adjusted R^2	0.93			
F-Statistic	78.71			
Durbin-Watson stat.	2.92			
No. of observations (n)	37			

The null hypothesis was not rejected, which suggests the nonexistence of Serial correlation, See Appendix 2 for regression results. The long run regression output is presented in table below;

DISCUSSION

All variables are highly significant and have the predicted signs, except country openness which is insignificant even at 10%. It is proved that availability of skilled labor, developed infrastructures, natural resources abundance and market size promote FDI, while, macroeconomic instability reduces FDI inflow. The regression results show that a ten percent ceteris paribus increase in skilled labor force increases FDI inflow to Tanzania by 16 billion US$ and a ten percent increase in infrastructural development increases the flow of FDI by 25 billion US$, while a ten percent ceteris paribus increase in macroeconomic instability in the country is predicted to reduce FDI inflow by 19 billion US$. Natural resource abundance leads to a 32 billion US$ increase in the predicted FDI inflow, This is a reasonable effect as expected, since natural resources are the major determinant of FDI inflow especially in Developing countries. A ten percent ceteris paribus increase in the country's market size on the other hand is predicted to increase FDI inflow by 31 billion US$. This suggests that macroeconomic stability, infrastructural development and skilled labor force both significantly determine the flow of FDI to the country, among the policy variables considered. This result is consistent with the research results of (Asiedu 2006; Jadhav 2012; Och et al. 2017; Onyeiwu et al. 2004; Sekkat and Veganzones-Varoudakis 2007) who found FDI flows to be significantly and positively determined by market size, natural resources and other factors. Country openness was found to insignificantly determine the flow of FDI to Tanzania. This is consistent with the studies done by (Mahmood 2018; Narayanamurthy et al. 2010) However, the results are not consistent with the results of (Jadhav 2012) who found natural resources to have a significant and negative impact on the flow of foreign direct investment.

The result also shows that about 92% of the variation in FDI is explained by the explanatory variables.

Conclusion and Policy Implications

This study examined the determinants of FDI in Tanzania, with a special attention on the effect of policy variables. The results signify that the policy variables have a significant impact on determining the flow of FDI to Tanzania. A natural resource endowment is found to be the major determinant of the flow of FDI to the country. Large market size on the other hand, has found to promote FDI inflow, while, macroeconomic instability reduces it. The findings of this study are in line with what is suggested by the theory. Based on the discussed results above, various policy conclusions may be reached on. First it is clearly shown that the Policy variables considered in this study proved their importance in determining the flow of FDI to Tanzania. For the control variables, natural resource found to attract more FDI inflow in Tanzania as compared to the size of the market, though their impact is almost same. Either, infrastructural development appeared to have a significant impact on determining FDI inflow, followed by macroeconomic instability and the presence of skilled labor force. Policy makers in Tanzania have to work on policies that ensures infrastructural development, supports macroeconomic stability and ensure availability of skilled labour to attract more investors in the country. The outcomes of this study are primarily intended to assist Tanzanian policy makers in making reasonable decision when articulating policies intended at attracting more FDI to the country. Despite the fact that Tanzania has shown a positive FDI performance in recent years and revealed a huge possibility of attracting further FDI activity, it still have miles to go for it to reach a reasonable share of FDI inflow with the asset and technological requirements of industrial development. Based on the outcome of this study, it is therefore suggested that there is a great potential to increase FDI activity in the country's economy by maximizing FDI impact on sound macroeconomic policies, natural resources and market size.

It is also suggested that more research should be done to include other determinants so as to have a genuine conclusion on the major determinants of FDI inflow in Tanzania.

Acknowledgement

REFERENCES

Adeolu, B. A. 2007. *FDI and Economic Growth: Evidence from Nigeria*. Vol. 165.

Ahmad, Fayyaz, Muhammad Umar Draz, and Su-Chang Yang. 2018. "Causality Nexus of Exports, FDI and Economic Growth of the ASEAN5 Economies: Evidence from Panel Data Analysis." *The Journal of International Trade & Economic Development* 27(6):685–700.

Anyanwu, John C. 2012. "Why Does Foreign Direct Investment Go Where It Goes ?: New Evidence From African Countries." 462:425–62.

