Impact of Foreign Direct Investment on Unemployment Rates in East African Community Founding Members: Who benefits the Most?

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Abstract: The study analyses comparative effects of Foreign Direct Investment (FDI) inflows on youth unemployment in East African Community (EAC) founding member countries of Kenya, Tanzania and Uganda. Based on time series data from 1990 to 2016, the Auto Regressive Distributed Lag (ARDL) regression revealed that, FDI significantly influences reduction in unemployment rate in Kenya by 0.708%. The results in Tanzania and Uganda showed that, FDI inflows increases unemployment rates by 0.337% and 0.852% respectively. The results revealed that, FDI is significantly benefiting Kenya young generation through job creation, as compared to Tanzania and Uganda. Unemployment rate in Kenya has been reduced significantly due to FDI inflow by 0.14 % by each percentage of FDI inflow. The favourable economic and social policies in Kenya, have been well integrated into investment policies and result into positive prospects of employment creations. In Tanzania and Uganda, FDI inflows have not been much effective on youth unemployment. Every percentage of investment growth, causes an increase of 0.34% and 0.85 % of unemployment in Tanzania and Uganda respectively. Based on these results, it is recommended that, both Tanzania and Uganda should revisit their FDI related policies to ensure the FDI programmes are beneficial in reducing unemployment rates.

Key Words: Foreign Direct Investment (FDI), Unemployment rates, East African Community (EAC)

1. Introduction

Despite of the common goal of increasing economic growth through a number of joint initiatives, countries involved in integration have also had their own country policies to achieve their objectives. Attracting Foreign Direct Investment (FDI) is one of the strategy to ensure improvement in macroeconomic and hence economic growth. Creation of decent jobs, poverty reduction, increasing exports, infusion of technology, skills and knowledge and support to local firms to access international markets are among the positive benefits of FDI (Mottaleb and Kallirajan, 2010). Globalization, competitiveness and free market economies are best facilitated by presence of FDI in the countries (He et al, 2009). Worker’s exploitation by multinational
companies especially those investing in developing countries are some of the negative effects that are caused by FDI. such as:. Slavica and Andreja (2014) have confirmed that FDI is a source of economic development and modernization, income growth and employment. Others are additional domestic capital accumulation and essential spill over effects to the rest of economy.

Investors are also looking for some factors before deciding to invest. Conducive political environment, security, macroeconomic conditions, legal and regulatory environment, fiscal incentives are among the key drivers for investment decisions (World Bank, 2017). The East African Community members are also among the countries which have been attracting FDI to gain from its benefits like competitiveness and accessibility to new markets. The countries in East African Community are among developing economies, characterised by high population growth, low income, inequality, poor health and educational social services. With inadequate domestic resources, these countries are also among recipients of official development assistance (ODA) in the form of grants and loans of various instruments adding to FDI for job creation and accessibility of foreign markets.

The East African Community was established in 1967 and collapsed 10 years later in 1977. By then, there were three member countries of Kenya, United Republic of Tanzania and Uganda. The re-establishment of the Community in 1999, was followed by EAC Treaty that was developed in September, 1999; ratified and went into force in July, 2000. It is an inter-governmental regional organization, that involves 4 pillars which are: Customs Union, Common Market, Monetary Union and Political Federation (EAC, 2017). While the Customs Union and Common Market pillars are in the implementation stage, the Monetary Union is in preparatory stage and Political Federation is at its infancy stage. Currently, EAC has six member countries including; Burundi, Kenya, Rwanda, South Sudan, United Republic of Tanzania and Uganda. The block has a total of 150 million people as of 2015, in which 22% resides in urban1. The member countries cooperate in many areas including; trade, monetary and fiscal affairs, investments, infrastructure development, human resources, natural resources and wildlife management, health and education, language and culture. According to Mwasha (2012), among the benefits that the integration can provide to its members include; the increased flow of FDI due to its market size, economic growth, market opportunity due to population size and job creation for the people. This study focuses on three founding member countries who initiated the regional integration, which are; Kenya, Tanzania and Uganda. These countries have been involved in the Community creation process since its initiation stage, in many strategic policies regarding economic performance in the block and in their individual countries.

Despite of common interest of having a strong economic and political regional block, each country is unique and specific. There are several areas in which investors are interested to invest into each country of the EAC. These areas are based on different interests by each of the investors. Each country differs in the level of development, policy and regulatory frameworks, security and are ranked differently in easiness of doing business. The internal factors among the

1www.eac.int
countries in EAC, play important roles in determining the extent of FDI inflow (Kinyuah, 2012). With different levels of FDI inflow, the benefits enjoyed could also be different. This study examined the impact of FDI inflow in the three EAC founding members.

