T.C. ISTANBUL AYDIN UNIVERSITY INSTITUTE OF SOCIAL SCIENCES



EFFECTS OF FOREIGN DIRECT INVESTMENT AND FINANCIAL DEVELOPMENT ON THE ECONOMIC GROWTH IN THE EAST AFRICAN COMMUNITY.

THESIS

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M. Sc. THESIS

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T.C. İSTANBUL AYDIN ÜNİVERSİTESİ SOSYAL BİLİMLER ENSTİTÜSÜ MÜDÜRLÜĞÜ



YÜKSEK LİSANS TEZ ONAY FORMU

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Joyce NIYIMPA

DEDICATION

I dedicate this work to my parents especially my dad (Mr. Bararusesa) for his moral support and encouragement during the program.

FOREWORD

My profound gratitude goes to God for His mercy and unconditional protection. I also appreciate my supervisor Prof. Dr. Ahmet Sedat AYBAR for the advice and academic support during the course of the prograsm.

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ABBREVIATIONS

ADF : The Augmented Dickey-Fuller

ANOVA : Analysis of Variance
BG : Breusch – Godfrey
BoP : Balance of Payments
BoT : Balance of Trade

BPM6 : Balance of Payments and international investment Position Manual

CEIC : Census and Economic Information Center

DW: Durbin-Watson

EAC : East African Community
EG : Economic Growth
EU : European Union
FD : Financial Development

FDI : Financial Development
: Foreign Direct Investment

G7 : Group of seven

GDP : Gross Domestic Product

GMM : Generalized Method of Moments

ICT : Information and Communications Technology

IMF : International Monetary Fund

JB :Jarque-Bera

MαAs : Mergers and Acquisitions

MINICOM: The Ministry of Trade and industry

MINECOF: The Ministry of Finance and Economic Planning

MININFRA: The Ministry of Infrastructure
MNE: Mutli-national Enterprises

MS : Member States

MTN : Mobile Telecommunications NetworkNISR : National Institute of Statistics of Rwanda

NPP : Normal Probability Plot

OECD: Organization of Economic Commission for Development

OLS : Ordinary Least Squares

PP : Philip-Perron

PDI : Private Domestic Investments RαD : Research and Development

SSA : Sub Saharan AfricanTSLS : Two-Stage Least Squares

UN : United Nations

UNCTAD: United Nations Conference on Trade and Development

UNDP : United Nations Development Programme

USD :United States DollarVAR : Vector Autoregression

VECMs: Vector Error Corrections Models

WAEMU : West African Economic and Monetary UnionZTE : Zhongxing Telecommunications Network

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EFFECT OF FOREIGN DIRECT INVESTMENT AND FINANCIAL DEVELOPMENT ON THE ECONOMIC GROWTH IN THE EAST AFRICAN COMMUNITY

ABSTRACT

This study aimed to investigate the effect of foreign direct investment and financial development on economic growth in the East African Community (EAC) using panel cross-sectional time-series data collected separately from 5 countries during the period from 1996 to 2015. The role of foreign direct investment(FDI) and financial development (FD) on the growth of an economy has been a topic of study for many researchers in several countries. A positive and negative impact of FDI and financial development has been found depending on countries or regions. A cross-sectional time-series regression analysis was used to measure the degree to which foreign direct investment, financial development, and economic growth are related to each other. The study investigated furthermore the relationship between trade openness, inflation and economic growth in the EAC. Using the Johansen cointegration model, we found between variables a long-run relationship. The study also found that all the variables are non-stationary at the level (0) form but have a unit root and are integrated at first difference I(1) by using the Augmented Dickey-Fuller unit root test for examining the stationarity of variables. The results of regression reveal that FDI has a negative effect on economic growth, it is found also that an increase or decrease in FDI doesn't generate economic growth in the countries of the EAC. Findings expose that economic growth is highly determined by domestic credit to the private sector, that the improvement of financial development can transform and generate economic growth in the countries of the EAC. The thesis finally revealed a positive and insignificant effect of trade openness on economic development in the countries of the EAC. It was concluded that inflation has a positive and significant effect on economic growth in EAC's countries.

Keywords: Foreign direct investment, economic growth, financial development, inflation, trade openness, East African Community

DOĞU AFRİKA TOPLULUĞUNDAKİ DOĞRUDAN YABANCI YATIRIMLARIN VE FİNANSAL GELİŞMENİN EKONOMİK BÜYÜME ÜZERİNDEKİ ETKİSİ

ÖZET

Bu çalışmada, 1996'dan 2015'e kadar 5 ülkeden ayrı toplanan panel kesitsel zaman serisi verilerini kullanarak Doğu Afrika Topluluğu'ndaki (EAC) doğrudan yabancı yatırımların ve finansal gelişmenin ekonomik büyüme üzerindeki etkisini araştırmayı amaçlamıştır. Doğrudan yabancı yatırım (DYY) ve finansal kalkınmanın (DY) bir ekonominin büyümesindeki rolü, birçok ülkede birçok araştırmacı için bir çalışma konusu olmuştur. Ülkelere veya bölgelere bağlı olarak DYY ve finansal kalkınmanın olumlu ve olumsuz etkileri tespit edilmiştir. Doğrudan yabancı yatırım, finansal gelişme ve ekonomik büyümenin her biri ile ne ölçüde ilişkili olduğunu ölçmek için kesitsel bir zaman serisi regresyon analizi kullanılmıştır. Çalışma ayrıca, AÇA'da ticari açıklık, enflasyon ve ekonomik büyüme arasındaki iliskiyi arastırmıstır. Johansen eşbütünleşme modelini kullanarak, sonuçlar değişkenler arasında uzun süreli bir ilişki olduğunu ortaya çıkardı. Çalışma ayrıca tüm değişkenlerin seviye (0) formunda durağan olmadığını, ancak bir birim kökü olduğunu ve değişkenlerin durağanlığını incelemek için Artırılmış Dickey-Fuller birim kök testini kullanarak ilk fark I (1) 'de entegre olduğunu buldu. Regresyon sonuçları, doğrudan yabancı yatırımın ekonomik büyüme üzerinde olumsuz bir etkisi olduğunu ortaya koymakta, doğrudan yabancı yatırımdaki artış ya da azalmanın AÇA ülkelerinde ekonomik büyüme yaratmadığı ortaya çıkmaktadır. Bulunan bulgular, ekonomik büyümenin iç krediyle özel sektöre yüksek oranda belirlendiğini, finansal kalkınmanın iyileştirilmesinin AAK ülkelerinde ekonomik büyümeyi dönüştürebileceğini ve üretebileceğini ortaya koymaktadır. Çalışma aynı zamanda, AAC ülkelerinde dış ticarete açıklığın ekonomik büyüme üzerinde olumlu ve önemsiz bir etkisinin olduğunu ve son olarak, enflasyonun AAK ülkelerinde ekonomik büyüme üzerinde olumlu ve önemli bir etkiye sahip olduğu sonucuna varılmıştır.

Anahtar kelimeler: Doğrudan yabancı yatırım, ekonomik büyüme, finansal gelişme, enflasyon, dışa açıklık, Doğu Afrika Topluluğu.

1. INTRODUCTION

This par twill cover the background, problem identified, objectives, research hypothesis, and study organization.

1.1 Study Overview

A country economy's health is usually measured by an overview of its economic growth and development. East African community as an area study of this research, it has been chosen because of its limited studies relating to the subject regardless of the countries that belong to EAC are the poorest countries in the world and their economy, over decades has been growing mostly because of the foreign aid received by those countries.

EAC is an intergovernmental organization located in the African great Lakers region formed by 5 countries which include Kenya, Burundi, Rwanda, Tanzania, and Uganda. All these countries are among the least developed countries with the lowest income per capita except Kenya that is among states that are in the process of developing their economy. South Sudan is excluded in this research for the reason of its missing data.

Historically, foreign companies across the globe tend to start divisions in nations that ingress their goods or services to get away with tax importation, they create their companies to take benefit of the internal subsidies particularly when goods or services are on a target between the European Union countries. For instance, products importation and exportation were subsidized for member countries in the European Union (Alfaro,2003). Due to the insufficient resources to finance long term development among countries and reducing poverty that is increasing in a harsh way, it was presumed that the attractiveness of foreign investor has a vital part in the growth of any economy. A small number of East Asian industrialized countries have experienced a fast-growing economy, they stated that attracting FDI could fill the resource gap of low-income countries and avoid high debt while directly addressing the causes of poverty (Prasad et al., 2003).

In Africa, a number of scholars such as Akinlo (2004) examined the importance of FDI and financial development as fundamental tools for growth for several periods and the channel through which it boosts the export growth since it also improves on the exchange rate in most African countries. Literature had shown that direct positive exist between FDI and export growth. Since the trend in export can further be traced down to the level of investment which in most cases can be domestic or foreign investment in those countries. Uganda is among East African countries that attract the highest FDI. FDI stocks have increased steadily since 2000. However, after attaining a high-level recording 2012 with\$1.2billion, foreign investment flows fall in 2016 to \$541 million, according to UNCTAD. Nevertheless, thanks to the disclosure of oil saves, new financial specialists may be keen on the nation later on. Uganda is ranked by the World Bank 115th out of 190 in the 2017 Doing Business report, gaining one place compared to the previous year, after having already gained 27 places between 2015 and 2016. The most important advances have been made in terms of electricity connection and cross-border trade (Kiiza, 2007).

East Africa has seen the level of FDI fall considerably over recent years. The region attracts the lowest FDI compared to other sub-regions in Africa. In Kenya, a study by (Ngugi and Nyangoro, 2005) indicated that market size and low economic growth are the main factors that should be cited to better understand the entry of horizontal FDI in the market. By taking in consideration the GDP growth level and investment rates, Kenya has a poor and low GDP in the EAC. The growth of Gross Domestic Product rate is much higher in Uganda and Tanzania comparing those two countries with Kenya and they are performing better than South Africa in terms of GDP growth too. The fact that Kenya has a low GDP growth may occur as a discouragement of market-seeking FDI in the country. Regarding the population size, Kenya has a big market and the GDP per capita specify that the demand for electric power is also great in Kenya. In its attempt to increase the growth rate and development, the country has presented some incentives policies and transparency in the economy to attract more FDI (Tshipo S.M.,2018). As indicated by Organization of Economic Commission for Development (OECD), outside direct venture inspires innovation overflows, makes a progressively aggressive business condition, improve business advancement and lead to global exchange incorporation all of which add to development.