Asiedu, Elizabeth. 2006. "Foreign Direct Investment in Africa: The Role of Natural Resources, Market Size, Government Policy, Institutions and Political Instability." *The World Economy* 29(1):63–77.

Azam, Muhammad and Ather Maqsood Ahmed. 2015. "Role of Human Capital and Foreign Direct Investment in Promoting Economic Growth: Evidence from Commonwealth of Dependent States." *International Journal of Social Economics* 42(2):98–111.

Bayer, Y. and Alakbarov, N. 2016. "Corruption and Foreign Direct Investment Inflows in Emerging Market Economies." *ECOFORUM* 5(2):303–8.

Bayraktar-Sağlam, Bahar and Selin Sayek Böke. 2017. "Labor Costs and Foreign Direct Investment: A Panel VAR Approach." *Economies* 5(4):36.

Bengoa, Marta and Blanca Sanchez-robles. 2003. "Foreign Direct Investment , Economic Freedom and Growth : New Evidence from Latin America." 19:529–45.

Bokpin, Godfred Alufar, Lord Mensah, and Michael E. Asamoah. 2015. "Foreign Direct Investment and Natural Resources in Africa." *Journal of Economic Studies* 42(4):608–21.

Cheng, Leonard K. and Yum K. Kwan. 2000. "What Are the Determinants of the Location of Foreign Direct Investment? The Chinese Experience." *Journal of International Economics* 51(2):379–400.

Christopher, Nicodemas. 2014. "Foreign Direct Investment and Economic Growth in Tanzania: The Granger-Causality Analysis." *Uongozi Journal of Management and Development Dynamics* 22(December 2011):22–37.

CUTS & ESRF. 2003. *Investment Policy in Tanzania: Performances and Perceptions*.

Dae-Bong, Kwon. 2009. "Human Capital and Its Measurement." *The 3rd OECD World Forum on "Statistics, Knowledge and Policy" Charting Progress, Building Visions, Improving Life* (October):1–11.

Daniela, Mamucevska and Nikolovska Natalija. 2017. "FDI Determinants, Incentive Policies and FDI Effects in the Western Balkan Countries." *Eurasian Economic Perspectives, Eurasian Studies in Business and Economics* 8(2):339–56.

Demirhan, Erdal and Mahmut Masca. 2008. "Determinants of Foreign Direct Investment Flows to Developing Countries: A Cross-Sectional Analysis." *Prague Economic Papers* 17(4):356–69.

Encinas-ferrer, Carlos. 2015. "Foreign Direct Investment and Gross Domestic Product Growth." *Procedia Economics and Finance* 24(July):198–207.

Jadhav, Pravin. 2012. "Determinants of Foreign Direct Investment in BRICS Economies: Analysis of Economic, Institutional and Political Factor." *Procedia - Social and Behavioral Sciences* 37:5–14.

Johnson, Andreas. 2006. "The Effects of FDI Inflows on Host Country Economic Growth." *CESIS Electronic Working Paper Series* (January):1–57.

Kandiero, Tonia and Chitiga, Margaret. 2006. "Trade Openness and Foreign Direct Investment in Africa." 9(3):355–70.

Kok, Recep and Bernur Acikgoz Ersoy. 2009. "Analyses of FDI Determinants in Developing Countries." *International Journal of Social Economics* 36(1–2):105–23.

Kumari, Reenu and Anil Kumar Sharma. 2017. "Determinants of Foreign Direct Investment in Developing Countries: A Panel Data Study." *International Journal of Emerging Markets* 12(4):658–82.

Le, Trinh, John Gibson, and Les Oxley. 2005. "Measures of Human Capital : A Review of the Literature." (December):1–50.

Leitão, Nuno Carlos and Horácio C. Faustino. 2010. "Determinants of Foreign Direct Investment in Portugal." *The Journal of Applied Business and Economics* 11(3):19–26.

Liargovas, Panagiotis. 2012. "Foreign Direct Investment and Trade Openness : The Case of Developing Economies Foreign Direct Investment and Trade Openness : The Case of Developing Economies." *Social Indicators Research* (June):323–31.

