The Determinants of Foreign Direct Investment in Somalia

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ABSTRACT

This study examines determinants of foreign direct investment (FDI) in Somalia, measured FDI inflow. Used time series data obtained from World Bank and SESRIC for a period of 41 years that is 1970-2010. Augmented Dickey-Fuller test was used for the unit root test and ordinary least square statistical technique was used to assess the degree of influence the variables have on each other. The results show a negative and significant relationship in exchange rate and FDI, while, a positive and significant relationship is observed between inflation, external debt and domestic investment of FDI. Also a negative but insignificant relationship is observed between lack of government and gross domestic product FDI. Therefore, there is need for the government to retain tight monetary and fiscal policies in order to attract FDI. This study therefore recommends that central bank of Somalia should control the fluctuations of the exchange rate in order to increase the FDI. Since the inflation is higher, the study also recommends having a good government to recover the financial institutions that manage the monetary policy of Somalia.

Keywords: Exchange Rate, Foreign Direct Investments, Somalia

JEL Classifications: F21, F31

1. INTRODUCTION

The works of foreign direct investment (FDI) is to combine developing economies into the global market place. Raising the Agriculture capital investment which leads to increased growth of the economy needed to decrease poverty and increase standard of living (Dupasquier and Osakwe, 2005).

At least two issues make FDI a hotly debated issue in the Sub-Saharan African countries. That they only attract a small share of total FDI flows, and concerns exist as to whether FDI really leads to economic and social development in SSA. These issues form the basis challenges that are faced by SSA policy makers to make FDI work for their development.

We do not contend that the list of challenges offers sufficient or even necessary guidelines for Sub-Saharan African countries wanting to attract FDI. Rather, it is a checklist for those countries in need of appropriate policies to make FDI work for their development. Each country will have different responses and priorities in relation to these challenges, but here we mention challenges in the more general context of Sub-Saharan African.

We focus on what host countries can do to influence FDI. This leaves aside whether and how regulation and voluntary initiatives at regional or global level can affect the level and impact of FDI. Actions at national and international level may not be substitutes but can act as balances. Host country policies need to address information gaps in the international investment process (Lall, 2000).

After her Independence Day (the year 1960-1969), Somalia had experienced 9 years of democratic government regime with free market system. In this period foreign companies dominated the country’s economy in general and public services in particular.

However, military regime changed the country’s systems and politics which resulted that all main businesses and sectors to be nationalized and governed by the government administrators. After the collapse of the government in 1990s, the country had experienced collapse of all government services and facilities including electricity, water, infrastructure, health and education. However, all services and facilities owned by private institutions were not destroyed and never collapsed mostly not looted unlike the public services (Argiolas et al., 2009).
Under “pull” and “push,” factors that influence world FDI and especially Somalia that is in effort to attract foreign investments through inflation, gross domestic product (GDP) growth rate, exchange rate and external debt.

Figure 1 this shows the trend of FDI over years. It shows that FDI had been relatively stable between 1970 and 1982 and between 1983 and 1988, there was increase. Stability was between 1999 and 2007 and between 2008 and 2013 there was an increase in the FDI.

The country has a large land mass with one of the longest stretching beaches, rich in oil deposits; good natural resource and cheap labor. These factors may attract FDI. Somalia FDI is very low compared to neighboring countries such as Ethiopia, Kenya and Djibouti.

In 2014, Somalia’s FDI fell marginally according to United Nations conference on trade and development 2015. The report shows that Somali recorded a 7% in investment inflows to rake in 106 million US dollars in last years compared to 107 US dollars attracted in 2013.

Low FDI in Somali may end in decreasing many factors including additional source of capital investment and foreign saving, also might bring about decreased productivity benefits which includes employment creation, technology transfer and associated spillover effects, skill development, trade, competitiveness and access to foreign market. If the FDI of Somali increase, then these factors will increase. The objective of the study is to investigate factors that influence FDI and will measure the exchange rate, gross domestic investment, lack of government, external debt, GDP and inflation rate in Somalia. The result of this study will benefit the government of Somalia to get more information about factors that determine FDI. This study will also benefit economic policy makers to improve both as an incentive for and as a results of FDI. This study will help academics to referencing this study for further researches on their interest. This study is organized as follows: Second section presents a view related literature. Third section data and methodology. Fourth section gives results and discussion and finally conclusion and policy implication.