1.2 Problem Identified

The role of foreign investment to macroeconomic indicators has been hotly debated universally where Burundi and other Eastern Africa countries are not let out. Many of the previous researchers have concentrated on the effect foreign investment has on economic performance while some studied the nexus between foreign investment and its growth on the economy. Meanwhile, these studies outcome have not been consistent. More so, some countries in Africa such as Nigeria, Burundi, Ghana, Tanzania, Uganda, Kenya, to mention a few are aiming to attract FDI to spur their economic condition. Some developed countries opined that economic growth spur or stimulate foreign direct investment while some view that foreign direct investment stimulates growth, some also opined that a bi-directional association-ship exists between FDI and growth.

Furthermore, foreign investment and financial development in the growing development of any nation is a topical analysis in many nations (Obwona, 1999). These analyses provided a massive investigation between foreign direct investment, financial development, and economic development. Some studies have been conducted on foreign investment, financial development, economic growth in the East Africa Community, given the low trend of economic growth and that is occasioned by low foreign direct investment and financial development. The economic performance for the East African community countries is presently growing fast for some countries as Kenya, Rwanda, and Tanzania. There is therefore not much research conducted on the region of EAC in analyzing the results for each country, hence, the need for analyzing the impact of FDI, financial advancement on economic development in Eastern Africa Community is essential to examine in the empirical literature.

1.3 Study Objectives

- To determine the effect of FDI on economic growth of East African Community nations economy
- To determine the impact of trade openness and growth in the East Africa Community nations

- To ascertain the impact of financial development and growth of the Eastern African Community nations
- To ascertain the inflation effect on the economic growth of the Eastern African Community nations

1.4 Study Hypotheses

- H₀: foreign direct investment has no significant impact on the economic growth of the EAC nations
- H₁: foreign direct investment has a significant impact on the economic growth of the EAC nations
- H₀: financial development has no significant impact on the economic growth of the EAC nations
- H₁: financial development has a significant impact on the economic growth of the EAC nations
- H₀: trade openness does not have a significant impact on the economic growth of the EAC nations
- H₃: trade openness have a significant impact on the economic growth of the EAC nations
- H₀: inflation does not have a significant impact on the economic growth of the EAC nations
- H₄: inflation has a significant impact of inflation on economic growth in the EAC nations

1.5 Operational Definition of Terms

Foreign direct investment is defined as an investment made by a firm or an individual investor in one country into business interests located in another country. Normally, FDI is the sum of the capital equity, re-investment of earning and other short term and long-term capital. It provides facilities of technology, employment, and innovations which is the best forecaster for the economic growth of the country.

Economic growth (EG) is usually indicated by an increase in the gross domestic product "GDP". GDP defined as the total monetary value of all the final goods and

services produced by a country over a period of time. It represents the volume of a country's economy.

Financial development (FD) is defined as a part of the secluded sector of markets, organizations, and instruments that encourage the growth of an economy and reduce poverty.

Domestic Credit to the private sector (DCPS) plays a vital part in reducing unemployment by creating jobs, efficiency, and productivity and inducing the development of any nation.

Inflation is known as a rise in the price index, it reflects the annual percentage changes of the cost of living to the average price of getting a basket of goods and services in a country' economy. It is studied by retail in price or consumer price index.

2.1LITERATURE REVIEW

A literature review involves an important aspect in so far as it is a contribution to the reader to understand clearly on which topic the study is conducted on. This section is considered as a crucial part in a research for the reason that it reviews work did by others previous researchers in order to obtain an understanding of the degree on which information is available and ready to be used and give a value to the study.

2.2 Empirical Literature

2.2.1 FDI, Financial Advancement and Economic Growth

Dhakalet al (2007), air a very costly omission, thereby posing reason for revalidation of country dummies which was not reported in the work. The analysis was mainly on the region where foreign direct investment has been most pronounced, namely the South and South-East Asia. The analysis engaged was the causality test, it was found that considerable deviation in the growth of foreign direct investment across studied nations. The study used nine Asian countries and the period reviewed was (1980-2001). The results obtained from the tests are that; concisely, the role of FDI on the growth of any economy is insignificant; conversely, the impact of economic growth on FDI inflows is both positive and significant.

Similarly, Asiedu and Lien (2011) endeavored to discover the impact that democracy has on FDI. The linear dynamic panel data model was utilized with a panel form of data. The method of analysis used was GMM estimator; and regression analysis. However, the number of years and countries under observation are sufficient, but the method of analysis can be upgraded to obtain a more precise result and therefore better application of policies.

The study by Ojo and Alege (2010) aimed to a study during recent global financial turmoil, policy implications with the effect of the sudden rise on FDI flows, as well as the consequent financial and economic development for the selected countries. It was based on International Trade, New Growth and Financial Theories and stated an

expanded Solow-type model in the determination of the endogenous growth model. The method of panel Vector Autoregression was also used, this was done principally to measure the active impact of FDI inflows for policy examination utilizing the role of stimulus reaction. The countries included and accessed were 27 and the period of estimation, 1987-2007. From the regression result, there is a significant positive value for GDP implying that the inflow of foreign capital will rise as there is an increasing economic activity within Africa.

Ayanwale (2007) studied the connection between foreign capital and Nigeria economic growth, thereby focusing on the country's definite focus on the foreign capital growth argument from 1970-2002. The study used OLS and 2SLS as estimation techniques. The empirical association-ship between non-extractive foreign capital and economic growth, investigating factors of foreign capital in the Nigerian economy.

In the study of Ayadi, Ajibolade, William, and Hyman (2014), unlike previous research which focused on examining, the connection between corruption and FDI flows in SSA countries. Panel data analysis was used along with the Fernandez Arias and the Montiel framework. The two variables as a result of this move together without drifting apart. Therefore, for SSA countries to attract FDI, it is expedient to transform their political and economic environment. However, to have more robust results in the study, the number of years and countries observed could be extended.

Kohler (2010) in his study, intended to analyze the behavior of multinational enterprises (MNE) experiencing a fragile institutional setting in domestic economies. The correlation analysis method of estimation was employed with the revelation principle and the Cournot Nash equilibrium framework. It was discovered from the results that; the weak institution is an impediment to FDI. Also, an insecure environment, local bureaucracy, and corruption are all hindrances and affect FDI flows to host countries with weak institutions. However, the analysis did not consider that indigenous authorities stimulate competitiveness; within investors from the external context to take full advantage of the degree of corruption. The kind of data used was also not specified in the study.

The research of Obstfeld (2012) took a step further in establishing the association linking financial system development and the growth of an economy. Unlike a study

done by Ploeg and Poelhekke (2007), who stated in their study, that there was proof for a tangible undeviating effect of financial system development in relation to economic growth, and that the effect was negative. They found a positive and significant connection between the level of financial advancement and economic growth. There as well exists a minute logical proof that openness financially increases wellbeing in some way by enhancing security modifications of economic establishments or strategies. Also, there exists a no direct connection between the flow of foreign investment and macroeconomic stability. The conscious release of the financial account most likely will increase the incidence, and gravity of economic distresses. However, developing countries persistently follow the route of more openness financially.

Kose, Prasad, Rogoff, and Shang-Jin (2009) as they also stated that there is no systematic association linking trade openness and economic growth. There's an insubstantial positive relationship, linking the GDP average growth and variation in financial openness. There also is a positive impact of financial integration, on economic growth. There exists a positive correlation between financial openness, financial development, and institutional quality. There is a negative correlation with the logarithm of inflation and government deficit essentially zero. There exists a positive relationship linking the degree of financial integration and growth of productivity. However, no systemic significant association exists linking financial openness and output volatility. There exists an association linking growth and current account, utilizing averaged data for a long period, for either country is positive. The study aimed at solving the inadequacies of the previous approaches used, their focuses on the only direct effect of financial globalization, coupled with scant empirical support, about the association between growth and financial openness.

2.2.2 Economic Growth and Trade Openness

A work of Levine and Renelt (1992) insisted that receptiveness to exchange would support remote direct venture because of decreased assessments, accordingly raising up long haul development. In their ongoing investigation, a study cited that to decrease duties would emphatically affect the assets designated to research and development. Lopez (2005) viewed a microeconomic structure, sending out firms are more experienced and innovation situated than non-trading firms for the reason that

trading firms are increasingly opened to the escalated level of rivalry when contrasted with those organizations that attention just on the local market.

A survey of the cross-sectional writing uncovered that past scholarly work utilized various techniques and information from different nations to observe the causality among transparency and financial development. Notwithstanding, a few investigations understood that there was no causality by any stretch of the imagination. Among the analysts tending to the connection among receptiveness and monetary development are Zeren and Ari (2013), they investigated transparency and development among the G7 nations, for example, Germany, France, Canada, Japan, Italy, the United States, and the United Kingdom from 1970 to 2011 utilized the Granger non-causality test so far the discoveries revealed a bidirectional causal connection among transparency and financial development.

Gries and Redlin (2012) uncovered a long-run positive causal connection among receptiveness and development. They included that a bidirectional connection between receptiveness to exchange and development is uncovered for the most part for industrialized nations just when the nations are ordered by to their degree of salary gatherings. Albeit, few investigations in created nations have exhibited a negative causality between exchange transparency and GDP development create. An examination done by Akilou (2013) explored the relationship of exchange transparency and financial improvement the West African Economic and Monetary Union countries. The outcomes expressed that monetary development did not cause exchange receptiveness Ivory Coast at the 10% degree of noteworthiness.

Rodriguez and Rodrik (1999) cited in their examination that exchange receptiveness can prompt an expansion in salary however it isn't the wellspring of monetary improvement over the long haul. A similar theory has been upheld by Brunner (2003). He showed that exchange transparency exhibited a critical positive impact on pay anyway it doesn't influence the developing of the financial institutions. Indeed, even Rigobon and Rodrik (2004) in their examination, subsequent to considering endogeneity and a nation heterogeneity institutions exploring the connection between exchange receptiveness and monetary improvement, the after effects of their

exploration expressed that exchange transparency estimated as exchange share GDP negatively affects financial development.

Rodrik (2001) advanced development rates appear to be decidedly connected with higher duty rates during the 1990s as per the graphical introduction of information on 66 nations. Exchange volume and exchange power control as intermediaries for exchange receptiveness can prompt the off-base aftereffects of research. Aside from dissimilarities in size of the economies and the degree of advancement proxied by GDP per capita, capacity of enterprises and the ability of innovation on a nations might be reflected by of higher fare and import offers to GDP support the development of an economy through fares as well as imports of innovation, creation of related material and middle person items. This certifies expanding exchange joining all around exhaustive fares may not really be related to the administration's activity of exchange-related unbiasedness 'guideline'. This contention is in accordance with crafted by Busse and Koniger (2012) who demonstrated that the connection between exchange receptiveness and advancement present a solid reliance on exchange particulars. Also, they suggested the significance of researching the relationship in a dynamic system.

2.2.3 Credit to Private Sector and Economic Growth

Levine (1992) stated that an economy where capital is efficiently allocated help economy to grow and he found also that in the years from 1990, there has been observed a strong impact of financial development on the economy. Several empirical studies have utilized different analytical approaches to examine the connection between private sector credit and development in many countries.

