Foreign Direct Investment, External Debt and Economic Growth: Evidence from Some Selected Developing Countries

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ARTICLE DETAILS	ABSTRACT
History *Revised format: Nov 2017* *Available Online: Dec 2017* **Keywords** *Foreign Direct Investment,* *External Debt,* *Economic Growth,* *Co-integration,* *Causality* *JEL Codes:* *C33, F21, F34, O47*	**Purpose:** The aim of this paper is to analyze the relationship between foreign direct investment, external debt and economic growth. The study is based on a sample of 25 region wise selected developing countries. Panel unit root tests suggest that selected variables are stationary at the level of first difference. Using data from 1990 to 2014, results of FMOLS method suggest that the core variables, foreign direct investment and External Debt have significant positive relationship with economic growth. Labor, Gross Domestic Saving and Government expenditures have positive while Gross capital formation exerts negative impacts on economic growth. Moreover, FDI exerts outstanding effects on growth because one unit rise in FDI raise the growth by 4.03 units while one unit rise in external debt upgrade the growth up to 2.13 units. It means that boundaries of selected developing nations are absorbent to FDI than external debt. The results of "Johansen Fisher Panel Co-integration test" reveal that, there exists a long period relationship among all the explained and explanatory variables. In order to investigate the causal relation among selected variables, pair wise granger causality test is employed.

1. Introduction

Developing nations are not fully financed from internal resources but external funding is also mandatory to minimize the divergence between saving and investment. All the developing economies in the globe are continually motivated for high economic growth. Thus, such nations fascinating the external inflows specifically in the form of foreign direct investment and external debt, which are supposed to be principal sources of external financing.

Foreign Direct Investment is considered as a source of Non-cash and cash inflows into the boundaries of recipient nations from abroad. World Investment Report (2011) declared that most of developing nations around the globe have practiced extensive growth in worldwide transactions because of FDI. Moreover, the net contribution of FDI in global GDP has grown-up more than five-times compared to the era of

nineties and beginning of 20th century. Lyroudi et al. (2004) explained that FDI can be transmitted by MNCs in the host nations.

External debt is one of among the external sources of finances that have strong effects on the growth of developing nations. External debt is component of total amount of debt in the nation that is payable to recipient economy. It is believed that external debt is beneficial to the recipient nations only if utilized cautiously in the investment & development projects. Investment projects with the help of external borrowing are favorable only when returns exceed the cost. Developing nations are constantly facing the trouble in term of limited financing facilities but external debt from industrialized economies, worldwide organizations like IMF and World Bank provides rays of hope to the capital deficient nations. Past studies shed light on the impacts of external debt on growth of developing economies and categorized into two heads. First group of studies is related to traditional school of thought who considers that borrowing from external resources is positively associated with the economic growth of less developed nations. Moreover, slow growth of underdeveloped economies is backed by low level of domestic savings and foreign exchange earnings. Both the low savings and foreign exchange revenues lead to the twin deficits (fiscal and Trade deficits).

General purpose of this work is to conduct the foreign direct investment, external debt & economic growth analysis with specific reference of some (region-wise) selected developing countries. To attain this broad objective, the work has a few specific objectives, which are given below:

- To make available the conclusive evidence on the association of FDI &economic growth specifically in context of developing countries.
- To analyze the interconnection of external debt &economic growth regarding developing nations.
- To empirically scrutinize the effects of Labor, capital, general government final consumption expenditures, and gross domestic saving on economic progress of selected developing nations.

2. Review of Past Literature

Ndambendia and Njoupouognigni (2010) described the affectivity of FDI and foreign aid on output growth in the case of thirty-six African nations. The period of study was from 1980 to 2007. This research work inspected the longer period association between FDI, External aid & output growth. Potent evidence has found about positive effects of foreign aid and FDI on output growth. Moreover, Pradhan (2009), Asghar et al. (2011), Agrawal and Khan (2011), Khachoo and Khan (2012), Zakari et al. (2012), Zeb et al. (2013), Jun (2015), Agrawal (2015), Zekarias (2016) provided the potent evidence about positive impacts of FDI on growth of developing nations.

Brecher and Alejandro (1977) elucidated that FDI adversely influenced to growth of recipient economies if MNCs transfer their surplus revenues to their parent nationn [Ahmad and Hamdani (2003), Eller, Haiss and Steiner (2005), Falki (2009), Hossain and Hossain (2012), Bashir et al. (2014)].

Chenery and Strout (1966) concluded that External borrowings plays a very crucial role to bridge the gap between saving and Investments. Frimpong and Abayie (2006) appraised the impact of external debt on growth with specific reference to Ghana. Empirical outcomes suggested that co-efficient sign of external debt was considerable positive during the period of study (1970-1999). Furthermore, Sulaiman and Azeez (2012), Rahman et al.(2012), Kasedi and Said (2013) favored the positive impacts of external debt on the growth of developing nations.