2. LITERATURE REVIEW

2.1. Theoretical Perspective

FDI started to be analyzed as it partly substitutes and represents trade and because of its results on the host and home countries. These analyses have resulted with theories. These theories have diversified and according to the flows, economics theories and the effects they generate.

Main stream of the FDI theories with imperfect competition encompasses product life cycle theory, internationalization theory and eclectic paradigm. Apart from these main stream theories, there are also theories of instrumental.

Although any of these theories is sufficient by itself in explaining all the FDI flows, each of them has considerable contribution in the explanation of FDI flows. There are several theories explaining factors effecting FDI. The major theory used in this study is internalization theory. Internalization theory tries to explain whether MNCs use leasing or licensing methods for the sale of their products abroad or they produce abroad through FSU by themselves. In other words it answers the question why a company prefers FDI instead of producing in the home country and then exporting it.

The theory is based on the study of Buckley and Casson in 1976. According to the theory, firms maximize their profits in an imperfect competition environment. Take the opportunities of the minimization of governmental regulations adverse effects through transfer pricing and price differentiation between different markets.

2.2. Exchange Rate and FDI

The relationships between exchange rate and direct foreign investment are different. One set of researchers support a negative relationship between exchange rate and FDI (Osinubi and Amaghionyeodiwe, 2009). The second study finds a positive relationship between exchange rate and FDI (Udomkerdmongkol et al., 2006). And the third paper argued causal relationship between exchange rate and FDI (Lily et al., 2014).

Study of Osinubi and Amaghionyeodiwe (2009), Time series data from 1070 to 2004 examine the effect of exchange rate volatility on FDI in Nigeria. Their findings that the structural adjustment programme (introduced in Nigeria in 1986) had a negative impact on real inward FDI, which could be due to the deregulation that was accompanied by exchange rate volatility. As such, a major challenge before the central Bank of Nigeria therefore, was to attain a stable and realistic exchange rate that will boost domestic production, increase real inward FDI and maintain internal and external balance. However their results were agreeing with those of Görg and Wakelin (2001). Froot and Stein (1991) and Blonigen (1997).

Udomkerdmongkol et al. (2006). Using of 16 emerging market countries using panel data for the period 1990-2002. They argue that exchange rate stability probably might have a significant role on FDI flows into the countries. Their results supports the Chakrabarti and Scholnick’s hypothesis that, ceteris paribus, there is a positive relationship between the expectation of local currency depreciation and FDI inflows. Cheaper local currency (devaluation) attracts FDI while volatile exchange rates discourage FDI.

Emmanue and Luther (2014), employed time series data of 45 years (1960-2005), examine causality analysis of FDI,
exchange rate and interest rate volatility in Ghana. They could have established that a stable exchange rate improves Foreign inflow into the country, they provided an empirical illustration of the bias this endogenous can cause when regressing measures of exchange rate volatility of FDI, it is a detailed stretch that uses pair wise granger causality test.

Their finding directly affects exchange rate and market attractiveness which then affects FDI in the long run. The paper therefore concludes that government should implement policies that will stabilize both the exchange rate and the interest. Volatility of exchange rate is insignificant for both entire sample and pre-SAP period and the null hypothesis that volatility of exchange rate granger cause FDI can be accepted at 5% significant level for post-SAP period. Hence volatility of exchange rate must be treated as endogenous variable. FDI its effects on the home and host countries. These analyses is significant for all the variables and hence must be treated as endogenous variable in the model.

### 2.3. Inflation and FDI

The relationship between inflation and FDI is supported by most of the researchers. They say there is a negative relationship between inflation and FDI (Ehimare, 2011).