At the same time, the results of a few studies have failed in a positive way to confirm if private sector credit and economic development are related to each other. Akpansung and Babalola (2012) in their study they investigated how banking sector credit and economic growth are related to each other in Nigeria from 1970-2008 by using the two-stage least squares estimation technique. Their results showed that private sector credit is impacted by economic growth over a period of time, while the lending rate interferes in the growth of an economy. In a similar study, Anthony (2012) concluded that there was a powerful connection between slacked estimations

of all-out private reserve funds, private area credit, open part credit, loan cost spread, trade rates, and financial development.

Backé and Zumer (2005) did a research on the factors that are behind the great improvement of local credit to the private segment in the new member states of the EuropeanUnion (EU) as of late. They uncovered that the development in the private division credit was higher in Baltic nations and Hungary than in the eurozone. They pointed out that in an environment where there is a presence of low inflation, Baltic countries are experiencing a high rate of growth in private sector credit. They proclaimed that high excessive loans to the private segment influenced decidedly a blend of macroeconomic and microeconomic pointers, which impact both free market activity part.

Krugman (1994) opined that productivity isn't everything, but in the long run, it is almost everything". Fawehinmi (2013) empirically investigated the significance of economy to the interest rate policy on private domestic investments in Nigeria using time series data from 1980 to 2010. An error correction mechanism used in this study anticipated that the results are in the same with the results stated in other existing literature that private investments have a stronger and more positive effect on growth than public investments. The findings of Fawehinmi's study affirm that the government to boost its private sector for participating in domestic investments decrease the interest rate within the economy. Rama (1990) cited in Fawehinmi (2013) carried out an empirical investigation of the theoretical and empirical determinants of private investments in developing countries.

Tan and Tang (2011) analyzed how private domestic investments (PDI), the user cost of capital, and economic growth in Malaysia have a strong connection with one and each other between the time from 1970 and 2009. Their results showed the existence of a bidirectional causal association between economic development and the user cost of capital in the long run as well as is strong evidence of bidirectional causality among the variables of interest. In the end, the impulse response function demonstrated that a malfunction in the user cost capital can indicate a bleak effect on PDI and growth in Malaysia.

2.2.4 Inflation and Economic Growth

Frimpong et al. (2010) in their research to analyze the intensity reaction that inflation may have on economic growth in Ghana during the period of 1960-2008, they discovered that inflation has a capacity to influence growth by 11 percent even if the test of significance has failed at a certain level. After dropping the money supply and the rate of the aggregate labor growth when they become insignificant. It further showed a strong relation of 11% between inflation and its close coefficients. Furthermore, they showed that small threshold levels, CPI is still significant on the growth of Ghana economy within the period studied. However, they didn't succeed to test the sensitivity of the estimated coefficients at a large sample to show if there was a new threshold impact. The work then clinched that the requirement of expanding the research on how to deal with the lower threshold by disputing that inflation has a significant connection with growth.

Espinoza et Prazad (2010) in their research, they investigated a probability of the level of inflation to affect GDP in Azerbaijan and others 165 countries including countries that are exporting oil by using a panel data of 165 countries between 1960-2007, they stated that for all country groups, a massive association between inflation and GDP growth was about 10% (industrialized countries were excluded because of their threshold level is too much low). Estimated results indicated that inflation was higher than 13% and declined real non-oil GDP by 207 % per year.

Hasanov, (2010) utilized yearly information to examine the limit of how development rate of genuine GDP, CPI, and development rate of gross fixed capital formation are related to the financial development of Azerbaijan between 2000-2009. Hasanov expressed in his decisions, that the expansion rate to not affect decidedly GDP it must have a lower percent which will be under 13 %, on the contrary case, the positive association will change to negative when the swelling will have a rate that is in excess of 13 percent.

Mallik and Chowdhury (2011) found that in any case, the connection between inflation and economic development for Bangladesh, Pakistan, India, and Sri Lanka was statically and totally significant between those two indicators. Also, the responsiveness of development to variations in inflation rates was exceptionally low than the affectability of swelling to changes in development rates. The ramifications

of these outcomes were that regardless of whether swelling assumes a job in advancing monetary development, an economy that is developing quick ingests into expansion by overheating its gross national item.

Quartey, (2010) utilized the Johansen procedure to examine whether the income augmenting rate of inflation sway economic development in Ghana from 1970-2006. The aftereffects of the investigation demonstrated that there was a negative effect of expansion on development in Ghana during the time of the example contemplate. Also, by utilizing the Laffer bend, Quartey found that an income amplifying rate of expansion was at 9.14 % over the time of the study. He at long last expressed that the rate of expansion that expanding the development of an economy is certainly not a solitary digit one.

2.2.5 Gap in Literature

The empirical review above has shown the association between foreign direct investment, financial development and the growth of the economy in a country. But these studies were done in different environments and hence the results may not be generalized to East Africa specifically. Therefore, a gap to fill in the literature which concerns the nexus between foreign direct investment, financial development, and economic growth strongly exist. The chapter is taken an important part of the study as far as findings revealed by past different researchers were a valuable asset to understand the degree of available information on the topic. Therefore, this part provides a summary of academic works made by other researchers that will be crucial to back up the results of our work.

3.1TRENDS OF FDI INFLOWS IN EAC

This section offers a review which empirically based on the trends of FDI in different countries. The overview determinations are done based on the determination of the FDI trends in 5 East African countries.

3.2 Overview of FDI in Burundi

Burundi is facing many challenges to attract foreign investors. It has a weak political and security position and besides that, its public institutions have an absence of human and financial capital and its private sector and domestic market need to be developed and more diversification are required for the country market. Regarding foreign investment, FDI in Burundi increased from a middling of \$0,5 million in 1999 to \$10 million in 2009 (UNCTAD, 2010), it showed that the amount of FDI has increased twenty times in 10 years.

The country owed this rising in FDI attaractiveness to political stabilization situation and some actions that have been put on the ground by the government in recent. In 2016, Burundi the value of Foreign direct investment, net inflows was \$ 55,420. Over the last few decades, the value of FDI has been varying between \$1167,727,100 in 2013 and (\$11,441) in 2001 (Index Mundi)

Burundi's official outlook about FDI is reviewed in the new Investment Code, which was officially approved on September 2008 and it has an aim of attracting and motivating foreign investors by opening the doors for new acquisitions, transformation, distribution of goods and services and production. The investment code describes the need that the government has to encourage foreign investment but unfortunately, the investment code must be improved because it outlines a lack of transparency, specific adjustments that may drive to a high-level foreign investment (Martin,2017).

Table 3.1: Overview of FDI of BURUNDI (1995-2016)

Year	Value	
1995	\$1,981,923	
1996	\$100	
1997	\$100	
1998	\$2,000,000	
1999	\$238,660	
2000	\$11,683,520	
2001	(\$11,441)	
2004	\$44,691	
2005	\$584,702	
2006	\$31,594	
2007	\$500,245	
2008	\$3,833,208	
2009	\$348,405	
2010	\$780,582	
2011	\$3,354,999	
2012	\$604,920	
2013	\$116,727,100	
2014	\$81,747,200	
2015	\$49,622,860	
2016	\$55,420	

Source: INDEXMUNDI, 2017

3.3 Overview of FDI in Kenya

Kenya's FDI raised by \$671.5million in Dec 2017, related to an increase of \$393.4million in the previous year. The highest FDI registered in Kenya was 1.45 USD billion in 2011 and the lowest was \$0.4million in Dec 1988. Kenya lately reports a deficit of \$317.4million 2018. Kenya's FDI rises up by \$257.1million and it's Foreign Investment decreased by \$109.8million. The Nominal GDP was recorded as \$23.0billion in 2018 (CEIC, 2018).

Kenya's FDI inflow showed a spectacular increase by hitting a massive grow in FDI of \$0.67billion in 2017. Nevertheless, the growth did not give to Kenya a compelling volume of FDI, and it revealed that it was depending on other keys to grow eastern Africa economies. Kenya has been ranked by the United Nations Conference on Trade and Development (UNCTAD) as the fourth country that received the highest FDI in East Africa after Ethiopia, Tanzania, and Uganda in 2018. In spite of depending on other East Africa's key economies, Kenya recorded a grow of FDI inflow from \$0.39 billion (Sh39 billion) in 2016 to \$0.67 billion in 2017, disregarded

both to globally and Africa trend where the rising of inflows is caused by a decline in commodity earnings and value of cross-border mergers and acquisitions (M&As)(Trademarkea,2018)

Kenya attracts investments more likely from US companies mostly prominent techoriented companies, Microsoft, Oracle, and Boeing. The United Kingdom entreprises of beer and pharmaceuticals companies as Johnson and Johnson in the United States also contribute to the replenishment of Kenya's FDI pipe. Infrastructure projects financed by foreign companies like the Mombasa–Nairobi railway have helped to raise economic performance and to create FDI inflows into the country.

Table 3.2: Overview of FDI inflows Kenya (1995-2016)

Year	Value
1995	\$42,289,250
1996	\$108,672,900
1997	\$62,096,900
1998	\$26,548,250
1999	\$51,953,460
2000	\$110,904,600
2001	\$5,302,623
2002	\$27,618,450
2003	\$81,738,240
2004	\$46,063,930
2005	\$21,211,690
2006	\$50,674,720
2007	\$729,044,200
2008	\$95,585,680
2009	\$116,257,600
2010	\$178,064,600
2011	\$1,450,475,000
2012	\$1,380,174,000
2013	\$1,118,825,000
2014	\$820,937,700
2015	\$619,724,500
2016	\$393,359,400

Source: INDEXMUNDI,2017

3.4 Overview of FDI in Rwanda

In the year of 2005 and 2009, the inflow increased at an average of 70.0 % every year by reaching a high amount of \$119million of investments before it decreased to \$42 million in 2010. The government aimed to attract foreign investors into the Rwandan economy as a priority factor. The 2009 boom reflects significantly on the investment of \$117million in telecommunications by Millicom. The average of Rwanda FDI inflows was \$ 232 million between 2009 and 2017. FDI reached the highest amount of investment in 2014 with \$ 315 million and its lowest investment was recorded in 2009 with \$ 118.67 million (Trading economics,2019). Rwanda FDI has been fluctuating between \$314,742,700 in 2014 and \$1,000 in 1994 (UNICTAD, 2012)

Table 3.3 Overview of FDI in Rwanda (1995-2016)

Year	Value	
1995	\$2,212,202	
1996	\$2,218,241	
1997	\$2,259,560	
1998	\$7,089,194	
1999	\$1,725,717	
2000	\$8,319,041	
2001	\$4,634,138	
2002	\$2,610,000	
2003	\$4,700,000	
2004	\$7,700,000	
2005	\$10,500,000	
2006	\$30,643,970	
2007	\$82,283,170	
2008	\$103,346,000	
2009	\$118,670,000	
2010	\$250,504,800	
2011	\$119,105,400	
2012	\$254,963,200	
2013	\$257,642,400	
2014	\$314,742,400	
2015	\$223,334,700	
2016	\$254,451700	

Source: INDEXMUNDI,2017

3.5 Overview of FDI in Tanzania

Tanzania is becoming a state that is bringing a high amount of foreign investments in Africa. Tanzania has attracted massively FDI inflows between 1995 and 2000 which lead to market reform and create more competitiveness and evolution of the new area of investments, it received a billion dollars of investment inflows in that period compared with only \$90 million during the preceding six years (Lindhal et al.,2010).