There are a number of studies which have analysed FDI related issues in regions and at country levels (Kinyuah, 2012; Marco, 2011; Otieno et al, 2013, Rwothungeyo, 2015, Slavica and Andreja, 2014). However, analyses on how each country in the EAC comparatively have benefitted from the FDIs have been few (Otieno et al, 2013; Rothungeyo, 2015). Therefore, it is imperative to analyse how important sectors have been benefitted from FDI inflows so that, successes recognised and challenges analysed can be used to reflect on respective policies and regulatory frameworks in each countries of the EAC. This study sought how Kenya, Uganda and Tanzania have each benefitted from long run FDI inflows. It focused on the creation of jobs, i.e on how much the FDI has managed to reduce unemployment rates in the EAC member countries and each countries’ expected benefits in their long term strategies. The study covered a period from 1990 to 2016 because of adequate data availability of the variables from this period. The remainder of the study is organised as follows: Section 2 gives theoretical and empirical evidences on FDI development perspectives and FDI impact on unemployment rates in various countries. It also highlights the FDI inflow and unemployment rates in Kenya, Tanzania and Uganda. Section 3 outlines the methodology used in analysing the effect of FDI inflows in the EAC countries and section 4 presents the results and discuss them. Conclusion and recommendations are given in section 5 of the study.

2. Theoretical Literature Review

2.1 Motive of Foreign Direct Investments

According to United Nations Conference on Trade and Development (UNCTAD), FDI is an investment made to acquire lasting interest of an enterprise operating outside the economy of an investor, in which investor’s purpose is to gain management voice in the investment. Furthermore, to enhance the justification of FDI to host country, OECD (2008) affirmed that, with the right policy framework, FDI can be an important source of financial stability, promotion of economic development and well being of a society. The organization furthermore clarified that, the investor can be an individual, a group of related individual, incorporated or unincorporated enterprises, public or private enterprises, or a group of related enterprises; which has acquire at least 10% of voting power in corporation or enterprise or equivalent and a resident in another economy.

A number of studies have explained evolvement of FDI and motivation behind investments. After World War II, FDI has been seen to play an important role at both national and international levels for entire economic development. FDI theories have been dynamic ever since with underpinnings of FDI, led to define the theories differently. According to Nayyar (2014), traditional FDI theories differ from modern perspectives of FDI motivation. Hymer (1960) and Kindleberger (1969) have been champions in explaining investments in areas where completion
is stiff and strong. They were of the opinion that, companies could find ways of acquiring new markets, technology, skills, higher costs of information other than international trade. Because of international competition with local firms, challenges in research and development, new skills, high transaction costs, investment in foreign countries could be undertaken. They affirmed to multinational companies that, international trade involvement challenges can be overcome through investment in foreign countries for overall profit increase (Calvet, 1981). Williamson (1979) asserted that, because of imperfection of international markets using their capitals, skills and technology, internal markets in multiple countries could also create needed markets and achieve desired goals and objectives (Nayyar, 2014). Explaining further the FDI motive, Dunning (1973) as noted by Franco et al (2008) was of the opinion that, firms, in pursuit of seeking profit maximization objective, should possess their ownership of assets and skills in another nationality so as to exploit the new markets. Dunning stressed three important aspects in which firms operating in the foreign country could be benefitted which are an OLI (what is OLI?). These are:

i. Ownership of the specific assets;
ii. The assets should be at the location in which the firms operate and
iii. Production should be within the country in which firms operate.

Dunning’s eclectic paradigm on FDI, has gained a wider attention on the current FDI theories as it combines both traditional and modern theories to FDI. However, it was criticized for inclusion of many variables. This criticism led to development of Investment Development Cycle (IDP) theory which is a modern theory in which investment decision is linked to development stage of the host country. This theory believes that, Government’s interaction through its policies and laws, have a direct influence over FDI decisions. On modern FDI theories, Aliber (1970) asserted that, weaker currencies over strong hosting country’s currencies could attract FDI and he tested his theory and worked in USA and Canada. This theory was however criticised for ignoring the pattern of FDI into the poor and developing countries, where the currencies are weaker.

