The Impact of Foreign Direct Investment on Economic Growth in Somalia

Mohamed Mire Mohamed, North South University, Daka Bangladesh
NajibullahNorIsak, Ministry of Finance of Somalia

Abstract

After the end of civil war of Somalia, the integration of the country with the global economy increased and Somalia has started to attract with greater inflow of foreign direct investment (FDI). FDI is assumed to benefit the developing economy by supplementing domestic investment, generating employment and through the transfer of technology. Many Studies investigated the impact of foreign capital on economic growth in developing countries and some of them found that negative relationship between impact of FDI and Economic growth while others found positive relationship between FDI and Economic growth. Therefore this paper examines the impact of FDI on economic growth in Somalia using detailed sectoral data for FDI inflows to Somalia over the period 1980-2015s. Multiple Regression Analyses were used to measure the relationship between independent (FDI) and dependent variables (macroeconomic indicators). The results obtained in this research signify a negative correlation between FDI and economic growth and may be a concern for the government of Somalia. The government might focus on required reforms and policy implications to make foreign investment more beneficial.The implication of this is that the policy linkage between real GDP and FDI is weak and there is need for policy to ensure provision of adequate infrastructure to maximize the potential benefit of FDI in Somalia.

Keywords: *Foreign Direct investment, Economic growth, Somalia, Empirical analysis*

I. INTRODUCTION

The impact of foreign direct investment on economic growth has been an interesting issue for several decades. In African economy, foreign direct investment has played a vital role, and the policymaker believes that foreign direct investment improves the productivity of host countries and boost development. Foreign direct investment(FDI) is a direct investment into production or business in a country by an individual or company of another country, either by buying a company in the target country or by expanding operations of an existing business in that country. This research paper also will be focus on how to change foreign direct investment in the long run and seasonal period over time and effected economic growth in Somalia.

A. Background of the study

1) FDI inflow in Somalia

Foreign direct investment in developing countries has been grown and shown significant over the last decade and now becoming over a third of global flows. Many countries with developing economies attracted external investing economies including China, India, Brazil the Republic of Korea, Malaysia, South Africa, Mexico, Hong Kong and Singapore. All these countries, improve their share of foreign direct investment inflow according to other countries and many countries, changed their constitution (law) related to foreign direct investment, because they wanted to attract international companies which want to invest and utilize resources from these countries. To strengthen their macroeconomic stability, taxation reform and liberalization of capital accounts.Somalia has a special case about the constitution, according to the developed or even developing countries because the Somalia's constitution contains of three parts Sharia law, customary law and formal law which to the same as pre-colonial constitutions. Customary law is a local law which is mostly used by clans to solve their dispute between themselves, but also used to shared resources and to solve social and civil matters. Sharia law is based on Hadith and Koran. Every action related to decision making either concern government administration, or social matter, must conform to the Koran and Hadith. All issues opposite to the Koran and Hadith have not been considered in Somalia even if they are very crucial for nation's economy and social development. Formal law system in Somalia doesn't promote the standard feature of commercial law as it's shown in the rest of the world. Because the Somali's formal law mostly influenced by colonial power especially British and Italian and many chapters in formal law formed by the military regime that governed Somalia from 1969 to 1991.after the 1991 military regime was destroyed and this created to strengthen the power of customary law because of the absence of law and order in much of Somalia over the past 20 years. However, the customary law does not focus on the importance of modern commercial law either and has tended to protect the interests of the local business elite while competition and the principles of opportunity. In

2014 FDI in Somalia was declined, according to report from (UNACTAD) in 2015 United Nations Conference on Trade and development. The report shows that the FDI inflows to Somalia were recorded a 7 percent to decline 106 million US dollars in the last year compared to 107 million US dollars attracted in 2013. In the 2014 FDI report the importance of services in the international investment landscape is emphasized as the result of a long-term structural trend. In the period 2001−2012, the share of services in global FDI increased by 5 per cent (to 63 per cent), offset by a comparable decrease in the share of manufacturing. Foreign direct investment (FDI) provides a major source of capital which brings with it up-to date-technology. It would be difficult to generate this capital through domestic savings, and even if it were not, it would still be difficult to import the necessary technology from abroad, since the transfer of technology to firms with no previous experience of using it is difficult, risky, and expensive. The long period of time foreign direct investment brings externalities in the form of benefits that affects a whole economy because most companies cannot suitable as part of their own income. These benefits include technology and knowledge transferring from their country to investing country and also these companies bring to increase country's production and contribution as well as industrial improving and increasing knowledge and experience of the labor force because they gain many training these related to job specification and they're this creates to increase their productivity and this induce to increase country's economy (Lipsey & Sjöholm, 2010)