Tanzania recently joined the FDI field. For that reason, the institutions that are related to the FDI development has to be improved in a long way as the new investment strategies are implemented. The FDI so far has only touched the mining sector. Other indicators such as agro-business are the potential sectors that need further investment for the reason that they are unexploited. The challenge now is to push FDI to new frontiers, achieving higher levels of investment inflows and increasing the scale and scope of benefits from FDI. (Lindahl and Yvonne, 2010).

Tanzania has recently performed high progress towards implanting a legal structure for FDI which is open and highly transparent. The 1997 Investment Act has been showing imperfections and a replacement is needed by introducing a new, modern act that is reflecting the current situations of the entire Tanzania. Other areas needing attention are commercial and contract, labor and competition law. The review and improvement of the incentives system must be equally considered. A plan of revising regulations fishing and tourism sectors could open new doors for Foreign investors (UNCTAD,2002)

Since 1985, at that time, Tanzania was starting the process of transiting from a centralized economy to market economy, the government put many efforts in its economic development by rising FDI role. More so, economic development was decreasing and inflation was excessive in the early 1990s but in the middle of 1990s, when the economic situation was improved, the country attracted many investors through the turning point of market-driven economies and a setting up of a favorable strategy that allows FDI to grow (UNCTAD,2002)

From 1995 to 2000 Tanzania obtained \$1billion of FDI compared to \$2million that it received from 1986 to 1991. Annually, from 1992 and years ahead, the FDI inflows climb to \$12 million, after it raised fast, to \$50 million in 1994 and

\$150million in 1995. FDI inflows in 1996 were sustainable at a level of \$150 million moreover the inflows continued to grow lower and it reached \$193million in 2000. (UNCTAD, 2002).

Table 3.4 Overview of FDI Tanzania (1995-2016)

Year	Value
1995	\$119,936,700
1996	\$150,066,400
1997	\$157,885,100
1998	\$172,306,200
1999	\$516,700,600
2000	\$463,400,900
2001	\$549,270,300
2002	\$395,567,100
2003	\$318,401,300
2004	\$442,539,600
2005	\$935,520,600
2006	\$403,039,000
2007	\$581,511,800
2008	\$1,383,260,000
2009	\$952,260,000
2010	\$1,813,200,000
2011	\$1,229,361,000
2012	\$1,799,646,000
2013	\$2,087,261,000
2014	\$1,672,550,000
2015	\$1,604,582,000
2016	\$1,365,388,000

Source: INDEXMUNDI,2017

3.6 Overview of FDI in Uganda

Uganda's latest Foreign direct investment was \$552,638,500 in 2016. During the past years, the value for this FDI has differed between \$1,205,589,000 in 2012 and \$11,900,000 in 1972. The Foreign Direct Investment inflows have an equivalent value of \$894,2in 2011. By 2012, FDI inflows raised by \$ 311.2 million, from \$894.2 million received in 2011 to \$1,205.4million. The increased inflow was mainly accounted by direct equity capital and borrowings from affiliated companies. FDI transactions during 2013 declined by \$109.3 million to \$1,096.1 million from the amount of \$1,205.4 million which had been registered in 2012. The reduction in FDI in 2013 was caused in the first place by of low expenditures from affiliated

companies, especially from foreign debt. (Private Sector Investment Survey report, 2014). FDI inflows levels were always elevated which was between \$894.2 million in 2012 to \$1.05 billion in 2014 and this was mainly due to mineral resources and oil sector.

Table 3.5 Overview of FDI Uganda (1995-2016)

Year	Value
1995	\$121,200,000
1996	\$121,000,000
1997	\$175,000,000
1998	\$210,000,000
1999	\$140,200,000
2000	\$160,700,000
2001	\$151,496,100
2002	\$184,648,100
2003	\$202,192,600
2004	\$295,416,500
2005	\$379,808,400
2006	\$644,262,500
2007	\$792,305,800
2008	\$728,860,900
2009	\$841,570,800
2010	\$543,872,700
2011	\$895,293,900
2012	\$1,205,389,000
2013	\$1,096,000,000
2014	\$1,058,565,000
2015	\$538,484,400
2016	\$522,638,500

Source: INDEXMUNDI, 2019

4. METHOD AND DATA PRESENTATION

This section presents the data description and the methodology applied in this research with the purpose of examining the effect of FDI, financial and economic development in the East African community. The summarized model of the study and the presentation of the variables that have been used to test hypotheses are presented. Furthermore, the estimation and diagnostics tests used to study the goodness of the model are discussed.

4.1. Data Description

This research used quantitative and secondary data for the dependent and independent variables. The cross-sectional and time-series data of the responsive variable (economic growth) and the explanatory variables (FDI net inflows, trade openness, financial development, and inflation) that covers the period from 1996 to 2015 were gathered from the World Development Indicator, African development indicator and the International world development Fund websites. The data available for the five countries are relevant and explicable to analyze the effect of foreign investment inflows and financial development on the economic growth in the East African Community.

Table 4.1: Variables and their proxies

Variables	Proxy
Economic growth	GDP (constant 2010 US\$)
Foreign direct investment	FDI,net inflows (BoP,current US\$)
Financial development	Domestic credit to private sector (%GDP)
Trade openness	Trade (%of GDP)
Inflation	Consumer price index (2010=100)

4.2. The model of the study

Therefore, descriptive statistics and t statistics are used to establish the distribution of the data. The regression analysis was employed to study the connection between FDI and financial development on economic growth.

The basic linear regression model for longitudinal data is specified below

$$Y_t = \alpha + \beta_1 X_t + \beta_2 X_t + \dots + \beta_n X_t + \varepsilon_t$$

Where

Y = dependent variable

X = independent variable

To test FDI, financial development, trade openness, inflation on economic growth, the following model is built as the research model for this study:

$$lnEG_t = \alpha + \beta_1 lnFDI_t + \beta_2 lnFD_2 + \beta_3 lnTO_t + \beta_4 lnIN_t + \varepsilon_t$$

Where

EG represents economic growth

FDI represents Foreign Direct Investment

FD represents Financial Development

TO represents Trade Openness

IN represents Inflation

 $\beta_{-}(1)$ - β 4 represents the elasticity of the coefficients

t represents time

ε represent the error term

4.3. Methods of analysis

Cross-sectional and time-series data or balanced panel data analysis was employed to analyze the study. Balanced panel data has more advantages than cross-sectional or time-series data. This technique of analysis has a greater degree of freedom and is desirable to analyze the non-stationarity of the data (Hsiao, 2003).

4.3.1 Descriptive Analysis

During data analysis, a discussion of descriptive analysis is presented on the way to measure the central tendency the mean, median, standard deviation, the variance, the maximum and minimum variables so that a brief summary of the sample data can be provided and allow a better explanation of the result.

This study presents the descriptive statistics that comprise five variables to summarize and describe our annual data collected from 1996 to 2015, where GDP per capita is the response variable and the independent variables are FDI net inflows, trade openness, domestic credit to the private sector and consumer price index.

4.3.2 Unit Root test

This study employed the stationarity analysis to test whether the mean and variance of the stochastic term were constant over time. The Augmented Dickey-Fuller (ADF) is appropriate for this work.

4.3.2.1Augmented Dickey-Fuller

The ADF test is used in this research to examine the level on which variables are integrated.

With the ADF tests, the null hypothesis affirms that a unit root exists in the time series (non-stationary time series), which is

H₀: the series has a unit root

the alternative hypothesis affirms that there is no unit root in the time series, that the time series is stationary (no unit root) which is

H₁: the series has no unit root

If the rejection of the null hypothesis succeeded, we can conclude that a unit root doesn't exist in the series. A classical regression model requires that responsive and explanatory variables should be stationary and that the errors have to have a constant mean and finite variance. Non-stationary variables are observed in spurious regression and as Granger and New bold (1974) argued, they are indicated by a low Durbin-Watson (DW) statistic and a great R², t-and F-statistics appear to be

sufficiently great, but the results obtained come out to not have any economic sense (Verbeek,2000: 281). The results "look good" as the least-squares estimates are not consistent and the usual test of statistical inference does not hold.

4.3.3 Co-integration analysis

The notion that there is a long-run trend for the FDI, financial development to grow relative to GDP growth or vice-versa has been a matter in economics that is frequently questioned. Therefore, if the variables are identified as having a random pattern and at the same time they are following a common long-run equilibrium relationship, then these variables should be co-integrated. Engle and Granger (1987) stated that co-integrated variables must have a long-run relationship. The main reason that this test has been widely used that it provides an effective background for testing and estimating time-series data both short-run and long-run relationships the variables have to each other.

This study applies an alternative test Johansen cointegration test the existence of the integration order of the proxies and looks at the short and the long-run effects between the proxies of observation.

4.3.4 Diagnostic tests

4.3.4.1 Serial-Correlation Analysis

Serial correlation is a correlation among members of the series of error terms ordered in time. It is mainly caused by incorrect functional forms, autoregressions, manipulation of data, data transformation and non-stationarity of data. The serial correlation test can be detected using the graphical method, Grey test, Durbin-Watson test, and Breusch-Godfrey test. In this study, the BG test based on the Lagrange Multiplier is chosen since other tests have drawbacks that made the BG test favored.

4.3.4.2 Heteroskedasticity: white test

They are many tests that are used to test if the residuals are heteroskedastic or homoscedastic. The residuals to be homoscedastic is more desirable than when the residuals are heteroskedastic. If the rejection of the null hypothesis is not reached, the conclusion will be that our residuals are homoscedastic (p-value $\,>\,5\%$). This study used a white test to test for the heteroskedasticity of the residuals.

5. RESULT AND FINDINGS

5.1 Introduction

This section presents a review of the data with an empirical analysis concentrating on the major variables that were stated in methodology. The study used a combination of graphical and empirical tools for carrying out the analysis in order to answer all the objectives that were inherently stated in the previous sections of the study. The analysis involves carrying out a comprehensive univariate analysis of each of the variables. This is intended to discover any forms and nature of trends in the data prior to carrying out an in-depth analysis. It involved the use of both the descriptive statistics and graphics for summarizing the data.