Ehimare (2011) study employed time series data of a 30 year period of study (1980-2009), examine the effect of inflation and FDI and its relationship with economic growth in Nigeria. He used a 30 year period in his study (1980-2009), he found that there is negative and non-significant impact of inflation on FDI with a coefficient. Hence, inflation is inelastic to FDI. This negativity in the coefficient of inflation is in conformity to the economic priority expectation of a negative impact on inflation of FDI; his finding was supported by (Carlos et al., 1995).

Rahman (2015) evaluates the impact of FDI on the economic development of Bangladesh. The research was conducted statistical analyses of the relationships between FDI and its impact on selected macroeconomic indicators such as GDP, inflation rate, and balance of trade. The study was used multiple regression analyses to measure the relationship between independent (FDI) and dependent variables (macroeconomic indicators). The study was found results signify a negative correlation between FDI and economic growth and may be a concern for the government of Bangladesh.

The research was concluded that the government might focus on required reforms and policy implications to make foreign investment more beneficial.

### 2.4. Lack of Government and FDI

The relationship between lack of government and FDI area different one set of researchers support a negative relationship between lack of government and FDI Castro and Nunes (2013), while other paper finds a positive relationship between inflation and FDI (Al-Sadig, 2009).

Castro and Nunes (2013), using 73 countries, over the period 1998. Examined Does Corruption inhibit FDI? Their finding the countries where corruption is lower, the FDI inflows the greater, and so controlling corruption may be an important strategy for increase FDI inflows the corruption coefficients are statistically significant in all regressions and with a positive sign: The results a positive impact of corruption on FDI. When controlling for several variables, the main results doesn’t change, as the coefficient of corruption maintains its significance. Their results were supported by other literature such Castro, 2008; Méndez and Sepúlveda, 2006.

Al-Sadig (2009) research used data for 117 countries over the period 1984-2004 and introduce two different econometrics methods, different panel data sets, and a much wider set of control variables, examine the effects of corruption on FDI inflows. Their findings that the negative impacts of corruption disappear once we control for the host country’s institutional quality, suggesting that foreign investors value the quality of institutions more than the level of corruption in the location selection.

Their results should not be interpreted as evidence that the corruption levels in the host country do not reduce the amount of FDI it receives. Rather, the results should be seen as an indication of the importance of the quality of institutions. They could that FDI inflows can be negative, so the logarithm of FDI may be problematic because the negative observations would be automatically dropped. Excluding those observations from our sample may bias their results, however their results was agrees with (Becker, 1968).

### 2.5. GDP and FDI

The relationship between standard of living and FDI are most of the researches support a causal relationship between standard of living and FDI Akinmulegun, 2012.

Akinmulegun (2012) using time series data version 1986-2009 period, investigate FDI and standard of living in Nigeria his finding FDI in Nigeria has no significant relationship with living standard. Thus, with the bi-directional relationship between FDI and PCI, the finding is consistent with theory and empirical literature. FDI is expected to have causal influence on standard of living, such that the past values of FDI should be able to help predict future values of PCI. This is in line with the previous findings of Adams, 2004 and Frimpong and Oteng-Abayie, 2006.

Çifçioğlu et al. (2004) investigated the nature of the annual effects of changes in the ratio of net FDI (NFDI/GDP) to GDP on economic growth, unemployment rate, openness and sectoral composition of GDP and employment in nine Central and East European countries. The study was found results and suggest the findings of Alfaro (2003) who showed that the sector into which FDI flows is critical in influential the nature of the overall effects on economic growth, and while be taken seriously. The study believes that the future research should focus on investigating the mechanisms thorough employment, productivity growth and technological progress both at aggregate and sectoral level. Based on these results of such studies, the policy makers will be in a better position to plan policies and regulations that can raise...
the likelihood of positive effects of FDI inflows on particularly productivity growth technological progress and economy growth.