Bruton (1969) gave contradictory arguments about two Gap theories. Aid was a source of divergence rather than convergence between saving sand investment. Furthermore, External aid contracts the growth than to expand. Chowdhury (2001) ascribed the Debt-Growth nexus with specific reference to highly indebted poor and non-highly indebted poor nations. Panel results interpreted a considerable negative causal effect that run from debt to economic growth in the case of both categorized economies. Moreover,

Clements et al. (2003), Presbitero (2008), Choong et al. (2010), Farhana & Chowdhury (2014) , Soydan and Bedir (2015), Bonga, Chirowa and Nyamapfeni (2015), Sheikh et al. (2015) disclosed that debt overhang curb the growth in the case of less developed nations.

However, this study enlightens few of the following findings, which were not conducted in the past studies.

- The study demonstrates a comparison between the effects of FDI and external debt on the economic growth based on selected developing countries during the time span of 1990-2014.
- The pros and cons of FDI and external debt on economic growth, which provides sound platform to outweigh the parameters.
- Selecting countries continent wise to find out the basics of economic growth which benefits to have a clear picture of developing economies.
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3. Theoretical and Conceptual Framework

Since the work is essentially associated with the economic growth, models and theories of economic growth collectively construct the theoretical skeleton. FDI inflows and external debt are included into the following theories to enlighten their anticipated impacts on economic growth. Such theories are included, which shows the positive and negative impacts of FDI and external debt on growth of developing nation.

A. FDI and economic growth

Modernization theory postulated that FDI contributes positively to the growth of less developed countries. The theory posits that economic growth is enhanced by process of capital formation in most of developing economies. Harrod-Domar Growth Model ascribed the mechanism of the economy by which higher level of investment leads to the higher level of economic growth. For a nation to expand and develop, it requires turning away fraction of its possessions from recent consumption and invested them in process of capital formation. Saving is the resources distraction from the current consumption. Saving is not just determinants of the GDP and H-D model argues that every nation must save a certain proportion of GDP that can replace cost of capital. Dependency Theory shows the adverse effects of FDI on growth of the host nation.

1 Conceptual illustration:

Figure 1
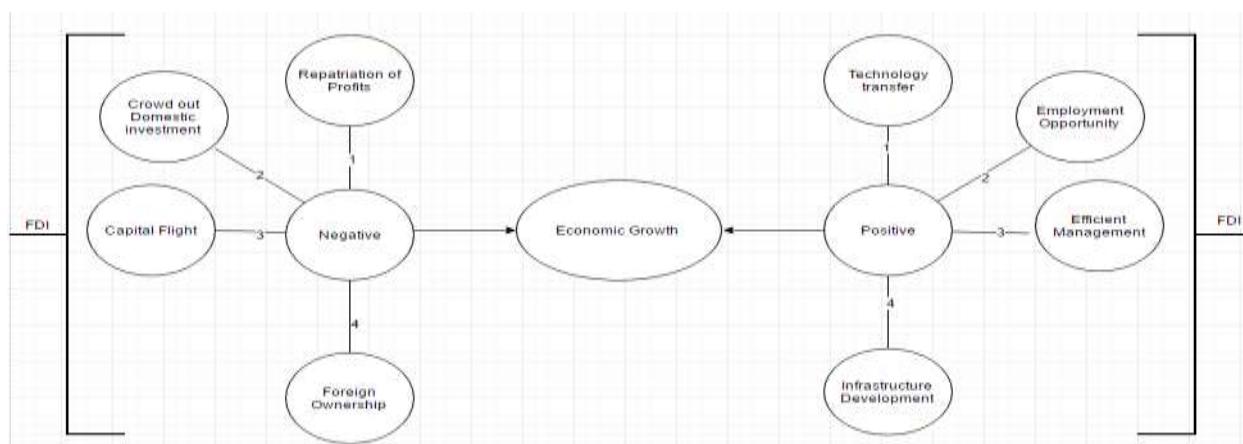
Figure 1 displays the influence of FDI on economic growth. The right half of fig1 illustrate the positive effects of FDI on growth through technology transfer, employment opportunities, provision of efficient management and infrastructure development while left half elucidated that the repatriation of profits, crowding out effect on domestic investment, capital flight, foreign ownership.