5.2 Descriptive Analysis

Table 5.1 presents a summary of descriptive statistic for the variables considered for analysis namely GDP growth, FDI, domestic credit to private sector, inflation and trade openness. It described the distribution of each variable with respect to mean, standard deviation, minimum and maximum values for the 20 observations.

Table 5.1: Descriptive Analysis for Burundi

	lnCPI	lnDCPS	lnFDI	lnGDP	lnTO
Mean	6.347094	3.361885	696.9842	10435.54	4.720680
Median	6.044662	3.374849	319.5566	10241.34	5.033038
Maximum	8.913680	3.698768	3188.073	11861.62	5.661069
Minimum	3.836164	2.928566	7.389056	9439.195	3.795913
Std-Dev	1.592309	0.218233	955.9534	826.5918	0.645427
Skewness	0.171482	-0.024243	1.647848 0.379420		-0.211403
Kurtosis	1.806388	2.231374	4.360762	1.692096	1.505085
Jarque-Bera	1.221014	0.469566	10.06468	1.810109	1.910716
Probability	0.543075	0.790742	0.006524	0.404520	0.384674
Sum	120.5948	63.87582	13242.70	198275.3	89.69293
Sum Sq.	45.63807	0.857263	16449246	12298571	7.498366
Dev.					
Observations	20	20	20	20	20

Source: Author's computation (2019)

The descriptive report of the variables used in Burundi revealed the result of mean, median, maximum, minimum, Skewness, Kurtosis and Jarque-Bera statistics. The result of Skewness showed that CPI, FDI, and GDP are positively skewed while DCPS and TO are negatively skewed. Kurtosis result revealed that CPI, GDP, DCPS, and TO are platykurtic (thin tail that is less than 3) while FDI showed leptokurtic (fat-tail that is more than 3) in nature. More so, the Jarque-Bera statistic revealed that all the proxies are normally distributed except FDI which is not normally distributed using the probability of Jarque-Berastatictic as presented in the above table.

Table 5.2: Descriptive Analysis for Kenya

	lnCPI	lnDCPS	lnFDI	lnGDP	lnTO
Mean	6.243216	4.162570	4102.942	37380.32	5.671511
Median	5.895847	4.103042	3006.841	36664.65	5.662330
Maximum	8.816632	4.639543	9523.428	45198.20	6.106888
Minimum	4.221680	3.804147	832.5479	32521.83	5.183775
Std. Dev.	1.540636	0.233497	2818.796	4113.200	0.207823
Skewness	0.314513	0.730940	0.849091	0.485096	-0.255843
Kurtosis	1.638842	2.715748	2.195270	1.923578	3.382825
Jarque-Bera	1.873686	1.848244	2.942844	2.942844 1.749965	
Probability	0.391863	0.396880	0.229599	0.416869	0.843532
Sum	124.8643	83.25140	82058.84	747606.4	113.4302
Sum Sq.	45.09762	1.035893	1.51E+08	3.21E+08	0.820614
Dev.					
Observation	20	20	20	20	20
S					

Source: Author's computation (2019)

The report of the descriptive analysis used in Kenya depicted the result of Skewness which shows that CPI, FDI, DCPS, and GDP are positively skewed while TO is the only variable that is negatively skewed. The Kurtosis result revealed that CPI, GDP, DCPS, and FDI are platykurtic while TO showed leptokurtic in nature. More so, the Jarque-Bera statistic revealed that all the variables are normally distributed.

Table 5.3: Descriptive Analysis for Rwanda

	lnCPI	lnDCPS	lnFDI	lnGDP	lnTO
Mean	6.430466	3.000361	2222.673	15154.39	4.844773
Median	6.233924	2.915082	1451.820	14875.41	4.790723
Maximum	8.179111	3.761919	4904.730	20322.84	5.587604
Minimum	4.894681	2.300024	511.3066	10645.14	4.302985
Std. Dev.	1.141913	0.408444	1626.654	2978.621	0.368868
Skewness	0.229592	0.494649	0.414500	0.178641	0.279938
Kurtosis	1.512231	2.444879	1.532996	1.800645	1.935693
Jarque-Bera	2.020255	1.072392	2.366119	1.305085	1.205176
Probability	0.364173	0.584969	0.306340	0.520720	0.547393
Sum	128.6093	60.00721	44453.46	303087.8	96.89545
Sum Sq.	24.77535	3.169699	50274050	1.69E+08	2.585212
Dev.					
Observation	20	20	20	20	20
S					

The result in Table 5.3 of the descriptive analysis in Rwanda depicted the result of Skewness which shows that CPI, FDI, DCPS, FDI, and GDP are positively skewed. The Kurtosis result revealed that CPI, GDP, DCPS, FDI, and TO are platykurtic. However, the Jarque-Bera statistic revealed that all the variables are normally distributed.

Table 5.4: Descriptive Analysis for Tanzania

	lnCPI	lnDCPS	lnFDI	lnGDP	lnTO
Mean	6.615634	2.537212	7159.024	32542.66	5.188126
Median	6.277946	2.661222	6324.897	32171.66	5.207453
Maximum	9.013422	3.258116	11154.26	41804.61	5.779466
Minimum	4.657472	1.633075	3555.615	25475.61	4.594805
Std. Dev.	1.322060	0.535132	2488.136	5218.280	0.333723
Skewness	0.451619	-0.437741	0.147469	0.243409	-0.045690
Kurtosis	2.028481	1.710816	1.696212	1.803855	1.995401
Jarque-Bera	1.466406	2.023720	1.489044	1.389796	0.847974
Probability	0.480368	0.363542	0.474961	0.499125	0.654432
Sum	132.3127	50.74425	143180.5	650853.1	103.7625
SumSq. Dev.	33.20903	5.440952	1.18E+08	5.17E+08	2.116056
Observations	20	20	20	20	20

Source: Author's computation (2019)

The report of the descriptive analysis in Tanzania showed the result of Skewness of CPI, DCPS, and GDP are positively skewed while FDI and TO are the variables that are negatively skewed. The Kurtosis result revealed that CPI, GDP, DCPS, FDI and TO are platykurtic in nature. More so, the Jarque-Bera statistic revealed that all the variables are normally distributed.

Table 5.5: Descriptive Analysis for Uganda

	lnCPI	lnDCPS	lnFDI	lnGDP	lnTO
Mean	6.663878	2.682390	5751.756	26333.95	5.052414
Median	6.292935	2.639525	5770.807	25830.95	5.031445
Maximum	8.798849	3.316016	8787.865	33499.93	5.755675
Minimum	5.241923	1.981980	3238.240	20061.34	4.383102
Std. Dev.	1.200300	0.446021	1943.471	4473.871	0.409653
Skewness	0.558413	-0.009671	0.108862	0.151285	0.143210
Kurtosis	1.850758	1.612357	1.435721	1.621854	1.716831
Jarque-Bera	2.140049	1.604938	2.078644	1.659029	1.440465
Probability	0.343000	0.448221	0.353694	0.436261	0.486639
Sum	133.2776	53.64779	115035.1	526679.0	101.0483
Sum Sq.	27.37367	3.779763	71764481	3.80E+08	3.188490
Dev.					
Observation	20	20	20	20	20
S					

The report of the descriptive analysis in Uganda showed the result of Skewness of CPI, DCPS, GDP, TO are positively skewed while FDI is the only variable that is negatively skewed. The Kurtosis result revealed that CPI, GDP, DCPS, FDI and TO are platykurtic in nature. More so, the Jarque-Bera statistic revealed that all the variables are normally distributed.

5.3 Augmented Dickey-Fuller

The results of ADF are shown in the table below. Both tests are tested at a 0.05 level of significance. The rejection criteria is that the null hypothesis is rejected if the test value is greater than its respective critical value of 5% alpha level and if otherwise, the null hypothesis is accepted.

Table 5.6: ADF Tests result for Burundi

Variable	Level		First Diffe	First Difference		Second Difference	
	ADF Stat	Critical Values @5%	ADF Stat	Critical Values @5%	ADF Stat	Critical Values @5%	
lnGDP	0.684729	-3.02997	-3.34618	-3.04039	-	-	I(1)
lnFDI	-2.004721	-3.02997	-4.93984	-3.04039	-	-	I(1)
lnDCPS	-6.219975	-3.08100	-	-	-	-	I(0)
lnCPI	2.086502	-3.02997	-2.92146	-3.04039	-4.82246	-3.08100	I(2)
lnTO	-1.468337	-3.02997	-4.10001	-3.040391	-	-	I(1)

Source: Author's computation (2019)

Table 5.6 shows that in Burundi, ln GDP and ln FDI, ln TO are stationary at first difference while ln DCPS is attaionary at level and ln CPI is stationary at second difference

Table 5.7: Unit Root Break Test for Burundi

Variable	Variable Integration Order		Break Period
	Unit Root		
		P-Value	Date
GDP	I (1)	0.0436	2005
FDI	I (1)	0.01	2014
DCPS	I(0)	0.01	2007
CPI	I(1)	0.01	2004
TO	I(1)	0.01	2011

Source: Author's computation (2019)

The result of unit root break test in table 5.7 reveals that, in Burundi D(GDP) was stasitionary at first difference and it experienced a break in 2005, D(FDI) was stationary at first difference and its experienced break in 2014, DCPS was stationary at level and experienced break in 2007, DD(CPI) was stationary at first difference and it experienced break in 2004 and D(TO) was stationary at first level and it experienced break in 2011 respectively.

Table 5.8: ADF Tests result for Kenya

Variable	Level		First Differ	First Difference		Second Difference	
	ADF Stat	Critical Values @5%	ADF Stat	Critical Values @5%	ADF Stat	Critical Values @5%	
lnGDP	4.67828	-3.02997	-2.05482	-3.04039	-3.79400	-3.11991	I(2)
lnFDI	-1.758147	-3.02997	-4.13338	-3.06559	-	-	I(1)
lnDCPS	-0.548144	-3.02997	-4.60543	-3.04039	-	-	I(1)
lnCPI	2.933479	-3.02997	-2.66388	-3.04039	-6.40446	-3.06559	I(2)
lnTO	-1.998628	-3.02997	-3.81342	-3.04039	-	-	I(1)

Source: Author's computation (2019)

Table 5.8 shows that in Kenya ln GDP and ln CPI are stationary at second difference while ln FDI, ln DCPS and ln To are stationary at difference

Table 5.9: Unit Root Break Test for Kenya

Variable Integration Order		Break Test	Break Period
	Unit Root		
		P-Value	Date
GDP	I(I)	0.0436	2009
FDI	I(1)	0.0159	2006
DCPS	I(0)	0.01	2012
CPI	I(1)	0.01	2006
TO	I(1)	0.01	2006

In Kenya, the results in table 5.9 shows that DD(GDP) was stasitionary at first difference and it experienced a break in 2009, D(FDI) was stationary at first difference and its experienced break in 2006, D(DCPS) was stationary at level and experienced break in 2012, DD(CPI) was stationary at first difference and it experienced break in 2006 and D(TO) was stationary at first level and it experienced break in 2006 respectively.