### 2.6. Gross Capital Formation (GCF) and FDI
Azlina and Jalaluddin (2014) motivated by a persistent increase in FDI inflows in Malaysia since the early 1970s, this study examines the impact of inward FDI on domestic investment between 1970 and 2001. The Johansen and Juselius co-integration technique employed in this study reveals that there is a long run relationship between domestic investment, FDI and economic growth. The error correction model suggests that there is a slow correction of disequilibrium of the investment model in the short run. The findings further suggest that FDI inflows in Malaysia “crowds out” domestic investment in the short run, in which an increase in one percentage point of inward FDI merely raises capital formation by 0.56% point.

Hejazi and Pauly (2002) much concern has been expressed by policy makers in Canada regarding the country’s falling share of inward FDI stock (Figure 1) regardless of whether we talk about the world, the G-7 or North America, Canada’s share of inward FDI stock has been falling. By contrast Canada’s share of outward FDI stock increased over the 1970s and 1980s, but fell in the 1990s. Therefore, the traditional position of Canada among developed countries as a predominantly host economy but not a large home (source) economy for FDI stock has been changing. Figure 2 shows how Canada’s rank among developed countries as a FDI stock (both in level and relative to GDP), its rank as a source (home) of FDI has also fallen. Figure 3 provide data on FDI flows relative to capital formation, averaged over the period 1986 to 1991, and also for 1996. Canada’s rank in terms of inward FDI flows relative to gross fixed capital formation (GFCF) has not changed. On the other hand, Canada’s outward FDI flows have increased relative to GFCF and in terms of Canada’s rank among countries.

Krkoska (2001) looks at the relation between FDI and GFCF in transition, countries as well as other sources of capital formation finance, namely debt financing, capital market financing and subsides. The paper shows that capital formation is positively associated with FDI, along with domestic debt and capital market financing, but negatively correlated with stock market liquidity. There is no statistically significant link between capital formation and foreign credit or subsides. The paper also shows that FDI is a substitute for domestic credit but is complementary with foreign credit and privatization revenues.

### 2.7. External Debt and FDI
Safdari and Mehrizi (2011) in this paper, balance relation and the long term of five variables (GDP, private investment, public investment, external debt and imports) and such, their influences on each other in Iran for the period of 1974-2007, were analyzed. As such, the vector autoregressive model (VAR) was used, first, stability of variables by the use of Dickey-Fuller test was examined, after which analysis of Johnson test for considering the convergence among five variables was used. The results of this research showed that the external debt had a negative effect on GDP and private investment. Also public investment had a positively relationship with private investment.

### 3. DATA AND METHODOLOGY
The statistical technique in employed in this study is ordinary least squares (OLS) econometric technique using a time series data covering the period from 1970 to 2014 has been used which were obtained from SESRIC and world Data include the annual series data on variables of exchange rate, gross domestic investment, lack of government, external debt, GDP and inflation rate and dependence model we use to determine
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Table 1: Descriptive statistics

<table>
<thead>
<tr>
<th>Normality test</th>
<th>FDI</th>
<th>Exchange rate</th>
<th>External debt</th>
<th>GCF</th>
<th>Inflation</th>
<th>Lack of government</th>
<th>GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>13809476</td>
<td>7163.895</td>
<td>1830000000</td>
<td>52200000</td>
<td>45.52146</td>
<td>0.463415</td>
<td>112000000</td>
</tr>
<tr>
<td>Median</td>
<td>700000.0</td>
<td>4000.000</td>
<td>237000000</td>
<td>49900000</td>
<td>31.050000</td>
<td>0.000000</td>
<td>939000000</td>
</tr>
<tr>
<td>Maximum</td>
<td>14100000</td>
<td>31585.42</td>
<td>3050000000</td>
<td>89500000</td>
<td>198.01000</td>
<td>1.000000</td>
<td>260000000</td>
</tr>
<tr>
<td>Minimum</td>
<td>-43390000</td>
<td>6.300000</td>
<td>77085000</td>
<td>38000000</td>
<td>3.510000</td>
<td>0.000000</td>
<td>341000000</td>
</tr>
<tr>
<td>SD</td>
<td>39358153</td>
<td>9453.234</td>
<td>1060000000</td>
<td>11600000</td>
<td>51.22657</td>
<td>0.504854</td>
<td>647000000</td>
</tr>
<tr>
<td>Skewness</td>
<td>1.852942</td>
<td>1.294826</td>
<td>-0.556538</td>
<td>4.382346</td>
<td>1.898095</td>
<td>0.146735</td>
<td>0.872567</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>5.722859</td>
<td>3.693272</td>
<td>1.714648</td>
<td>4.609589</td>
<td>5.416435</td>
<td>1.021531</td>
<td>2.576654</td>
</tr>
<tr>
<td>Jarque-Bera</td>
<td>36.12705</td>
<td>12.27766</td>
<td>4.938912</td>
<td>17.48393</td>
<td>34.59411</td>
<td>6.834125</td>
<td>5.508882</td>
</tr>
<tr>
<td>P</td>
<td>0.000000</td>
<td>0.002157</td>
<td>0.084631</td>
<td>0.000160</td>
<td>0.000000</td>
<td>0.032809</td>
<td>0.063645</td>
</tr>
</tbody>
</table>