Product Life Cycle was also explained as a motive of FDI that, because of stiff competition and technological advancement, products become matured and that firms could look into new areas of investment and product development at a cheaper costs (Lattore, 2008). This could be done through FDI. In case of FDI from developing economies, government’s policies have been outlined as the most effective motive of all. Exerting policies that are restrictive at home country, could force the firms in the developing countries to invest abroad where policies are less tight. This was sighted as an example of many Indian companies to invest in other countries. This is also in line with political risks that make multinational companies to decide to invest into other countries (Nayak, 2014). The FDI theories have been dynamic. Many factors have been discussed by different studies on how have caused FDIs and how they have benefitted recipient countries. In general, technology sophistication, trade openness, human capital stock, geographical location and infrastructure are also important determinants of FDI.

2.2 FDI and Unemployment

Among the benefits that FDI is expected to bring to recipient country is employment opportunities particularly to youth. Among the strategies to reduce unemployment rate in
economies, is to create conducive environment for FDI, which is expected to bring in new 
expertise and technology which will enhance capabilities of the locals and hence employment 
opportunities (OECD, 2016). Though the benefits do not come automatically, the host countries 
have been urged to develop transparent and effective policies for attracting FDIs that could 
ultimately bring in positive spill over effects (Palat, 2011). One of the expected benefits of FDI is 
reduction of unemployment rate of host countries. Strat et al (2014) has also confirmed on the 
positive relationship between FDI and unemployment and that, when FDI increases, it creates 
employment opportunities hence reduction of unemployment of host country.

Hall (2011) has explained the confirmatory direct linkage between FDI inflow and reduction of 
unemployment rate. He noted that, when productivity slow down it increases unemployment 
rate. Since FDI is directly linked with increased productivity (OECD, 2016), its slow down have 
direct increase in unemployment rate. Availability of cheap labour in host country has been 
named as one of the determinants of FDI, in which, in return, grows the employment rate 
(Slavica and Andreja, 2014). Irpanet al (2016) explained that, one of the factors that caused 
economic down turn and increasing unemployment rate in Malaysia was the decrease of FDI 
inflow. Others that were named to be negative effects of FDI to host countries include; risk of 
political and religious influence, higher costs, influence on exchange rates and domestic 
investments.4.

2.3 Empirical Evidences

Apart from theoretical perspectives on how FDI can negatively impact unemployment rate in 
host countries, a number of evidences have brought forward to nail this theory. Irpanet al, 
(2016), using ARDL, found out that, unemployment rate was reduced by increasing of FDI in 
Malaysia, after a period of rising unemployment rate between 1982 and 1986. The FDI was 
significantly found to reduce unemployment rate by 12.23%. A strong correlation between 
unemployment and FDI was found in Pakistan by Aqilet al (2014). They found out that, at least 
0.47% of unemployment rate was reduced by FDI in Pakistan between 1983 and 2010. They 
analysed the relationship using correlation and Analysis of Variables (ANOVA) techniques.

In the same line, Maqbool et al (2013) found a negative correlation between unemployment and 
FDI, in such a way that, for every unit of investment, unemployment rate was reduced by 
0.091%. They used ARDL method in their analyses in Pakistan from 1976 towards 2012. In 
Japan, Palat (2011) found out a strong correlation between FDI inflow and unemployment rate, 
using correlation and quadratic analyses. The Foreign Direct Investment in Balkan States during 
2000 – 2014 showed no significant impact on reducing unemployment rates with the exception 
of Croatia, though the rates are still very high. These results were found by Grahovac and Softic 
(2017) using multiple regression analyses. On the same range, FDI was found to cause no 
statistical significance on unemployment in Macedonia during 1999 – 2013 as evidenced by 
Djambaska and Lozanoska (2015). The short term influence of FDI on unemployment rate was 
found in Poland by Balcerzak and Zurek (2011) during 1995 – 2009, where they suggested for 
the internal policies review to encourage long term impact of FDI on unemployment. Eldeeb 
(2015) found out that, FDI causes increase in unemployment rate in Libya from 1999 to 2014.

4https://connectusfund.org
Using Ordinary Least Square method to find his results, he described internal policies to have caused the FDI not to work towards reduction on unemployment rates which was in the range of 30% during the period of study. Liu and Lu (2011) found out that, the outward FDI causes significant drop of unemployment rate in China using Johansen co-integration and Toda and Yamamoto Granger Causality Test from 1982 towards 2007.

From these results, it is evident that, FDI have negative effects on unemployment rates in many places, though some few studies showed different results. This study analysed comparative impact of FDI on unemployment for the three East African Countries of Kenya, Tanzania and Uganda from 1990 to 2016.