2) ***Foreign Direct Investment & Its Components***

In this paper research, foreign direct investment refers to an investment made by a group of companies or individuals in one country, especially business interest or profit orientation in another country, in the form of establishing business operations in the other country, such as a controlling interest in a foreign company. The research focus on foreign investors who live outside Somalia and invest their money in the various companies those interests to invest in Somalia. According to the literature, foreign direct investment needs a good relationship between foreign companies and local companies. This relationship facilitates contract between companies because this foreign direct business relationship creates scope for multinational corporations (MNC). The foreign direct investment firm has also qualified voting power in a business enterprise operating in a foreign country. This affirmation by investment, economy and financial report of the economy, but foreign direct investment can also be expertise, monetary resources and machinery foreigners invest in the outside company in their domestic countries. In the local companies setting up to show percentage share need to get from outsider investing companies. All foreign investing creates new market channels, new markets, cheaper production facilities, gaining access to new technology and to gain new skills.

B. Literature review

Macaulay, (2012) asserted that Nigeria's foreign investment can be traced back to the colonial era, when the colonial masters had the intention of exploiting our resources for the development of their economy. There was little investment by these colonial masters. With the research and discovery of oil foreign investment in Nigeria, but since then, Nigeria's foreign investment has not been stable. The Nigerian governments have recognized the importance of FDI in enhancing economic growth and development and various strategies involving incentive policies and regulatory measure have been put in place to promote the inflow of FDI to the country.

On the other studies, Zhang, et al. (2001) and (Choe, 2003) investigated the relationship between economic growth and FDI. Zhang focused on data from developing countries, which included Latin America and East Asia. And Zhang also found that in many cases, the studies show that FDI makes improvement in the process of increasing economic growth deeply, but there are two conditions beyond that and they are, if the country has macroeconomic stability, and trade regime. If those conditions are met, then FDI has full effect on economic growth. Choe (2003) examined the causality between FDI and economic growth in any trend and he found that FDI is caused by economic growth.

In the recent years, many policies have emerged which are related to FDI and are dealing with economic policies which promotes FDI in developing countries. Hong Kong, Taiwan and Singapore these countries had good experiences and becoming newly industrialized countries (NICs) including South Korea, which promoted FDI as the catalyst of economic growth in the first stage of beginning on their economic development.

Despite FDI having a strong positive impact on economic growth is not merely a source of determining the economic growth rather than domestic investment. Foreign trade and employment level are main factor those impacts economic growth.

From the above discussion, experts are sharply divided on the impact of FDI on the economic development of the host country. The objective of this study is to know if FDI has a significant impact on economic growth in Somalia.

C. *Purpose of the study*

The general objective of this study is to assess the effect of FDI on the economic growth of Bangladesh. This will be accomplished by conducting a historical and statistical analysis of the relationship between the trend of FDI inflow and its impact on Economic growth in Somalia.

D. *Research Hypothesis*

As we mentioned the earlier part of this research paper, many researchers are divided on the impact of Foreign Direct Investment on Economic growth in Somalia. Thus this study will examine the following hypotheses:

H1: There is a strong positive relationship between FDI and GDP growth in Somalia.

H2: There is a strong negative relationship between FDI and GDP growth in Somalia.

E. *Significant of the study*

Based on the significance of this study, it attempts to examine the role of FDI on economic growth in Somalia. Therefore, this research paper will be discover the true effect of Foreign Direct Investment on Economic growth in Somalia and it will be played vital role a significant contribution to existing literature related to Economic growth in Somalia and its determinants.

Fsinally, this study will contribute to the policies promoting the role of determinants of economic growth. Thus, promoting and sustaining economic growth in the region.