Liu, Qing and Larry D. Qiu. 2012. "Labor Training and Foreign Direct Investment." *UNiversity of International Business & Economics, Beijing, China* 1–17.

Lukwaro, Fanuel Yona (Tanzania Investment Center). n.d. *An Overview of the Investment Climate and Opportunities in Tanzania, 2012*.

Magombeyi, M. T. and Odhiambo, N. M. 2016. "Foreign Direct Investment Dynamics in Tanzania: Trends, Policies and Challenges." *Socioeconomica* 5(9):137–52.

Mahembe, Edmore E. and Nicholas M. Odhiambo. 2016. "Does Foreign Direct Investment Cause Economic Growth? A Dynamic Panel Data Analysis for SADC Countries." *International Journal of Emerging Markets* 11(3):316–32.

Mahmood, Haider. 2018. "An Investigation of Macroeconomic Determinants of FDI Inflows in Bangladesh." *Academy of Accounting and Financial Studies Journal* 22(1):1–8.

Malanga, Alex. 2017. "Tanzania: Revealed - Why FDI Inflows to Tanzania Dipped By 15% - AllAfrica.Com." *AllAfrica*. Retrieved April 9, 2019 (https://allafrica.com/stories/201711230397.html).

Mengistu, Alemu Aye and Bishnu Kumar Adhikary. 2011. "Does Good Governance Matter for FDI Inflows ? Evidence from Asian Economies." *Asia Pacific Business Review* 17(3):281–99.

Mohammad, Ahmad and Obeid Gharaibeh. 2015. "The Determinants of Foreign Direct Investment-Empirical Evidence from Bahrain." *International Journal of Business and Social Science* 6(8):94–106.

Muganda, Anna. 2004. "Tanzania ' s Economic Reforms - and Lessons Learned." *Scaling Up Poverty Reduction: A Global Learning Process and Conference, May 25–27* 1–28.

Mugizi G., Gebre E., Biro, M., and Deltelbacher, S. 2012. "Tanzania: Social Accountability Monitoring - Reports." (September).

Narayanamurthy, Vijayakumar, Perumal Sridharan, and Kode Chandra sekhara Rao. 2010. "Determinants of FDI in BRICS Countries: A Panel Analysis." *Int. Journal of Business Science and Applied Management* 5(3).

Och, Maralgua, Christian Baerbig, and Tsolmon Jadamba. 2017. "Determinants of Inward FDI in Mongolia: An Application of the ARDL Bounds Testing Approach to Cointegration." *Asian Economic and Financial Review* 7(3):307–33.

Ogunkola, Olawale. .. and Afeikhena Jerome. 2006. "Foreign Direct Investment in Nigeria: Magnitude, Direction and Prospects." *African Economic Research Consortium* (1):1–302.

Ombundo, Alfred (East Africa Trade). 2018. *Tanzania Investment Policy Assessment*. Vol. 15.

Onyeiwu, Steve, Hemanta Shrestha, Steve Onyeiwu, and Hemanta Shrestha. 2004. "Determinants of Foreign Direct Investment in Africa." *Journal of Developing Societies* 20(1–2):89–106.

Pegkas, Panagiotis. 2015. "The Impact of FDI on Economic Growth in Eurozone Countries." *The Journal of Economic Asymmetries* 12(2):124–32.

Romer, D. 1993. "Openness and Inflation: Theory and Evidence." *The Quarterly Journal of Economics* 108(4):869–903.

Samsudin, Nurulain Mohd, Ahmad Naqiyudin Bakar, and Rugayah Hashim. 2012. "Challenges of Backsourcing of E-Government Services: A Case Study." *CHUSER 2012 - 2012 IEEE Colloquium on Humanities, Science and Engineering Research* 463–66.

Sekkat, Khalid and Marie-Ange Veganzones-Varoudakis. 2007. "Openness, Investment Climate, and FDI in Developing Countries." *Review of Development Economics* 11(4):607–20.

Tahir, Muhammad, Imran Khan, and Afzal Moshadi Shah. 2015. "Foreign Remittances , Foreign Direct Investment , Foreign Imports and Economic Growth in Pakistan : A Time Series Analysis." *AEBJ* 10(2):82–89.