2.4 FDI and Unemployment rates in Kenya, Uganda and Tanzania

Like many economies, the countries in East African Community have also been attracting FDI aiming at enhancing macroeconomic conditions, The key one has been on the creation of job opportunities and hence reduction of unemployment rates. During the period of study, Uganda was experiencing the average highest FDI inflow (FDI), with the lowest youth unemployment rates followed by Tanzania. The highest youth unemployment rate has been experience in Kenya, with the lowest FDI inflow. The youth unemployment rates (UR) and the FDI inflow trends are presented in the Figure 1.

![Figure 1: FDI and Unemployment Rates in Kenya, Tanzania and Uganda: 1990 – 2016](image)

The average FDI percentage of Gross Domestic Product (GDP) in Uganda in 27 years was 3.13%, while it was 3.06% in Tanzania and 0.73% in Kenya.
3.0 Methodology

The variables used for analysing the macroeconomic factors were independent variables of FDI percentage of GDP, population growth (POP) and Gross Domestic Product (GDP) growth rates. The youth unemployment rate (UR) was dependent variable and was the rate of unemployment for youth between 15 – 45 years of age. All variables data were obtained in the World Bank data sheet.

The data variables were tested for stationarity by using Augmented Dickey and Fuller (ADF) which caters for small sample data and the Auto Regressive Distributed Lag (ARDL) method was used for regression analysis. The ARDL is suitable when data are stationary at level and at first difference (Nkoro and Uko, 2016). The FDI and GDP were expected to have negative impact to unemployment, while population growth was expected to have positive influence on unemployment. The estimated model is as shown in equation 1. The variables used are those in Maqbool et al (2013).

\[ UR_t = \beta_0 + \beta_1 FDI_t + \beta_2 GDP_t + \beta_3 POP_t + \mu_t \]

whereas \( UR \) is unemployment rate which is dependent variable and \( FDI, GDP, \) and \( POP \) are independent variables which are Foreign Direct Investment, Gross Domestic Product and population growth. The \( \beta_0 \) is an intercept when all independent variables are zero and the other \( \beta \)'s are the coefficient of change of independent variable to the change of dependent variable. The \( t \) is time variant of variables. To check whether the models are reliable and not spurious, the Histogram and Normality Test and Serial Correlation are taken on their residuals. The probabilities of JaqueBera and F-Statistics of the tests should be more that 5% to reject null hypotheses of abnormal distribution and presence of serial correlation of residuals respectively.

4.0 Results and Discussions

Unit Root Test

The unit root test performed revealed that, FDI data for Kenya; and GDP and POP for Uganda were stationary in level. Other variables were stationary after first difference as shown in Table 1. The maximum lag of 6 was automatically selected by Schwarz Information Criterion.

ARDL F-Bounds Test

The ARDL F-Bound Test was used to test whether the variables have long term relationship or not. The results revealed significant positive co-integration between variables in all three countries.

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5www.data.worldbank.org
Table 1: The Augmented Dickey and Fuller Unit Root Test

<table>
<thead>
<tr>
<th></th>
<th>UNIT ROOT</th>
<th>FIRST DIFFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UR</td>
<td>FDI</td>
</tr>
<tr>
<td>Kenya</td>
<td>-1.5415</td>
<td>-4.5254*</td>
</tr>
<tr>
<td>Tanzania</td>
<td>-0.6912</td>
<td>-2.8302</td>
</tr>
<tr>
<td>Uganda</td>
<td>-2.6979</td>
<td>-2.1559</td>
</tr>
</tbody>
</table>

Note: the * indicates the significance at 5% level. :
: the – indicates that, the variable data is stationary at level.

All F-statistic values passed the critical value at 5% significant level of 3.67. Kenya showed a value of 9.15, Tanzania had a value of 5.99 and Uganda had a value of 13.85. The long term co-integration revealed the following results in Table 2.

Table 2: Results of ARDL Long term relationship of UR, FDI, GDP and POP in three East African Countries

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>CONSTANT</th>
<th>FDI</th>
<th>GDP</th>
<th>POPULATION GROWTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenya</td>
<td>0.877**</td>
<td>-0.708**</td>
<td>-0.144**</td>
<td>-0.177**</td>
</tr>
<tr>
<td>Tanzania</td>
<td>-0.319**</td>
<td>0.337**</td>
<td>0.443**</td>
<td>2.412*</td>
</tr>
<tr>
<td>Uganda</td>
<td>0.071</td>
<td>0.852**</td>
<td>-0.090</td>
<td>-0.013</td>
</tr>
</tbody>
</table>

Note: ** denote significance at 5% level and * denotes significance at 10% level.