II. METHODOLOGY

The main type of data used in this study is secondary data, the empirical analysis is conducted by using annual data on foreign direct investment and economic growth in Somalia over the periods from 1980 to 2015s and unit of data is measured by millions of dollar currencies since Somali currencies is not working a well, after 1991th when central government was destroyed. we had collected data from SESRICorganization. Organization of Islamic countries forum especially statistical, economic and social research. The model used in this study is estimated using data on Foreign Direct Investment (FDI) and some macroeconomic indicators, which includes: Gross Domestic Products (GDP) and Domestic investment (DI) for the period 1980 to 2015s. This study also used to regression analysis of the ordinary least square (OLS) to the estimation technique that is being employed in this study to determine the relationship between and impact of the Foreign Direct Investment on economic growth proxy by Gross Domestic Product (GDP).

A. *Model Specification*

The theoretical model employed in this study is based on the postulates of de Mello (1996, 1997, and 1999), and was set forth in (Irandoust, 2001).

In the model specification explains the impact of foreign direct investment and domestic investment on economic growth. Now, consider the following production function, depicting an economy that produces a single consumption well:

(1) $Y(t) = EF(K, L, FDI)$

Where Y is real GDP, E represents the state of economic environment, K represents of physical capital, L stands for labor and FDI is represents by foreign direct investment. In this formulation, E, the state of economic environment encompasses different control and policy variables that affect the economy's productivity level. A considering that production of the country is consists of combining of labor and physical capital. Further suppose that the physical capital is composed of domestic capital (K_d) and foreign-owned capital (K_f) that is generated from Foreign direct investment FDI.

Let H stand for human capital in the recipient nation. Given a Cobb-Douglass production function, equation (1) can be represented as:

$$(2)\ Y(t) = EF(K_d, H) = EK_d{}^{\beta}H^{1-\beta}$$

Where, β is the share of domestic physical capital. To ensure the existence of diminishing returns to domestic capital, assume that β<1. Assume that H depends on domestic-owned and foreign-owned capital, and is represented by a Cobb-Douglass function of the following type:

$$(3)\quad H = \left(K_d, K_F{}^{\lambda}\right)^{\eta}$$

Where, λ and η are marginal and the intertemporalelasticity of substitution between foreign and domestically-owned capital stock, respectively. If we merge equation (2) and (3) we get the following equation:

$$(4) Y = EK_d^{\beta+\eta(1-\beta)}K_F{}^{\lambda\eta(1-\beta)}$$

Taking logarithms of equation (4), we get:

$$\ln Y = \ln E + (\beta + \eta(1-\beta))\ln K_d + \lambda\eta(1-\beta)\ln K_F$$

Taking time derivatives of equation (5) we get:

$$(6)\qquad \frac{1}{Y}\frac{dY}{dt} = \frac{1}{E}\frac{dE}{dt} + \left(\beta + \eta(1-\beta)\right)\frac{1}{K_d}\frac{dK_d}{dt} + \lambda\eta(1-\beta)\frac{1}{K_F}\frac{dK_F}{dt}$$

Now, this equation we can rewrite as follows.

$$Gy = \left(\beta + \eta(1-\beta)\right)G_{DI} + \lambda\eta(1-\beta)G_{FDI} + G_{TPF}$$

Where, Gy represents the growth rate of Gross domestic product GDP, while GDI represents the growth domestic investments and GFDI represents growth foreign direct investment.

GTPF represents to the total productivity factor or we can call Solow model residuals.

after this derived we can rewrite this model as Econometric model:

GDP = F (FDI, DI)

GDP = □□ □ □□□FDI □□□DI □ μ

□□□ □ □ he intercept or the constant,

GDP = Gross Domestic Product in Somalia,

FDI= Foreign Direct Investment in Somalia,

DI= Domestic Investment in Somalia.