B. External debt and economic growth

Chenery & Strout (1966) in Dual-Gap theory stated that overseas aid plays a vital role in bridging the Saving-Investment or Import-Export gap. Financing Gap Theory supports the positive impacts of external debt on growth of less developed nations usually; the concept of "financing gap" has tainted the less developed nations, which notably encouraged so-called external source of borrowings. Gap between available funds from domestic resources and total funds requirement refers as financing gap; and external financing is most prominent way to minimize that gap. Debt overhangs theory states that, when economies have high external debt/GDP ratio has comparatively meager finances to make the productive investment, which resultantly deters the growth. The Crowding out Effects Theory ascribed that, charging the high interest rate on debt from debtor country and TOT (terms of trade) of that nation will be deteriorates the growth. Furthermore, recipient nation do not get facility to get external borrowings anymore.

The right half of figure 2 depicts the positive impacts of external debt on growth of nation through productive projects; improved technology & expertise, favorable BOP, raising the Efficiency in allocation of resources productivity, debt overhang, crowding out effect, uncertainty, high inflation rate.
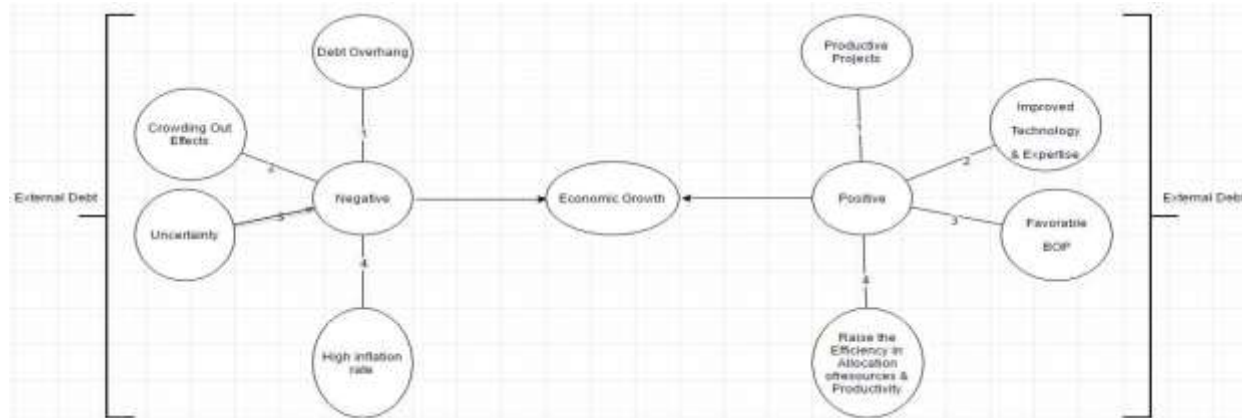
2 Conceptual illustrations:

Figure 2

4. Description of Data and Methodology

A. Sample, Description of Data and Model Specification

To combine the time span (t) from 1990 to 2014 with the cross sections (i) that are 25 (region wise classified) developing countries makes the analysis of panel data in order to investigate the association among FDI, External debt and Economic growth. Economic growth (proxies by GDP at constant 2005 US$) is the dependent variable of this study. Independent variables are External debt and FDI. Foreign direct investment is proxies by FDI, net inflows (BOP Current US$) and External debt is proxies by External debt stocks, total (DOD, current US$). Other independent variables of this study are labor, capital, gross domestic saving and general government final consumption expenditures. Labor is proxies by labor force, total (current S$), capital is proxies by gross capital formation (current US$), Gross domestic saving (current US$) and Government final consumption expenditures (Current US$). Data for all the variables is taken in millions US$.

Table: 1 Data Description

Variables	Proxy used	Unit of measurement	Source of data
Economic growth	RGDP	US Dollars	WDI
Labor	LF	US Dollars	WDI

Capital	GCAF	US Dollars	WDI
Foreign direct investment	FDI	US Dollars	WDI
External debt	EDT	US Dollars	WDI
Gross domestic saving	GDSA	US Dollars	WDI
Govt. final consumption expenditures	GFCE	US Dollars	WDI

Theoretical model based on Neo Classical Production function is presented as

$$RGDP = f(LF, GCAF) \tag{1}$$

Here, RGDP is the real gross domestic product serve as a proxy for economic growth; LF denotes the labor force, total. GCAF is the gross capital formation (proxy for capital).

$$RGDP = f(LF, GCAF, FDI, EDT) \tag{2}$$

RGDP is not only effected by above-mentioned (Labor, capital, FDI and external debt) four variables. There are many factors that influence the RGDP, but this study includes following two variables (Gross domestic saving and Government final consumption expenditures) in function (2.2) as follows

$$RGDP_{it} = f(LF_{it}, GCAF_{it}, FDI_{it}, EDT_{it}, GDSA_{it}, GFCE_{it}) \tag{3}$$

Since analysis is based on panel data, so "t" and "i" subscripts are used with each variable. In equation form it can be written as;

$$RGDP_{it} = \beta_{1i} + \beta_{2i}LF_{it} + \beta_{3i}GCAF_{it} + \beta_{4i}FDI_{it} + \beta_{5i}EDT_{it} + \beta_{6i}GDSA_{it} + \beta_{7i}GFCE_{it} + \mu_{it}$$
$$\tag{4}$$

Above Equation word of i (i =1, 2 .., N) Shows the cr0ss sections while t (t=1, 2… T) represented instant and *u* denotes the error term.