Table 5.10: ADF Tests result for Rwanda

Variable	Level		First Difference		Second D	ifference	Integration
	ADF Stat	Critical Values @5%	ADF Stat	Critical Values @5%	ADF Stat	Critical Values @5%	
lnGDP	5.409226	-3.02997	0.151248	-3.08100	-5.55136	-3.08100	I(2)
lnFDI	-0.324919	-3.081002	-6.69978	-3.08100	-6.69978	-3.95915	I(2)
InDCPS	0.144364	-3.02997	-3.55248	-3.04039	-	-	I(1)
lnCPI	-0.336073	-3.065585	-1.52899	-3.06559	-6.80500	-3.06559	I(2)
lnTO	0.939059	-3.02997	-4.09489	-3.04039	-	-	I(1)

Source: Author's computation (2019)

Table 5.10 shows that in Rwanda, In GDP and In FDI, In CPI are stationary at second difference while In DCPS and In TO are stationary at first difference

Table 5.11: Unit Root Break Test for Rwanda

Variable	Integration Order	Break Test	Break Period
	Unit Root	P-Value	Date
GDP	I(I)	0.01	2006
FDI	I(2)	0.01	2011
DCPS	I(0)	0.01	2007
CPI	I(I)	0.01	2008
TO	I(1)	0.0118	2014

In Rwanda, the findings in table 5.11reveals that DD(GDP) experienced a break in 2006, DD(FDI) in 2011, D(DCPS) in 2007, DD(CPI) in 2008 and D(TO) in 2014 respectively

Table 5.12: ADF Tests result for Tanzania

Variable	Level		First Diffe	First Difference		Second Difference	
	ADF Stat	Critical Values @5%	ADF Stat	Critical Values @5%	ADF Stat	Critical Values @5%	
lnGDP	4.319256	-3.040391	0.067614	-3.09890	-3.22368	-3.09890	I(2)
lnFDI	-0.749425	-3.040391	-7.68355	-3.04039	-	-	I(1)
lnDCPS	-0.684442	-3.052169	-4.14271	-3.05217	-	-	I(1)
lnCPI	3.714404	-3.02997	-1.63227	-3.04039	-4.63771	-3.11991	I(2)
lnTO	-1.001101	-3.052169	-4.62050	-3.05217	-	-	I(1)

Source: Author's computation (2019)

Table 5.12 shows that in Tanzania, In GDP and In CPI are stationary at second difference while In DCPS, In FDI and In TO are stationary at first difference

Table 5.13: Unit Root Break Test for Tanzania

Variable	Integration Order	Break Test	Break Period
	Unit Root	P-Value	Date
GDP	I(1)	0.01	2006
FDI	I(1)	0.01	2008
DCPS	I(0)	0.0174	2004
CPI	I(2)	0.01	2012
TO	I(1)	0.0587	2011

Source: Author's computation (2019)

In Tanzania, the results in table 5.13 shows DD(GDP) experienced a break in 2006, DD(FDI) in 2008, DCPS in 2004, DD(CPI) in 2012 and D(TO) in 2011 respectively

Table 5.14: ADF Tests result for Uganda

Variable	Level		First D	ifference	Secon	d Differenc	e Integration
	ADF Stat	Critical Values	ADF Stat	Critical Values	ADF Stat	Critical	
	Stat	@5%	Stat	@5%	Stat	Values @5%	
lnGDP	3.243187	-3.02997	-2.48373	-3.04039	-6.34138	-3.05217	I(2)
lnFDI	-1.228445	-3.02997	-1.47810	-3.09890	-4.45712	-3.09890	I(2)
lnDCPS	-0.35298	-3.052169	-5.48365	-3.05217	-	-	I(1)
lnCPI	2.707641	-3.02997	-2.35264	-3.04039	-5.05909	-3.06559	I(2)
lnTO	-1.281023	-3.02997	-4.96503	-3.04039	-	-	I(1)

Table 5.14 shows that in Uganda, In GDP, In FDI and In CPI are stationary at second difference while In DCPS and In TO are stationary at first difference

Table 5.15: Unit Root Break Test for Uganda

Variable	Integration Order	Break Test	Break Period
	Unit Root	P-Value	Date
GDP	I(2)	0.01	2009
FDI	I (1)	0.01	2013
DCPS	I(0)	0.01	2013
CPI	I (1)	0.01	2008
TO	I (1)	0.01	2004

Source: Author's computation (2019)

In Uganda, the results in the table 5.15 reveals that DD(GDP) experienced a break in 2009, DD(FDI) in 2013, D(DCPS) in 2013, DD(CPI) in 2008 and D(TO) in 2004 respectively.

5.4 Co-integration Analysis.

In our study, we check for cointegration using the Johansen test. This test is based on maximum likelihood estimation and two statistics: maximum Eigenvalues and a trace statistic. The Null hypothesis is that there is no Cointegration. A co-integration test is purposely done to check if the variables have a long-run association with each other. The results of the co-integration analysis have been presented in the table below.

Table 5.16: Johansen Co-Integration Test Results for Variables

	Rank	Trace	0,05 %	Max Eigen	0,05%
		test	critical	test	critical
		statistics	value	statistics	value
Burundi	At none	137,1981*	69,81889	63,21615*	33,87687
	At most 1	74,58199*	47,85613	45,25274*	27,58434
	At most 2	29,32925	29,79707	18,93602	21,13162
	At most 3	10,39323	15,49471	10,33034	14,2646
	At most 4	0,062896	3,841466	0,062896	3,841466
Rwanda	At none	123,1031*	69,81889	47,47317*	33,87687
	At most 1	75,62991*	47,85613	40,04046*	27,58434
	At most 2	35,35514*	29,79707	22,23431*	21,13162
	At most 3	13,35514	15,49471	8,317953	14,2646
	At most 4	5,037187*	3,841466	5,037187*	3,841466
Kenya	At none	111,5275*	69,81889	52,60067*	33,87687
	At most 1	58,92687*	47,85613	25,09085	27,58434
	At most 2	33,83602*	29,79707	17,35608*	21,13162
	At most 3	16,47993	15,49471	15,02137	14,2646
	At most 4	1,458561	3,841466	1,458561	3,841466
	Rank	Trace	0,05 %	Max Eigen	0,05%
		test	critical	test	critical
		statistics	value	statistics	value
Uganda	At none	121,5418*	69,81889	57,72002*	33,87687
	At most 1	63,82173*	47,85613	33,82133*	27,58434
	At most 2	30,0004*	29,79707	22,83749*	21,13162
	At most 3	7,162909	15,49471	7,14763	14,2646
	At most 4	0,015278	3,841466	0,015278	3,841466
Tanzania	At none	127,7364*	69,81889	52,14838*	33,87687
	At most 1	75,58798*	47,85613	37,31474*	27,58434
	At most 2	38,27324*	29,79707	19,11123	21,13162
	At most 3	19,16201*	15,49471	11,51977	14,2646
	At most 4	7,642239*	3,841466	7,642239*	3,841466

*cointegration

Source: Author's computation (2019)

Table 5.11 shows the results from the cointegrating test of the data. The null hypothesis states that there is no Cointegration. The rejection criteria are that the null hypothesis rejected if the statistic is more than 5% of the p-value. In the case of the above findings, at zero ranks, the trace statistic is greater than 5% of critical value implying that the no Cointegration hypothesis is rejected. A closer look at the findings above indicates the presence of Cointegration relation at many ranks in the model. Moreover, for the maximum eigenvalue, at most of the ranks, the null hypothesis is also rejected at the 5% level. In other words, for the maximum Eigenvalue and the trace tests, the findings indicate the existence of cointegrating at

many ranks for each country because, at these ranks, we succeed to reject the null hypothesis and conclude that there is Cointegration among variables.

5.5 Regression analysis

The objectives of this study were to determine the effect of FDI and financial development on the growth of the economy in the EAC states. To determine also the impact of trade openness on economic development in the East Africa community. To establish the effect of CPI and DCPS on economic growth in the states of EAC. Regression analysis was employed as a way of examining how the study variables affect economic growth in each EAC state.

The transformed variables were used for the regression analysis so as to minimize the chances of a model suffering from the problems of autocorrelation, non-normal residuals as well as heteroscedasticity. The findings are presented in the tables below.

Table 5.17: Estimated results for Burundi

 $DDlnGDP_t = \alpha + \beta_1 DlnFDI_t + \beta_2 lnDCPS_t + \beta_3 DlnTO_t + \beta_4 DDlnCPI_t + \varepsilon_t$

Dependent Variable: GI Method: Least Squares)P			
Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	8.880824	0.127488	69.65981	0.0000
lnCPI	0.339958	0.046941	7.242236	0.0000
lnDCPS	-0.126825	0.098704	-1.284904	0.2197
lnFDI	-0.001105	0.003698	-0.298689	0.7696
lnTO	-0.057813	0.061817	-0.935218	0.3655
R-squared	0.945321	Mean depe	endent var	9.250044
Adjusted R-squared	0.929698	S.D. deper	ndent var	0.078336
F-statistic	60.50947	Durbin-W	atson stat	1.265718
Prob(F-statistic)	0.000000			

Source: Author's computation (2019)

Table 5.12 reveals the coefficients of FDI, trade openness and domestic credit to private sector are negative coefficient and insignificant at 5% level of significance. The coefficient of the consumer price index exhibits a positive and significant at 0,05. More so, the R-squared and the adjusted R-squared including the F-statistic

reveal that the independent variables can jointly influence on the dependent variable during the study period.