GDP: Gross domestic product, FDI: Foreign direct investment, SD: Standard deviation, GCF: Gross capital formation

Table 2: Correlation of the FDI

<table>
<thead>
<tr>
<th></th>
<th>FDI</th>
<th>ER</th>
<th>EXD</th>
<th>GCF</th>
<th>INF</th>
<th>LG</th>
<th>GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDI</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ER</td>
<td>0.65</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXD</td>
<td>0.36</td>
<td>0.71</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GCF</td>
<td>0.50</td>
<td>-0.14</td>
<td>0.19</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INF</td>
<td>0.85</td>
<td>0.88</td>
<td>0.64</td>
<td>0.03</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LG</td>
<td>0.39</td>
<td>0.76</td>
<td>0.81</td>
<td>-0.31</td>
<td>0.59</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>GDP</td>
<td>0.54</td>
<td>0.74</td>
<td>0.75</td>
<td>-0.12</td>
<td>0.71</td>
<td>0.77</td>
<td>1</td>
</tr>
</tbody>
</table>

GDP: Gross domestic product, FDI: Foreign direct investment

Table 3: Stationary test at level and at 1st difference

<table>
<thead>
<tr>
<th>Variables</th>
<th>At level</th>
<th>1st difference</th>
<th>At level</th>
<th>1st differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDI</td>
<td>-1.594247</td>
<td>-7.368118</td>
<td>-1.508013</td>
<td>-8.140808</td>
</tr>
<tr>
<td>ER</td>
<td>3.196806</td>
<td>-4.988942</td>
<td>2.570649</td>
<td>-4.203666</td>
</tr>
<tr>
<td>INF</td>
<td>3.639078</td>
<td>-3.240429</td>
<td>3.118762</td>
<td>-3.213933</td>
</tr>
<tr>
<td>GCF</td>
<td>-2.311010</td>
<td>-7.817739</td>
<td>-2.210999</td>
<td>-7.817739</td>
</tr>
<tr>
<td>EXD</td>
<td>-1.670609</td>
<td>-4.172769</td>
<td>-1.452059</td>
<td>-4.172769</td>
</tr>
<tr>
<td>LG</td>
<td>-0.902378</td>
<td>-6.244998</td>
<td>-0.902378</td>
<td>-6.245001</td>
</tr>
<tr>
<td>GDP</td>
<td>-2.301594</td>
<td>-3.278154</td>
<td>-2.185876</td>
<td>-2.869838</td>
</tr>
</tbody>
</table>

FDI: Foreign direct investment, ADF: Augmented-Dickey-Fuller, GDP: Gross domestic product