B. Panel Unit Root Test – Levin, Lin & Chu test

LL&C (2002) recommended panel unit root test for checking stationarity of selected variables. H0 (Null hypothesis) of the test means the existence of a non-stationarity in available data while the H1 (alternative hypothesis) means the existence of stationarity in the data.

H_0: non-stationary data

H_1: Stationary data

C. Panel co-integration Johansen Fisher Panel Co integration Test

After checking the data stationarity, the next task is to judge the long run relationship among variab1es. If all variab1es have similar integrating order & long run correlation prevails among the variables, an evaluation of that sort of relationship will provide errors in stationary form. Variables are co integrated only if long run equilibrium link prevails among them.

FMOLS Method

Co-integration test give authorization about presence or absence of long run relationship among selected variable. If whole variables have first integrating order, and long run relationship exists, then the next phase is to estimate the specified model by employing the FMOLS method, devised by Pedroni in 1996 &2000.

D. Granger causality test

Causality is a very essential concern in Econometrics, which refers to the ability of one variable to cause another variable. Granger (1969) devised a comparatively trouble-free test that posits the causality as: consider two variables **x** and **y**, a variable is supposed to Granger cause **x** only if the **x** is predicted by the lagged values of the **y**, and remaining all terms suppose to be same and vice versa.

Pair wise Granger Causa1ity Tests

Pair wise Granger causality test shows causal link between selected variables just as pair wise. It can best be illustrated in the form of following equations

$$Y_t = \sum_{i=1}^{m} \alpha_i X_{t-i} + \sum_{i=1}^{m} \beta_i Y_{t-i} + \mu_{1t} \qquad (1)$$

$$X_t = \sum_{i=1}^{m} \lambda_i Y_{t-i} + \sum_{i=1}^{m} \delta_i X_{t-i} + \mu_{2t} \qquad (2)$$

5. Data Analysis and findings
A. Descriptive Analysis
B. Table: 2 Descriptive analyses

	RGDP	LF	GCAF	FDI	EDT	GDSA	GFCE
Mean	249,625.80	68.63	97,027.50	8,004.49	64,432.49	97,459.88	40,775.54
Median	56,951.65	15.77	11,141.13	752.18	22,503.09	5,165,037	6,400.70
Maximum	5,270,061	806.50	4,782,094	290,928.40	959,509.80	5,165,037	1,408,395
Minimum	1305	0.67	0.00	-4,550.036	629.44	-2,275.14	90.39
Std.Dev.	562,964.40	159.43	396,128.3	28,733.20	110,062.60	422,073.7	123,656.8
Skewness	5.02	3.89	8.68	7.15	3.58	8.77	6.89
Kurtosis	35.34	13.67	87.68	61.47	20.51	88.56	61.33

Above Table depicts the descriptive statistics results. Results show that average of real GDP is 249,625.80 with standard deviation 562,964.40 and maximum at 5,270,061 while minimum at 1305 during the time span 1990 to 2014 with reference to some selected under developed nations. Average of Labor is 68.63 while its degree of dispersion is 159.43 and its maximum value is 806.50 while minimum is 0.67 during the period of study. Gross capital formation, is 97,027.50 at average, with standard deviation of 396,128.3 and maximum at 4,782,094 while minimum at 0.00. Foreign direct investment has average value of 8,004.49 with standard deviation 28,733.20and maximum at 290,928.40 while minimum at -4,550.036. External Debt is 64,432.49 at average with standard deviation of 110,062.60 and maximum at 959,509.80 while minimum at 629.44. Here the variation in External debt is more than foreign direct investment. Gross domestic saving has an average value of 97,459.88 with degree of dispersion 422,073.7 and maximum at 5,165,037 while minimum at -2,275.14. The average value of Government final consumption expenditures is 40,775.54 with standard deviation of 123,656.8 and maximum at 1,408,395 while minimum at 90.39.Departure from symmetry is said to be skewness. As per descriptive statistics, all the variables are positively skewed. The Kurtosis refers to degree of peakedness or flatness of distribution. For the normal distribution, value of kurtosis is three. Available results give testimony about leptokurtic nature of distribution because value is greater than 3 as per findings.

C. Analysis of Correlation Matrix
To check the strength of relationship between the variables, correlation matrix is used in this study. Following table interpreted that how much the variables are highly correlated with each other.