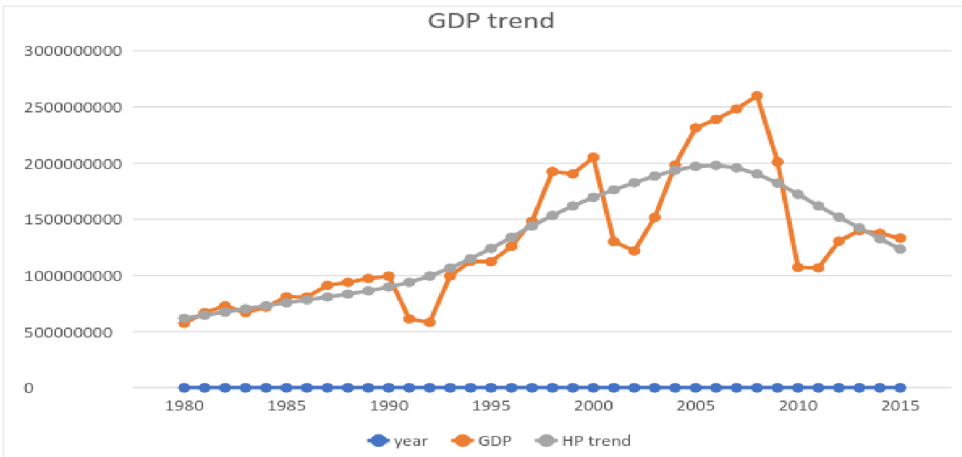
μ = Error Term (Other explanatory variables not mentioned in the model).

III. EMPIRICAL RESULTS AND DISCUSSIONS

The focus of this study is to determine whether the Foreign Direct investments received directly Affect the growth of the Somali economy. The main objective of this research is to ascertain whether there is a positive or negative impact of FDI on the growth of the Somali economy.

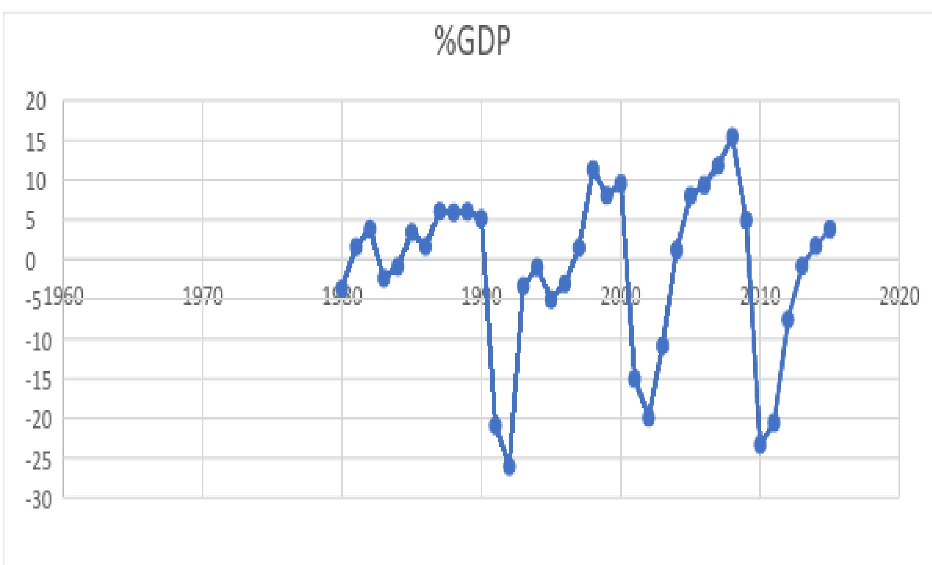
A. *Hp Filter Estimation*

Figure: 1



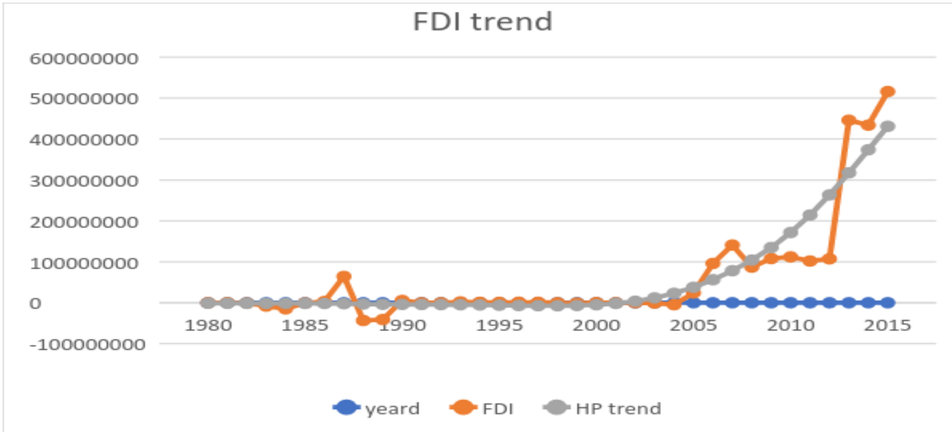
This figure depicts trends of gross domestic product in Somalia from 1980 to 2015. In the time between 1980 to 1988, the trends of GDP in Somalia were consistent and did not change overtime. After that, the GDP shifted upside and down year after year. As we can see, trends of above figure show that some years GDP were fallen recession and other years fallen to expansion growth.