UKEssays.com. 2018. "Foreign Direct Investment Impact On Tanzania Mining Sector." Retrieved April 9, 2019 (https://www.ukessays.com/essays/economics/foreign-direct-investment-impact-on-tanzania-mining-sector-economics-essay.php).

UNCTAD. 2002. "United Nations Conference on Trade and Development UNCTAD Annual Report, United Nations, New York."

UNCTAD, United Nations. 2011. "United Nations Conference World Investment Report 2011 Non-Equity Modes of International Production and Development Country Fact Sheet." 1–2.

UNCTAD, United Nations. 2012. *World Investment Report, Towards a New Constraction of Investment Policies*.

Vijayakumar, N., Sridharan, P. and Rao, K. C. .. 2010. "Determinants of FDI in BRICS Countries: A Panel Analysis." *Int. Journal of Business Science & Applied Management* 5(3):1–13.

Wang, Zhen Quan and Nigel J. Swain. 1995. "The Determinants of Foreign Direct Investment in Transforming Economies: Empirical Evidence from Hungary and China." *Weltwirtschaftliches Archiv* 131(2):359–82.

World Bank, 1996. n.d. *The World Bank Annual Report, 1996*.

Yasmin, Bushra, Aamrah Hussain, and Muhammad A. L. I. Chaudhary. 2003. "Analysis of Factors Affecting Foreign Direct Investment in Developing Countries." *Pakistan Economic and Social Review* XLI(1 & 2):59–75.

Yussof, Ishak and Rahmah Ismail. 2002. "Human Resource Competitiveness and Inflow of Foreign Direct Investment. " *Asian Pacific Development Journal* 9(1):89–107.

APPENDICES

Appendix 1. Residual Stationarity test

Null Hypothesis: RESID01 has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-9.956219	0.0000
Test critical values:	1% level	-3.626784	
	5% level	-2.945842	
	10% level	-2.611531	

*MacKinnon (1996) one-sided p-values.
Augmented Dickey-Fuller Test Equation
Dependent Variable: D(RESID01)
Method: Least Squares
Date: 04/16/19   Time: 13:58
Sample (adjusted): 1981 2016
Included observations: 36 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID01(-1)	-1.515938	0.152260	-9.956219	0.0000
C	3.996495	23.48079	0.170203	0.8659
R-squared	0.744603	Mean dependent var		-5.068500
Adjusted R-squared	0.737092	S.D. dependent var		274.5586
S.E. of regression	140.7788	Akaike info criterion		12.78621
Sum squared resid	673834.4	Schwarz criterion		12.87418
Log likelihood	-228.1518	Hannan-Quinn criter.		12.81691
F-statistic	99.12629	Durbin-Watson stat		1.978224
Prob(F-statistic)	0.000000			

Appendix 2. Residual Serial Correlation test

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	5.226226	Prob. F(2,28)	0.0418
Obs*R-squared	10.05763	Prob. Chi-Square(2)	0.0865

Test Equation:
Dependent Variable: RESID
Method: Least Squares
Date: 04/16/19   Time: 13:52
Sample: 1980 2016
Included observations: 37
Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-261.8896	716.6144	-0.365454	0.7175
LHCAPTL	37.87693	63.40852	0.597348	0.5551
LMACRSTB	44.93953	83.88291	0.535741	0.5964
LTELSUBSC	56.62982	193.4238	0.292776	0.7719
LOPEN	-16.60647	210.4201	-0.078921	0.9377
LNATRES	-11.84952	246.0882	-0.048152	0.9619
LMRKTSIZE	27.16365	67.60244	0.401815	0.6909
RESID(-1)	-0.579292	0.199168	-2.908553	0.0070
RESID(-2)	-0.052211	0.199555	-0.261639	0.7955

R-squared	0.271828	Mean dependent var	-6.19E-13
Adjusted R-squared	0.063779	S.D. dependent var	158.3333
S.E. of regression	153.2010	Akaike info criterion	13.10915
Sum squared resid	657175.3	Schwarz criterion	13.50100
Log likelihood	-233.5193	Hannan-Quinn criter.	13.24730
F-statistic	1.306556	Durbin-Watson stat	1.916414
Prob(F-statistic)	0.280589		

****