Table: 3 Correlation Matrix

Correlation (probability)	RGDP	LF	GCAF	FDI	EDT	GDSA	GFCE
RGDP	1.00						
LF	0.79 (0.00)	1.00					
GCAF	0.92 (0.00)	0.66 (0.00)	1.00				
FDI	0.93 (0.00)	0.67 (0.00)	0.96 (0.00)	1.00			
EDT	0.90 (0.00)	0.60 (0.00)	0.79 (0.00)	0.82 (0.00)	1.00		

GDSA	0.91 (0.00)	0.66 (0.00)	1.00 (0.00)	0.96 (0.00)	0.77 (0.00)	1.00	
GFCE	0.94 (0.00)	0.65 (0.00)	0.96 (0.00)	0.96 (0.00)	0.88 (0.00)	0.88 (0.00)	1.00

D. Investigating the order of integration

Table: 4 LLC results test at level

Levin, Lin& Chu test(At level)				
variables	**Intercept**		**Intercept and trend**	
	Statistic	**Probability**	**Statistic**	**Probability**
RGDP	20.6430	1.0000	2.97653	0.9985
LF	15.3920	1.0000	-0.22235	0.4120
GCAF	12.4401	1.0000	1.19839	0.8846
FDI	3.27091	0.9995	-1.71348	0.0433
EDT	13.3757	1.0000	9.02749	1.0000
GDSA	6.71047	1.0000	1.1830	0.8815
GFCE	17.6822	1.0000	4.96960	1.0000

Table : 5 LLC results at first difference

Levin, Lin &Chu test (At first difference)				
variables	**intercept**		**Intercept and trend**	
	Statistic	**Probability**	**Statistic**	**Probability**
RGDP	-3.93918	0.0000*	-12.4508	0.0000*
LF	-3.00414	0.0000*	-7.14370	0.0000*
GCAF	-8.99304	0.0000*	-10.3162	0.0000*
FDI	-22.3298	0.0000*	-16.7172	0.0000*
EDT	-5.22198	0.0000*	-9.66518	0.0000*
GDSA	-11.5291	0.0000*	-12.1451	0.0000*
GFCE	-7.20418	0.0000*	-11.1880	0.0000*

*exhibits the rejection of Null Hypothesis (stationary data)

Table 4 exhibits the results of LLC Panel unit root test both at individual intercept and individual intercept with trend. The econometric outcomes shows that null hypothesis is accepted which indicates the presence of unit root. Therefore, data for all selected variables is non-stationary at level while results of **Table 5** show that all the selected variables became stationary at first difference. On the other way, all the macroeconomic variables have not unit root and integrating at the first order.

D. Panel co-integration Tests

Table: 6 Results of Johansen Fisher Panel Co integration Test

Hypothesized No. of CE(s)	Fisher Stat.* (from trace test)	Probability	Fisher Stat.* (from max-Eigen test)	Probability
None	**1,379.00**	**0.00**	**1,449.00**	**0.00**
At most 1	**1,124.00**	**0.00**	**574.80**	**0.00**
At most 2	**700.60**	**0.00**	**351.70**	**0.00**

At most 3	422.90	0.00	229.50	0.00
At most 4	239.20	0.00	140.90	0.00
At most 5	151.20	0.00	131.10	0.00
At most 6	96.64	0.00	96.64	0.00

 * Probabilities are computed using asymptotic Chi-square distribution.

Table 6 exhibits findings 0f *Johansen Fisher Panel Co integration test*. The first column depicts the *Hypothesized number of Co-integrating equation* from none to at most six. Second & Forth columns carries the values of Fisher statistics while third and fifth columns shows the respective probability values. Values of fisher statistic are designed with regards to "trace" & "*Maximum Eigen statistics*". As per probability values given in third and fifth column, the analysis clarifies about the rejection of H_0. All the explained and explanatory variables have co-integration.

E. Fully Modified OLS result
Table 7 Results of FMOLS method

Variable	Coefficient	Std.Error	T-statistic	Prob.
LF	842.68	73.76	11.42	0.00
GCAF	-1.62	0.53	-3.05	O.00
FDI	4.03	1.41	2.85	0.00
EDT	2.13	0.20	10.67	0.00
GDSA	1.67	0.49	3.37	0.00
GFCE	0.66	0.37	1.78	0.08
C	-9,474.32	10,682.4	-0.89	0.38
R-squared **Adjusted R-Squared**	0.97 0.97	**Mean dependent var.** **S.D. dependent var.**	249,918.80 563,368.40	