Figure: 2



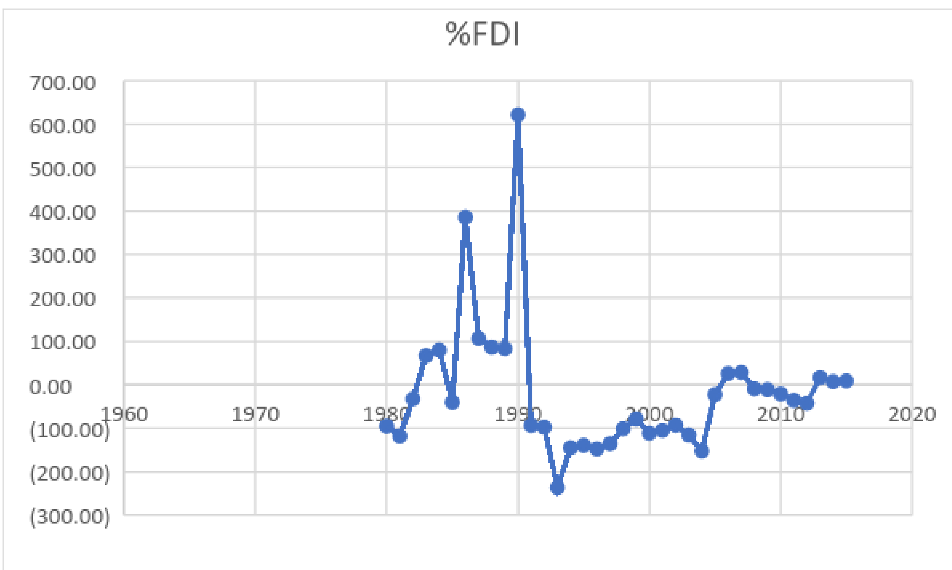
This figure shows the percentage changes of GDP from 1980 up to 2015 and this graph also represents the recession and expansion of percentage GDP during that time.

Figure: 3



The above figure shows the trends FDI inflows into Somalia from 1980 into 2015. The FDI inflows into Somalia had declined since after 1980s when central government in Somalia started to fall and there has not been foreign direct investment into Somalia. This graph also illustrates in 2004 FDI in Somalia had started to increase although after that time FDI sometimes fell to recession and then gotten expansion.

Figure: 4



This graph portrays a percentage change of FDI inflows into Somalia, upon time from 1980 into 2015. As shown in this graph, the foreign direct investment inflows into Somalia has declined after 1990th when the central government of Somalia fell and all abroad countries and international organization start to stop to invest in Somali countries.

Note well, All figures or diagrams in this article are our own work and there is no extension/copied took from any further source just we did all figures our data.

B. Co-integration Test

Since the HP trend results indicated that the variables are integrated of same orders, it is therefore necessary to carry out cointegration test to confirm if there is long-run relationship among the variables in the model. The Johansen Cointegration Test method was employed and both the Trace statistics and the Eigenvalue confirmed the existence of one cointegrating equation. So as result of this, we concluded that there is a long run relationship among the variables in the model.