Table 4: Estimation of the model coefficients

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Standard error</th>
<th>t-statistic</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>DER</td>
<td>-2899.976</td>
<td>1334.635</td>
<td>-2.172862</td>
<td>0.0371</td>
</tr>
<tr>
<td>DDCF</td>
<td>0.195456</td>
<td>0.045012</td>
<td>4.342320</td>
<td>0.0001</td>
</tr>
<tr>
<td>DINF</td>
<td>792213.2</td>
<td>362860.9</td>
<td>2.183242</td>
<td>0.0362</td>
</tr>
<tr>
<td>DEXD</td>
<td>0.082207</td>
<td>0.041831</td>
<td>1.965244</td>
<td>0.0578</td>
</tr>
<tr>
<td>LG</td>
<td>-13630578</td>
<td>8184349</td>
<td>-1.665444</td>
<td>0.1053</td>
</tr>
<tr>
<td>DGDP</td>
<td>-0.006910</td>
<td>0.012140</td>
<td>-0.569165</td>
<td>0.5731</td>
</tr>
<tr>
<td>C</td>
<td>12163900</td>
<td>6586928.</td>
<td>1.846673</td>
<td>0.0738</td>
</tr>
</tbody>
</table>

Inflation: Inflation represents GDP deflator date obtained from trading economics from 1970 up to 2010.

Lack of government: This variable indicates lack of financial institutions or weak government by using dummy variable.

Domestic investment: GCF in Somalia country by using date from 1970 up to 2010 the data obtaining from SESRIC.

External debt: Total external debt in Somalia country by using date from 1970 up to 2010 the data obtaining from SESRIC.

GDP: Goods and service producing in Somalia country by using date from 1970 up to 2010 the data obtaining from SESRIC.

3.1. Data and Measurement

FDI inflow: FDI inflow as dependent variable using data from Somalia reported by SESRIC from 1970 up to 2010.

Exchange rate: Obtained from WORLD BANK and SESRIC it is the value of Somali shilling measured against US Dollar from 1970 up to 2010.
3.2. Model Specification
To make econometrics test and hypothesis to specify the model used by this study cited a variety of the models has been specified to facilitate the test of hypothesis that whether explanatory variables effects FDI.

FDI = β₁ + β₂ ER + β₃ INF + β₄ LG + β₅ EXD + β₆ GDP + ε,

Where;
FDI: Foreign direct investment inflow.
INF: GDP deflator.
GCF: Gross capital formation.
LG: Lack of government.
EXD: External debt.
GDP: Gross domestic product.
ε: Error term.

This study first step is to examining unit root test by using the Augmented-Dickey-Fuller (ADF).

And measure how OLS regression fits to the data line. We assume that total same square is not equal to which zero is true unless all dependent variable has equal value. We compute R square to the equation. However, in this study R² = 50% and above are considered acceptable.

4. DATA ANALYSIS AND FINDINGS

4.1. Descriptive Statistics
In the following table descriptive analysis shows the maximum, minimum and mean average. Mean value stands highest average and standard deviation. With the dependent variable, the descriptive results in Table 1 show that average of FDI is (13809476) unit, and its standard deviation is (39358153) and the highest is (141000000) unit. With the independent variables include exchange rate, inflation, external debt, lack of government, GCF and GDP. Exchange rate its average is (7163.895) unit, and its standard deviation is (9453.234) and the highest is (31585.42) unit. The average of inflation is (45.52146) unit and its standard deviation is (51.22657) and its highest is (198.0100) unit. The average of GCF is (522000000) unit. And its standard deviation is (116000000) and its highest is (895000000) unit. The average of lack of government is (0.463415) and its standard deviation is (0.504854) and its highest is (1.000000). The mean average of external debt is (7163.895), the standard deviation of external debt is (9453.234), and its highest is (31585.42). The mean average of GDP is (1.12E+09), the standard deviation of GDP is (647000000), and its highest is (2600000000).

4.2. Zero Order Correlation
The current study investigates the determinants of FDI in Somalia; correlation coefficient test employed to check the multicolinearity and the relationship between the variables under investigation.

There were six variables to determine FDI in Somalia. As shown in Table 2, the dependent variable in this study (FDI) was significantly and positively correlated with all six independent variables, namely exchange rate (r = 0.65, P = 0.000), external debt (r = 0.36, P = 0.000), gross capital formulation (r = 0.50, P = 0.000), and GDP deflator (r = 0.85, P = 0.000). In addition, the dependent variable was also significantly and positively correlated with lack of government (r = 0.39, P = 0.000) and GDP (r = 0.54, P = 0.000).