Interpretation of FMOLS results

Above table depicts the Fully Modified OLS results for 25 region wise selected developing nations. The outcomes are as per expectations. Coefficient of Labor is positive and considerable significant because when Labor force goes up by one unit then economic growth will go up by 842.68 units. Its justification is quite clear that rise in units of labor force pull the real gross domestic product in upward direction. This impact might be due to high rate of participation. As the labor force is increasing, participants in economic activity are also increasing. Therefore, due to such addition of participants, high economic activity leads to high economic growth. This result is consistent with the studies of Zekarias (2016).Coefficient of GCAF have negative and insignificant relationship with GDP. Moreover, foreign direct investment has a significant positive association with RGDP because according to findings, when FDI increases by one unit then it will expand the economic growth by 4.03 units. FDI is found to have positive impact on economic growth because; foreign direct investment is a great source of establishment of new industries in developing nations. It is also helpful in job creation and poverty reduction process. Positive effect of FDI on economic growth is supported by the literature Ndambendia and Njoupouognigni (2010), Pradhan (2009), Asghar et al. (2011), Agrawal and Khan (2011), Khachoo and Khan (2012), Zakari et al. (2012), Zeb et al. (2013), Jun (2015), Agrawal (2015), Zekarias (2016).

External debt has considerable positive association with RGDP as per study, because one unit rise in external debt brought 2.13 units rise in Economic growth. External debt has a positive influence on

growth of developing nations as per finding. The developing nations usually face the dual gap (internal and external gap) and internal financial possessions are insufficient to bridge that gap. Hence, External debt for developing nations is a major source to meet the financial needs and accelerate the economic growth. Positive correlation between external debt and economic growth is supported by studies of Chenery and Strout (1966), Frimpong and Abayie (2006), Sulaiman and Azeez (2012), Rahman et al. (2012), Kasedi and Said (2013).

F. Pair wise Granger Causa1ity Test

**Table: 8 Results of Pair wise Granger Causa1ity Test**

Null Hypothesis:	Obs.	F-Stat.	Prob.
LF does not Granger Cause RGDP	575	44.58	0.00
RGDP does not Granger Cause LF	575	25.08	0.00
GCAF does not Granger Cause RGDP	575	19.37	0.00
RGDP does not Granger Cause GCAF	575	81.36	0.00
FDI does not Granger Cause RGDP	575	9.36	0.00
RGDP does not Granger Cause FDI	575	57.36	0.00
EDT does not Granger Cause RGDP	575	38.23	0.00
RGDP does not Granger Cause EDT	575	22.99	0.00
GDSA does not Granger Cause RGDP	575	13.59	0.00
RGDP does not Granger Cause GDSA	575	98.37	0.00
GFCE does not Granger Cause RGDP	575	24.33	0.00
RGDP does not Granger Cause GFCE	575	63.60	0.00
GCAF does not Granger Cause LF	575	18.75	0.00
LF does not Granger Cause GCAF	575	29.26	0.00
FDI does not Granger Cause LF	575	17.59	0.00
LF does not Granger Cause FDI	575	23.21	0.00
EDT does not Granger Cause LF	575	0.42	0.00
LF does not Granger Cause EDT	575	29.14	0.00
GDSA does not Granger Cause LF	575	16.58	0.00
LF does not Granger Cause GDSA	575	24.58	0.00
GFCE does not Granger Cause LF	575	11.37	0.00
LF does not Granger Cause GFCE	575	23.52	0.00
FDI does not Granger Cause GCAF	575	19.20	0.00
GCAF does not Granger Cause FDI	575	12.71	0.00
EDT does not Granger Cause GCAF	575	2.56	0.08*
GCAF does not Granger Cause EDT	575	26.65	0.00
GDSA does not Granger Cause GCAF	575	72.96	0.00
GCAF does not Granger Cause GDSA	575	37.58	0.00
GFCE does not Granger Cause GCAF	575	1.25	0.29*
GCAF does not Granger Cause GFCE	575	26.61	0.00

EDT does not Granger Cause FDI	575	5.99	0.00
FDI does not Granger Cause EDT	575	16.17	0.00
GDSA does not Granger Cause FDI	575	20.48	0.00
FDI does not Granger Cause GDSA	575	9.41	0.00
GFCE does not Granger Cause FDI	575	21.51	0.00
FDI does not Granger Cause GFCE	575	33.55	0.00
GDSA does not Granger Cause EDT	575	30.60	0.00
EDT does not Granger Cause GDSA	575	2.25	0.11*
GFCE does not Granger Cause EDT	575	35.86	0.00
EDT does not Granger Cause GFCE	575	2.78	0.06*
GFCE does not Granger Cause GDSA	575	10.07	0.00
GDSA does not Granger Cause GFCE	575	35.47	0.00

*exhibits the acceptance of null hypothesis (no causal relationship)

Table: 8 interpreted the causal relationship among variables. It declares that there exists uni and bi directional causality among variables.