Table 5.18: Estimated results for Rwanda

$$\begin{aligned} DDlnGDP_t &= \alpha + \beta_1 \, DDlnFDI_t + \beta_2 DD \, lnDCPS_t + \beta_3 DDlnCPI_t + \beta_4 DlnTO_t \\ &+ \varepsilon_t \end{aligned}$$

iDP			
}			
Coefficient	Std. Error	t-Statistic	Prob.
-4.438914	0.823103	-5.392903	0.0001
-0.079036	0.099198	-0.796744	0.4380
0.062502	0.016160	3.867609	0.0015
0.555879	0.109096	5.095321	0.0001
0.360528	0.167838	2.148071	0.0485
0.992247	Mean depe	endent var	1.846138
0.990180	-		0.176941
479.9330	-		1.605414
0.000000			
	Coefficient -4.438914 -0.079036 0.062502 0.555879 0.360528 0.992247 0.990180 479.9330	Coefficient Std. Error -4.438914 0.823103 -0.079036 0.099198 0.062502 0.016160 0.555879 0.109096 0.360528 0.167838 0.992247 Mean dependence of the company	Coefficient Std. Error t-Statistic -4.438914 0.823103 -5.392903 -0.079036 0.099198 -0.796744 0.062502 0.016160 3.867609 0.555879 0.109096 5.095321 0.360528 0.167838 2.148071 0.992247 Mean dependent var 0.990180 S.D. dependent var 479.9330 Durbin-Watson stat

Source: Author's computation (2019)

Table 5.5 shows that the coefficient sign of DCPS, consumer price index and trade openness are positive and significant at 5% level. The regression coefficient of foreign direct investment reveals negative and not significant at 0,05 implying that FDI exhibited a negative and insignificant impact on economic growth. This result is supported by Mutandwa (2014) that FDI has an insignificant effect on economic growth of Rwanda

Table 5.19: Estimated results for Kenya

$$DDlnGDP_t = \alpha + \beta_1 DlnFDI_t + \beta_2 D \ lnDCPS_t + \beta_3 DDlnCPI_t + \beta_4 D \ lnTO_t + \varepsilon_t$$

Dependent Variable: G Method: Least Squares	DP			
Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	9.734491	0.219983	44.25117	0.0000
LnFDI	0.012759	0.007336	1.739186	0.1025
LnDCPS	0.148570	0.093701	1.585584	0.1337
LnCPI	0.380928	0.025122	15.16317	0.0000
LnTO	-0.122738	0.093056	-1.318965	0.2070
R-squared	0.986022	Mean dep	endent var	10.52329
Adjusted R-squared	0.982294	S.D. deper	ndent var	0.108028
F-statistic	264.5193	Durbin-W	atson stat	1.268128
Prob(F-statistic)	0.000000			

Table 5.14 affirms that the coefficient sign of foreign direct investment and DCPS are positive and not significant to influence GDP. The coefficient of CPI is positive and significant to influence GDP. While trade openness reveals a negative and insignificant impact on GDP.

Table 5.20: Estimated results for Tanzania

 $DDlnGDP_t = \alpha + \beta_1 DlnFDI_t + \beta_2 DlnDCPS_t + \beta_3 DDlnCPI_t + \beta_4 D \ lnTO_t + \varepsilon_t$

Dependent Variable: G Method: Least Squares	DP			
Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	8.762735	0.188367	46.51956	0.0000
lnCPI	0.593808	0.057880	10.25927	0.0000
lnDCPS	0.156994	0.039151	4.009972	0.0011
lnFDI	0.003963	0.023285	0.170218	0.8671
lnTO	0.198861	0.067726	2.936263	0.0102
R-squared	0.993180	Mean dep	endent var	10.37815
Adjusted R-squared	0.991362	S.D. deper	ndent var	0.159909
F-statistic	546.1354	Durbin-W	atson stat	1.196689
Prob(F-statistic)	0.000000			

Source: Author's computation (2019)

Table 5.15 shows the sign of all the independent variables' coefficient such as foreign direct investment, DCPS, Trade openness and CPI are positive but not significant excluding FDI which is significant at 5% in the case of Tanzania.

Table 5.21: Estimated results for Uganda

 $DDlnGDP_t = \alpha + \beta_1 DDlnFDI_t + \beta_2 D lnDCPS_t + \beta_3 DDlnCPI_t + \beta_4 D lnTO_t + \varepsilon_t$

Dependent Variable: GD	P			
Method: Least Squares				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	8.481697	0.157589	53.82171	0.0000
lnCPI	0.402158	0.058387	6.887849	0.0000
lnDCPS	0.527013	0.069885	7.541193	0.0000
lnFDI	0.094472	0.026330	3.587984	0.0027
lnTO	-0.246836	0.109412	-2.256027	0.0394
R-squared Adjusted R-squared F-statistic	0.995105 0.993800 762.4060	Mean depen S.D. depend Durbin-Wat	lent var	10.16483 0.170606 2.376578
Prob(F-statistic)	0.000000			

Source: Author's computation (2019)

Table 5.16 shows that the coefficient sign of foreign direct investment, DCPS and consumer price are positive and significant at 0,05. Hence, trade openness coefficient reveals a negative and significant to influence GDP during the study period in Uganda.

The results in the tables above show that the value of R-squared and Adjusted R-squared are between 94% and 99%. The value of adjusted R² shows that the data are fitted for the model used in this study and the value of R² shows that the variation in the responsive variable is justified by the explanatory variables. Prob F Statistic value (0,000) shows the level of significance of all the independent variables in explaining the dependent variable.

5.6 Means of Achieving the Stated Objectives

The first two objectives were achieving in the below illustrations:

The first research objective is to examine the impact of foreign direct investment on economic growth in EAC, and from the analysis, the result showed that FDI showed

negative and positive impact but not significant at 5% alpha level for Burundi, Rwanda, Kenya, and Tanzania. These results are like papers of It implies also that the increase or decrease of foreign direct investment in these four countries doesn't affect positively the growth of the selected countries. On the other hand, for Uganda, a unit increase in FDI will lead to an increase GDP by \$3,58 million. We fail to reject the null hypotheses for all most all the countries, it shows that FDI doesn't have a significant effect of foreign direct investment on Economic growth in the East African community. This result is carried out by the paper of Steve (2016) found out that FDI was negative and insignificant on the growth of East African countries. It equally confirms the findings of Sindre (2011) that showed that instead of FDI to impact the economic development in African regions, have been a supportive factor to grow the economy of a nation.

The coefficient sign of trade openness is found to be positive or negative and its t statistic is found to be less or greater than 2 which means that the trade openness has a positive or negative impact on the growth of the EAC' economy. It implies that trade openness has either a positive or negative effect on economic development regarding on the country of interest in the East African community states.

Further, the third research objective was to determine the effect that DCPS has to the economic development in the East African community states. The coefficient of DCPS is positive and statically significant in explaining the variation of economic growth in Rwanda, Tanzania, and Uganda. DCPS has a significant contribution to the increase of the GDP in those 3 countries of the EAC. These results are supported by the paper of Hermes (2003) that found that financial development can strongly impact the attractiveness of investment in a country which lead to the growth of the economy. These findings are backed by previous research studies that undertook to establish a similar purpose as elaborated above.

The last research objective of this study was to examine the effect of consumer price index proxy of inflation on the economic growth in the EAC countries. The coefficient of CPI is positive and significant for all the countries this implies that inflation has an impact on the economic growth in the East African Community countries, the instability of economy in a country discourage the foreign investment. The result shows that an increase of 1% in inflation will decrease the growth of the economy in the EAC countries.

5.7 Diagnostic tests Results

Diagnostic tests determine the goodness of the model. Thus, the regression model was preceded by diagnostic tests presented.

Table 5.22: Breusch-Godfrey Serial Correlation LM Test

Countries	Prob chi-square (2)
Burundi	0,4321
Rwanda	0,3722
Kenya	0,0838
Tanzania	0,1151
Uganda	0,7192

Source: Author's computation (2019)

Table 5.17 shows the results of serial correlation LM test, it indicates that the prob chi-square (2) is greater than 0,05 which gives a conclusion that variables are not correlated the H_0 cannot be rejected. The H0 is accepted which means that the residuals in this model are not serially correlated.

Table 5.23: Heteroscedasticity test: White

Countries	Prob chi-square (2)
Burundi	0,5627
Rwanda	0,1497
Kenya	0,3138
Tanzania	0,5669
Uganda	0,1989

Source: Author's computation (2019)

The heteroscedasticity test is used in this study to test if the variances errors in a regression model are constant, Table 5.18 demonstrates that prob chi-square is greater than 5%, H_0 cannot be rejected, it means that the variances of errors in this model are equal.

Table 5.19: Correlation Matrix before the first difference

	CPI	DCPS	FDI	TO	GPD
CPI	1				
DCPS	0,3097115	1			
FDI	0,4840021	-0,11791	1		
TO	0,4812781	0,414463	0,6070521	1	
GPD	0,2905216	0,150785	0,7560569	0,6916	1
After 1 st difference					
	CPI	DCPS	FDI	TO	GDP
CPI	1				
DCPS	0,3020921	1			
FDI	0,5901904	0,036851	1		
TO	0,4248678	0,536622	0,3980105	1	
GDP	0,3798096	0,500784	0,669055	0,6775	1

Table 5.19 indicates that the variables are positively correlated with each other. The degree of correlation is not as strong as much between all variables. Some variables show a weak correlation and others show a strong correlation.

6. CONCLUSION AND STUDY SUGGESTION

This final chapter of the report share out the findings of the research that is established in the previous chapter. The discussion follows similar works done by other researchers previously. Lately in this section, recommendations and. suggestions areas that are potential grounds for further research are presented.

6.1 Conclusion

In attempt to carry out the impact of foreign direct investment on economic growth among EAC, several concepts and analyses were carried out to the broad and the specific objectives. Nonetheless, FDI and financial development may help to raise the growth of the economy but the contribution of FDI will depend on how other factors that consist of the growth of the economy are taken into consideration. Many studies had argued the impact of foreign direct investment and financial development to GDP in the African countries especially in the least developed countries, the positive and negative relationship has been reported between the variables, some agreed that FDI impacts economic growth through the development of others factors that are related to economic growth. The results in our study pointed out that FDI has an effect that is negative effect on economic development in the EAC Countries and DCPS as a proxy of financial development has positive significance in the EAC countries. The report in this study is backed by Hermes and Robert (2010) in their research on how FDI and financial development affect economic growth in Latin America, Asia and sub Saharan Africa countries founds that Latin America and Asia countries with financial developed system were more likely to attract FDI which lead to their economic growth, in another hand's Sub-Saharan countries with less developed financial system FDI was not significant to the growth of their economy which is supported by the study of Mumtaz (2016) who studied the connection between foreign direct investment and financial development in MENA countries and his study revealed that financial development is a strong factor to predict inflows of FDI in MENA countries. furthermore, Edimealem (2017), his study supports our results, he found that FDI and trade openness have a powerless effect on economic growth in the EAC region. Contrarily, consumer price index as a proxy of inflation was found to positively affect economic growth in the EAC which is disputed by the study of Alfaxad (2013) on the governance and economic growth in the EAC, his findings were cited as population growth rate and inflation rate was negatively related to the growth of economy in the EAC.