4.3. Unit root Test
To test the stationary of the data, we tests ADF were conducted the presences of non-stationary variables might produce false regression results.

The result show that the null hypothesis of non-stationary at level for all the time series fails to be accepted, however, all null hypotheses were rejected for every test at first difference. It indicates clearly that all variables are stationary at (first difference) (Table 3).

4.4. Regression Results
After testing the unit root test and having established the presence of a unit root in the first difference of each variable, the next step is to test whether there is OLS among dependent variable and independent variables.

The result of the model shows that the coefficients of DEXD (0.082207), DGCF (0.195456), DINF (792213.2) are positive indicating that in this stage the study will accept the hypothesis which predicted that these variables have positive relationship with FDI. It means that one increase (decrease) in each one of these variable will result in one percent increase (decrease) in the FDI while holding other variables constant. The model also shows that LG (−13630578), DGDP (−0.006910) and DER (−2899.976) have negative relationship with exchange rate (Table 4).

The findings of the study states that GCF, inflation and external debt has positive relationship with FDI, it means that one increase in each one of those variable will result in one percept increase in FDI, and one decrease in each variable will result a decrease in FDI while holding other variables constant. The study also shows that exchange rate has negative relationship with FDI this means that when there is appreciate in exchange rate the FDI is going high.

The GCF has a positive significant to FDI, because the increasing in domestic capital causes to increase the FDI in Somalia which attracts the investors to invest in the country. Also the study find that inflation has a positive influence to FDI, because the inflation in Somalia in highly which is unstable and the FDI interest to be cheaper product in order to export abroad with a cheap product. The study also finds that external debt has a positive relationship
to FDI, because the external debt which the government spend and improve the infrastructure of the country and the FDI investors will attract to increase their investment. And the conclusion is the exchange rate has a negative effect to FDI, because the exchange rate in Somalia is a depression level which to the FDI will decrease.

4.5. Diagnostic Test
It is obvious from residual diagnosis that neither Heteroskedacity nor serial correlation exist which means the model of choosing is good and fit. The R squared ($R^2$) value for this model is 51% systematic variation on the model over the observed years while the remaining variation is explained by other determinant variables outside the model counted in residual term. The validity of the model is tested with comparing $R^2$ with Durbin-Watson test, if DW is $>R^2$ the model valid otherwise not. Since DW-2.305279 is $>R^2 = 51\%$ and also F-statistics are significant, this model has validity.

From the Table 5, there is no serial correlation in the model because the probability of the P Chi-square (4) (0.2653) is $>0.05$ on the other hand, there is no heteroskedasticity in the model owing to the fact that the probability of the P Chi-square (0.4480) and $>0.05$ and all independent variable are in significant and there is normal distribution because the P < 0.5 (0.707543).

5. CONCLUSION AND POLICY IMPLICATION
This study has investigated determinants of FDI in Somalia for the period which spanned between 1970 and 2010. An augmented internationalization theory was estimated via the OLS techniques to ascertain the relationship between various macroeconomic variable and FDI in Somalia. The study also reveals that exchange rate, domestic investment, lack of government, external debt and inflation that are effected FDI in Somalia.

There is a need for the Government to retain tight monetary and fiscal policies in order to attract foreign direct investment. Therefore the study recommends that Central bank should control the fluctuation of the exchange rate in order to increase the FDI.

The inflation is higher and the study also recommends having a good government to recover the financial institutions that manage the monetary policy of Somalia.

The study also recommends that there is need for government to consciously develop the strategic of international trade by provision of necessary infrastructure, which will lower the cost of doing business in Somalia.

The scope of this research was the period 1970-2010. For this period the study not tells what other research findings that hold in after 2010. The data use of the data from the various sources and that may differ from the other studies that use one source of the data and may become difference. This study focused on the some variables which effect to FDI. So that may be there is some variables that influence to FDI in Somalia which is not including to this research, the study was suggest to future research to examine the other variables that determine the FDI on Somalia.

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