Figure 3 Diagrammatical representation of pair wise granger causality results
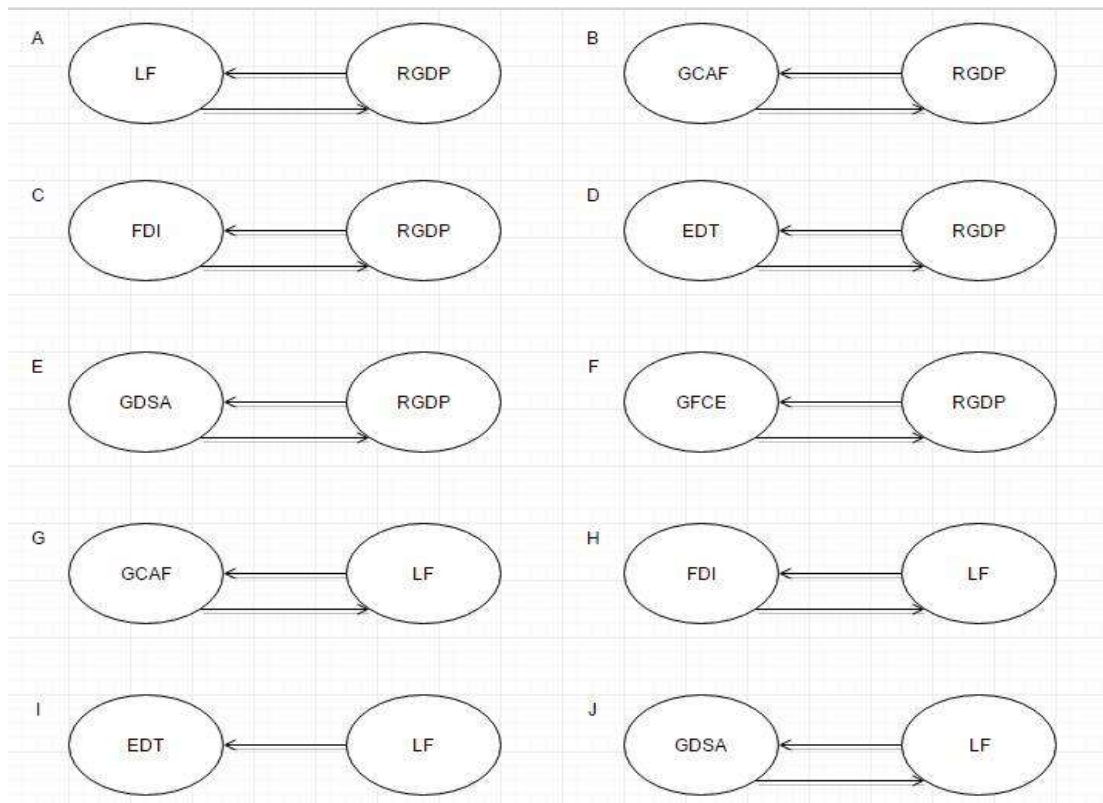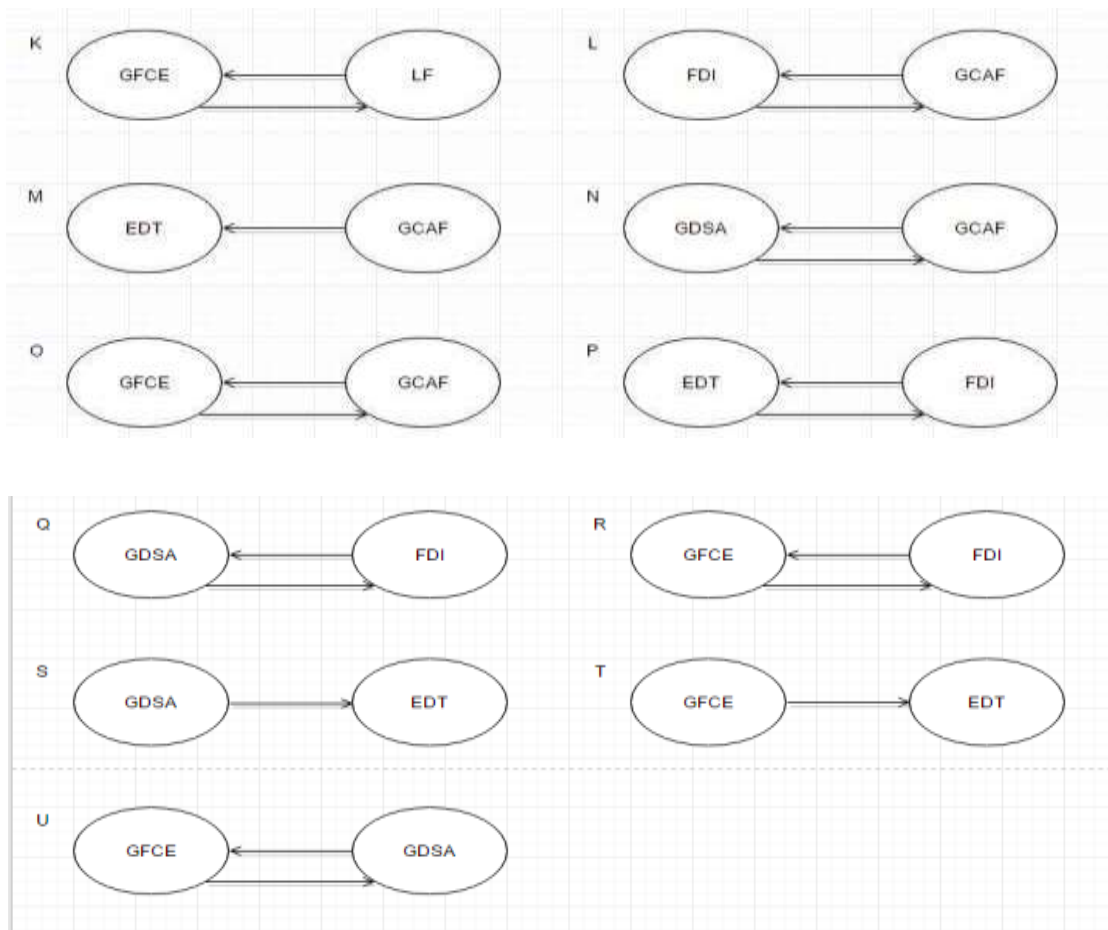
Elucidation:
Figure 3 elucidates the pair wise granger causal relationship between the variables. The arrow sign depicts the direction of causality.
All the above figures show the bidirectional causal association between the selected variables except the figure (i), (m), (s) and (t).
Figure (i) explain the unidirectional causality between LF and EDT because Labor force causes the external debt while EDT does not cause the LF.
Figure (m) explicates the one-way causal link between EDT and GCAF because GCAF cause the EDT while external debt does not cause the GCAF.