Vector Error Correction rank GDP FDI DI, trend(constant) lags (3) max

Table: 1 Trend: constant Number of obs = 33

Sample: 1983 - 2015 Lags = 3

Maximum rank	Parms	LL	eigenvalue	trace statistic	5% critical value
0	21	-1920.1992		30.7389	29.68
1	26	-1912.2571	0.38205	14.8547*	15.41
2	29	-1906.1703	0.30850	2.6811	3.76
3	30	-1904.8297	0.07803		

C. Granger Causality Test result

Granger Causality test was carried out to determine the direction of causality between the twomain variables of interest namely FDI and economic growth. The result of the test ispresented in Table below. The result shows that FDI does not granger cause real GDP inSomalia and real GDP does not granger cause FDI. While DI granger cause real GDP and vice versa real GDP cause DI

Table: 2 Granger causality Wald tests

Table: 2 .1 Granger causality GDP and other variables

GDP	Equation	Excluded	chi2	dfProb> chi2
GDP	FDI	4.8941	3	0.180
GDP	DI	10.686	3	0.014
GDP	ALL	14.354	6	0.026

Table: 2 .2 Granger causality FDI and other variables

FDI	Equation	Excluded	chi2	dfProb> chi2
FDI	GDP	1.9989	3	0.573
FDI	DI	.82468	3	0.844
FDI	ALL	6.3417	6	0.386

Table: 2 .3 Granger causality DI and other variables

DI	Equation	Excluded	chi2	dfProb> chi2
DI	GDP	15.948	3	0.001
DI	FDI	4.0561	3	0.255

DI	ALL	19.628	6	0.003

Based on the co-integration and Granger Causality test results presented in Table 1 andTable 2 respectively, the model was estimated as a Vector Error Correction (VEC)Mechanism.

D. Regression Model output:

Table: 3

. esttab m1 m2 m3, se ar2

	(1) GDP	(2) GDP	(3) GDP
FDI	0.834		-0.0228
	(0.739)		(0.183)
DI		4.316***	4.320***
		(0.178)	(0.185)
_cons	1.26262e+09***	217050282.4***	217229664.3***
	(106287685.7)	(50821572.6)	(51593831.5)
N	36	36	36
adj. R-sq	0.008	0.943	0.942

Standard errors in parentheses
* p<0.05, ** p<0.01, *** p<0.001

R-square has a limit value of 1, and it happens when the regression line fits the observations exactly. The overall fit of the estimated regression equation to the actual data will be "better" if R-square is closer to the value of 1. For time series data R-square of .5 might be considered as a reasonable good fit for cross sectional data Baye (2005). In this research paper, total 94.51% variation in the dependent variable as shown in table 3 is explained by the explanatory variables. However, the rest of the variation is due to factors other than the independent variables or residuals. The validity of the model is represented in the value F-statistics. F-statistic is a measure of total explained variation divided by total unexplained variation. The higher the F-statistic, the better the overall fit of the regression line through the actual data.

From the multiple regression models drawn from table 3 the coefficients of the independentvariables are written in the form:
$GDP = \alpha - .0227516FDI + 4.320366DI + \mathcal{E}$

The relationship between foreign direct investment and growth domestic product is negative as shown in table 3. Since the foreign direct investment in Somalia declined after 1980.

But, the relationship between Domestic Investment and Growth Domestic Product is positive as shown in the above table, the coefficient of Domestic investment has a positive sign. That means that foreign direct invest does not affect gross domestic product in Somalia.

E. Discussion of the Findings

The researcher's findings exhibited insignificant correlation between Foreign Direct Investment and Gross Domestic Product and strong positive relationship between Domestic Investment and Gross Domestic Product in Somalia.
Therefore, the results obtained in this research suggest that growth in FDI has not been associated with positive economic growth in Somalia. In generally Foreign Direct Investment and economic growth in Somalia has been in positive relationship before 1980, but unfortunately after that time the FDI in Somalia declined since at that time Somalia and Ethiopia broken out in war against each other which caused the decline of foreign investment in Somalia and Somalia's economic growth started to decline. Since this research found negative correlations between FDI and GDP, these results may be a concern for the government of Somalia. A low-capital country like Somalia cannot ignore the importance of foreign investment for sustainable growth. Evidence suggests that the impact of FDI on economic growth is reliant on the absorptive capacities of the recipient country, which considers factors such as skilled human resources, technology, infrastructure, trade policy, institutional reform, and political conditions (Adams, 2009)