The ARDL regression revealed that, FDI significantly influences reduction in unemployment rate in Kenya by 0.708%. This result is the same as found by Aqilet al (2013) and Irpan et al (2016) which was as expected. The growing GDP in Kenya was found to reduce unemployment by 0.144%. However, population growth reduces the unemployment by 0.177%. The results in Tanzania and Uganda, showed that, FDI inflow increases unemployment rates by 0.337% and 0.852% respectively. These results were the same as those that were found out by Eldeeb (2015), contrary to what has been expected. The increased GDP and population growth in Tanzania influenced unemployment rates by 0.443% and 2.412% respectively. GDP reduced unemployment in Uganda as expected, by 0.09%. Population growth reduced unemployment rate by 0.013% in Uganda, though not at significant levels. Both regressors and dependent variables lagged at four periods whereas the lag length was determined by Akaike Information Criterion (AIC) in all countries.
Model Tests

The tests were carried out to check whether the coefficients and residuals in the models were fit and do not correspond to any spurious relationships. The result showed that, both Histogram Normality Test and Breusch-Godfrey Serial Correlation LM Test rejected their respective null hypotheses with their probability values of more than 5% as shown in the Table 3.

Table 3: The Model Tests

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>HISTOGRAM NORMALITY TEST</th>
<th>SERIAL CORRELATION TEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenya</td>
<td>JB – 0.359; Prob 0.835</td>
<td>F-statistics – 0.466; Prob. 0.642</td>
</tr>
<tr>
<td>Tanzania</td>
<td>JB – 0.918; Prob. 0.632</td>
<td>F-statistics – 1.097; Prob. 0.371</td>
</tr>
<tr>
<td>Uganda</td>
<td>JB – 0.229; Prob. 0.891</td>
<td>F-statistics – 0.074; Prob. 0.933</td>
</tr>
</tbody>
</table>

The Jarque Bera (JB) of Kenya model was 0.359 with the probability of 0.835. The Tanzania FDI effect on unemployment had a Jarque Bera value of 0.918, with the probability of 0.632, while that of Uganda had the Jarque Bera of 0.229, with probability of 0.891. For serial correlation test, the F-statistics in Kenya had a value of 0466 with probability of 0.642, while of Tanzania residuals had F-statistics of 1.097 and probability of 0.371. The Ugandan model residuals had F-statistics value of 0.074 with the probability of 0.933. The lag length for the serial correlation tests was 2.

5.0 Conclusion and recommendations

The study analysed comparative effects of FDI inflow on youth unemployment in EAC founding members of Kenya, Tanzania and Uganda, from 1990 to 2016. The founding members had a common goal of increasing equitable economic growth through increased FDI in the region and in their individual countries since at their foundation stage. Despite of common objective, each member country had a specific strategy to attract FDI in their own countries for improving their macroeconomic environments. Youth unemployment is one of the common challenges facing these member countries and each individual country strategies are being implemented to ensure that, jobs are created for the young generations, through education, skills and knowledge improvement among others.

The results revealed that, FDI was significantly benefiting Kenya young generation through job creation, as compared to Tanzania and Uganda. Unemployment rate in Kenya has been reduced significantly due to FDI inflow by 0.14 % by each percentage of FDI inflow. The favourable economic and social policies in Kenya, have been well integrated into investment policies and have resulted into positive prospects of employment creations. In Tanzania and Uganda, FDI inflows have not been very much effective on youth unemployment. Every percentage of investment growth, caused an increase of 0.34% and 0.85% of unemployment in Tanzania and Uganda respectively.
In Tanzania, the GDP growth has not resulted into sufficient job creation for the locals and unemployment increased among youth by 0.44% for every percent of growth. In Uganda, the case had been opposite, whereas, economic growth, favours youth employment by 0.019%. The population growth had been significantly precipitating youth unemployment in both Kenya and Tanzania, in which the effect was higher in Tanzania by 2.42% compared to Kenya which was 0.18%. Uganda had well utilized population dynamics especially of the growing youth population whereas for every percent of population growth, unemployment was reduced by 0.01%.

Based on these results, it is recommended that, both Tanzania and Uganda should revisit their investment policies to ensure the FDI programmes implemented in their countries, are those that can absorb the available skills and knowledge of youths in their respective countries. Concurrently, these countries should enhance their youth enhancement programmes so that they are well equipped with the skills and knowledge required in the FDI programmes. These countries should enhance population management programmes so that, unemployment challenges are well and significantly addressed by economic opportunities available.

6.0 References