More so, this study further concluded that, in Burundi, the result revealed FDI, trade openness and domestic credit to private sector were negative and insignificant to influence economic growth while consumer price index exhibited a positive and significant. In Rwanda, the result showed that DCPS, consumer price index and trade openness were positive and significant while foreign direct investment exhibited a negative and insignificant impact on economic growth. In the case of Kenya, the result showed that foreign direct investment and DCPS were positive but not significant to influence economic growth, CPI was positive and significant while trade openness revealed a negative and insignificant impact on economic. In Tanzania, it showed all the employed independent variables were positive but not significant excluding FDI which revealed significant impact on economic growth. Hence, the result of Uganda showed that foreign direct investment, DCPS and consumer price were positive and significant while trade openness exhibited a negative and significant impact in economic growth during the study period.

6.2 Policy Recommendations

Based on the findings and conclusion of this study, the following recommendations are formulated.

The governments in the EAC community states have to put more attention on financial development system such as the improvement of their private domestic investment, develop their banking system in a way to contribute to FDI inflows in these countries. Strategic and systematic ways of controlling rates should be adopted by the policymakers to improve the state of how interest and exchange rates are functioning. Trade openness and inflation need to be considered in order to grow the economy of the EAC countries.

Regarding the trade openness in the East African community, there should be an introduction of import substitution industries to produce imported goods by the government. This will reduce government expenditure abroad and therefore try to stabilize foreign exchange or exchange rates. The government should embark on industrialization, and modern technique of agricultural production since this area can employ a large population resulting in high productivity hence economic growth including attaining the products and services for export.

Finally, the establishment of an independent monetary policy authority is important. Some studies clearly point to the short and long-run effects of monetary policy on inflation in many countries. Thus, monetary and fiscal policies should aspire for macroeconomic stability. In other words, policymakers should be carefully committed to pursuing programs that may cause an increase in the price of goods and services with the aim of stabilizing macro-economic instability and reducing unemployment.

6.3 Areas of Further Study

The results presented in this report may not be conclusive and should be treated as being preliminary. Further analysis of the survey data on the Impact of foreign direct investment and the financial integration on the development of economy in the EAC states needs to be done to validate these findings and provide greater confidence in explaining the changes in inflation and unemployment rate. Furthermore, it was found out that the effect of the inflation on unemployment is low hence provoking the fact that there are other factors that influence economic growth. Therefore, based on these, there is a need for further study to be conducted on the following.

- Effect of inflation on economic development,
- Impact of financial integration on economic growth,
- A study on the factors that influence the growth of EAC economy.

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- Url https://www.indexmundi.com/facts/uganda/foreign-direct-investment

APPENDIX

Burundi						
	CPI	DCPS	FDI	GDP	TO	
YR1996	22.10411	14.23341	100	1444065193	21.57372	
YR1997	28.98105	11.8717	100	1421104557	24.27538	
YR1998	32.6038	13.53521	2000000	1488607023	27.44003	
YR1999	33.70758	15.39021	238660.3	1473572092	23.53975	
YR2000	41.94302	17.08001	11683518	1460945583	22.55372	
YR2001	45.84212	16.30283	-11440.9	1490979806	20.96405	
YR2002	45.21607	20.31026	100	1557276512	21.67383	
YR2003	50.03043	20.13273	100	1538219684	27.37631	
YR2004	54.12113	17.35075	44690.71	1612571959	31.57612	
YR2005	61.2933	14.54179	584701.7	1627085107	41.64681	
YR2006	62.97606	15.8333	31593.78	1714698066	54.15179	
YR2007	68.27365	14.77584	500245.1	1796760634	41.48231	
YR2008	84.93716	13.66462	3833208	1887463245	47.41792	
YR2009	93.90265	14.98071	348404.5	1952928500	49.92587	
YR2010	100	18.24828	780582	2026864469	48.0957	
YR2011	109.5922	20.32357	3354999	2111823041	47.0192	
YR2012	129.4952	18.9066	604919.7	2196704928	46.41898	
YR2013	139.7745	17.3972	1.17E+08	2297622744	41.64117	
YR2014	145.9321	16.74582	81747197	2404713060	41.307	
YR2015	154.0236	16.457	49622866	2310420828	35.9932	

Kenya						
	CPI	DCPS	FDI	GDP	TO	
YR1996	27.55708	21.68163	1.09E+08	24528267342	57.31211	
YR1997	30.68807	24.35518	62096810	24644752554	54.05712	
YR1998	32.75106	23.96342	26548246	25455617585	48.89724	
YR1999	34.63163	26.56944	51953456	26042468490	48.19227	
YR2000	38.08787	25.75838	1.11E+08	26198643973	53.30904	
YR2001	40.27358	25.22269	5302623	27188928219	55.94684	
YR2002	41.06347	25.8546	27618447	27337613464	55.17267	
YR2003	45.09413	25.15568	81738243	28139282294	54.13227	
YR2004	50.33589	27.28752	46063931	29575595617	59.477	
YR2005	55.52692	26.27688	21211685	31322527291	64.47887	
YR2006	63.55264	22.88831	50674725	33349876084	55.23649	
YR2007	69.75466	23.04496	7.29E+08	35634585974	53.89479	
YR2008	88.05816	25.38061	95585680	35717358968	57.5786	

YR2009	96.18956	25.02161	1.16E+08	36898510533	50.86364
YR2010	100	27.22812	1.78E+08	40000088347	54.22686
YR2011	114.0225	30.57154	1.45E+09	42443399231	60.4465
YR2012	124.7153	29.58196	1.38E+09	44380180300	57.85465
YR2013	131.8458	31.71305	1.12E+09	46989153289	53.13299
YR2014	140.9144	34.13371	8.21E+08	49506417104	51.2983
YR2015	150.1896	34.24648	6.2E+08	52337445097	44.21132

Rwanda						
	CPI	DCPS	FDI	GDP	TO	
YR1996	38.73906	6.806436	2218241	1874385461	32.23007	
YR1997	43.39372	8.090274	2598560	2133983208	33.46746	
YR1998	46.0885	8.759214	7089194	2323025727	28.79446	
YR1999	44.97964	9.925615	1725717	2423435684	30.80771	
YR2000	46.73363	10.41282	8319040	2626299259	31.19816	
YR2001	48.29587	10.66135	4634138	2849129767	32.7467	
YR2002	49.25821	11.04485	2610000	3224988890	30.74473	
YR2003	52.9278	10.34209	4700000	3296015155	31.99158	
YR2004	59.41183	11.18447	7700000	3541491697	35.88485	
YR2005	64.76726	11.71896	10500000	3873609811	36.63859	
YR2006	70.52043	12.39407	30643966	4231030726	37.10364	
YR2007	76.92419	12.80652	82283166	4553997446	40.88059	
YR2008	88.79991	14.24356	1.03E+08	5062280241	42.37918	
YR2009	100.2505	11.7735	1.19E+08	5378584802	41.40948	
YR2010	100	12.19131	2.51E+08	5773084568	42.03064	
YR2011	103.0802	15.82854	1.19E+08	6235918930	43.89292	
YR2012	113.6676	18.45342	2.55E+08	6775059583	44.57149	
YR2013	120.4015	19.17316	2.58E+08	7090700999	46.02054	
YR2014	123.2364	20.77691	3.15E+08	7631336868	47.6327	
YR2015	126.3524	21.13145	2.23E+08	8308082095	52.54733	

Tanzania						
	CPI	DCPS	FDI	GDP	TO	
YR1996	34.55197	3.093606	1.5E+08	13979023119	51.88067	
YR1997	40.11161	3.545348	1.58E+08	14471822573	41.90763	
YR1998	45.2458	3.861583	1.72E+08	15008511791	37.41763	
YR1999	48.81589	4.183627	5.17E+08	15734981143	35.38399	
YR2000	51.70773	4.087733	4.63E+08	16511320979	33.49085	
YR2001	54.36936	5.381469	5.49E+08	17501641754	38.29025	
YR2002	57.26064	6.83473	3.96E+08	18755381231	37.42109	
YR2003	60.29749	8.083006	3.18E+08	20046919269	41.37361	
YR2004	63.15306	9.240734	4.43E+08	21616251926	45.71708	
YR2005	66.33255	8.504419	9.36E+08	23383020791	39.08236	
YR2006	71.1423	9.810604	4.03E+08	24472803075	42.10623	
YR2007	76.14041	11.65126	5.82E+08	26544274428	50.60353	

YR2008	83.96643	12.16031	1.38E+09	28021886853	49.43778
YR2009	94.16182	11.46757	9.53E+08	29530121807	43.65185
YR2010	100	11.94384	1.81E+09	31407908612	47.8764
YR2011	112.691	12.63914	1.23E+09	33890549127	56.79516
YR2012	130.7228	13.00299	1.8E+09	35632866873	54.39708
YR2013	141.0116	12.89497	2.09E+09	38220903729	48.72066
YR2014	149.6579	13.78519	1.67E+09	40883041248	49.20252
YR2015	158.021	15.17571	1.6E+09	43728220562	46.40026

Uganda						
	CPI	DCPS	FDI	GDP	TO	
YR1996	45.3616	5.287803	1.21E+08	8063985903	35.38549	
YR1997	49.0672	4.831661	1.75E+08	8475249334	34.15857	
YR1998	49.10096	5.617737	2.1E+08	8890982815	30.04392	
YR1999	51.9377	6.355036	1.4E+08	9607057981	36.02471	
YR2000	53.69944	6.234175	1.61E+08	9908902840	32.74903	
YR2001	54.701	7.105811	1.51E+08	10422546785	35.32998	
YR2002	54.54373	7.94714	1.85E+08	11332715044	36.27779	
YR2003	59.27839	8.400087	2.02E+08	12066311003	36.58573	
YR2004	61.48431	8.0577	2.95E+08	12887692950	35.46009	
YR2005	66.67895	8.615806	3.8E+08	13703814498	38.99429	
YR2006	71.55363	10.10876	6.44E+08	15181735862	43.63329	
YR2007	75.94596	10.23153	7.92E+08	16458888152	46.77742	
YR2008	85.09809	13.90106	7.29E+08	17892251887	56.25827	
YR2009	96.17553	11.39397	8.42E+08	19109196503	46.74475	
YR2010	100	13.3413	5.44E+08	20186496527	45.71982	
YR2011	116.1941	15.80389	8.94E+08	22082345211	52.93644	
YR2012	130.9271	13.98388	1.21E+09	22929745405	53.33849	
YR2013	137.3479	13.91339	1.1E+09	23752213779	50.89653	
YR2014	141.5732	14.87281	1.06E+09	24965074811	46.31653	
YR2015	149.493	15.60151	7.38E+08	26260227907	47.66442	

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2008-2011 : Secondary School İn Economics- High school of Lake Tanganyika

Work Experience

02/02-06/08/2015: Internship at the Commercial Bank of BUJUMBURA

Skills

-Computer knowledge: Microsoft Word, Excel, Power point

-Language knowledge: French and English

-Excellent knowledge of internet

-Ability to work in team in order to acheive goal and reach high performance