In developing countries, there are number of factors which affects country's foreign direct investment such as political instability, inadequate infrastructure, natural disasters and unskilled labor factors for instance Somalia from 1990th up to 2011th. There has been political instability and many disasters like diseases and bad famine and all these problems impacted country's economic growth. And, the absence of effective government the Somalia country became first corrupt country in the world (Transparency, 2016) so that, since there is weak government regulation which emphasis country's foreign direct investment causes to decline country's credibility from abroad organization those interested to invest Somalis natural resource. Since Somalis' comparative advantage lies on the basic factors of production such as low cost labor. However, Somalia needs to improve the effectiveness and efficiency of its labor market by enhancing labor knowledge and skilled labor force. A skilled labor force is a condition for industrialization and economic development. And, Somalia needs to reform all policies those related to foreign direct investment in Somalia. Merits of FDI are not just to earn one day and it takes to make strong things those emphases foreign direct investment.

To make the FDI beneficial, the government of Somalia must improve the absorptivecapacity of the country such as educated labor force, strong infrastructure, interrupted supply of utilities, investment friendly policy, advanced technology, and political stability.

IV. SUMMARY AND CONCLUSION

This paper examined the impact of foreign direct investment on economic growth in Somalia for the period between 1980 and 2015 using the vector Autoregression estimation model. In the study, HP trend tests were carried out and it was realized that only GDP and DI were found to be stationary at level where FDI was nonstationary. Following the tests, the study estimated the vector error correction model that incorporated real GDP, FDI and DI, which enabled us to trace the transmission mechanism of shocks. It was observed that FDI is not strong and statistically important determinants of real GDP performance in Somalia, when compared with Domestic investment. The implication of this is that the policy linkage between real GDP and FDI are weak and unpredictable, there is therefore the need to improve infrastructural facilities and put policy in place to check massive capital flight through profit repatriation from Somalia.

F. Recommendations for Future Research

The result of this study would be useful to foreign investors and development organizations seeking to better understand the role of FDI in Somalia. The negative impact of FDI on economic growth may raise concerns among international organizations such as the United Nations (UN), World Bank (WB), and International Monetary Fund (IMF), which are working to promote the macroeconomic well-being of developing countries. These organizations may push the government of Somalia to take the steps that are necessary to make future foreign investment advantageous. Future research should be focused on finding a causal relationship between FDI and economic growth in Somalia. It is recommended that future research include other macroeconomic indicators (such as unemployment rate, gross national product, purchasing power parity, poverty level, and foreign exchange rate), which may help to better explain the effect of foreign investment on the economic growth of Somalia.

REFERENCE

[1] Adams, S. (2009). Foreign direct investment, domestic investment, and economic growth in Sub-Saharan Africa. Journal of Policy Modeling, 31(6), 939-949.

[2] Balasubramanyam, V. N., Salisu, M., & Sapsford, D. (1996). Foreign direct investment and growth in EP and IS countries. The economic journal, 92-105.

[3] Choe, J. I. (2003). Do foreign direct investment and gross domestic investment promote economic growth? Review of Development Economics, 7(1), 44-57.

[4] Chowdhury, A., & Mavrotas, G. (2003). Foreign Direct Investment and Growth: What Causes What. Department of Economics, Marquette University.

[5] Mahutga, M. C., & Bandelj, N. (2008). Foreign investment and income inequality: The natural experiment of Central and Eastern Europe. International Journal of Comparative Sociology, 49(6), 429-454.

[6] Zhang, P., Ding, S., Wang, G., & Zhou, D. (2001). An FDI approach for sampled-data systems. Paper presented at the American Control Conference, 2001. Proceedings of the 2001.

[7] Ang, J. B. (2009). Financial development and the FDI-growth nexus: the Malaysian experience. Applied Economics, 41(13), 1595-1601. Eller, M., Haiss, P., & Steiner, K. (2006). Foreign direct investment in the financial sector and economic growth in Central and Eastern Europe: The crucial role of the efficiency channel. emerging Markets review, 7(4), 300-319.

[8] Kunle, A. M., Olowe, S., & Oluwafolakemi, F. O. (2014). Impact of foreign direct investment on Nigeria economic growth. International Journal of Academic Research in Business and Social Sciences, 4(8), 234.