6. Concluding Remarks, Policy Implications and future prospects

Panel unit root tests suggest that the entire selected variables are stationary at the level of first difference, meaning that all the variable have I(1) integrating order. The results of "Johansen Fisher Panel Co integration test" reveal that, there exists a long period relationship among all the explained and explanatory variables. Findings of "Fully Modified OLS" method declared that, both the FDI and external debt have significant positive association with the economic growth in the case of 25 region wise classified developing economies. So, the study declares that, the effect of foreign direct investment is outstanding than external debt on the growth of developing nations because one unit rise in FDI raise the growth by 4.03 units while one unit rise in external debt upgrade the growth up to 2.13 units. It means that boundaries of selected developing nations are absorbent to FDI than external debt. Furthermore, Units of labor have considerable positive association with economic growth. Furthermore, negative impact of the capital stock and significant positive impact of gross domestic saving on economic growth has noted during span 1990-2014 in the case of developing countries. Pair wise granger causality test has been employed for analyzing the uni and bi directional causal relation among selected variables. Results of this study are likely to make available a prospect to structure several policy implications. Both the FDI and

external debt contributes positively to the growth in context of some selected developing countries. Therefore, the government should positively focus on utmost use of possessions to boost FDI inflows and proper utilization of external debt to augment the economic growth. This study provides suggestions that how to improve the structure of developing nation to attract more FDI in order to upgrade the economic growth.

Host countries should provide the business-welcoming atmosphere to the foreign investors to be a magnet for huge FDI. For this purpose, developing nations must have to mounting skilled and educated personnel, provision of Jobs to uneducated people as per their skills. Moreover, safety of foreign investors and appropriate structure of tax also captivate massive foreign investment. Since agriculture sector is backbone in most of developing nations but deficient financial sources leads to the usage of poor techniques of production and low quality inputs in this sector. Huge amount of FDI can provides finance to modernize the structure of agriculture sector in developing countries. External debt should to be use for productive projects and returns from that projects must be higher than its cost. Government of developing nations should make certain about stability in both economical and political aspects in order to minimize the debt burden and enjoying its fruitful effects on growth. Intention of government strategies must be positive while acquiring the external debt, meaning that it should borrow just for the welfare of their nations rather than for political purposes.

This study opens the gate for new research in term of following. There is always a bench mark to judge performance like in this case if we make comparison with developed countries it will defiantly opens doors for crucial elements to surface up, which helps to device a comprehensive plan for economies to set objectives for their economic growth as this study covered with only developing countries without making comparisons. Future research required to elaborate the consequences of external debt and FDI in term of incorporating relationship of both core variables.

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