Foreign Direct Investment and Economic Growth: A Literature Survey

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Abstract

Earlier foreign direct investment (FDI) was looked with great suspicion by many developing countries but now the dilemma has been removed and it is regarded as a catalyst for economic growth and important vehicle for transfer of technology from developed to developing countries. Several theoretical and empirical studies have been conducted to investigate whether economic growth is influenced by the FDI Inflows. This paper deals with review of literature since 1959, to study the relation between FDI and economic growth. In this literature survey, emphasis has been done to study the bi-directional relation between FDI and economic growth, impact of FDI on domestic investment (DI) and role of absorptive capacity to attract and optimally utilize the flow of FDI. The analysis of results highlights various determinants and impact ofFDI. This study also suggests whether and which country should adopt FDI-led growth or export-led growth.

Key words: Foreign Direct Investment (FDI), Economic growth and Domestic Investment (DI).

1. Introduction

FDI is not a new concept but gained importance after Second World War. Earlier FDI was looked with great suspicion by many developing countries but now the dilemma wasremoved and it is regarded as a catalyst for economic growth and important vehicle for transfer of technology from developed to developing countries. FDI refers to an investment in foreign country where the investor retains control over the investment. This is a long term capital investment because this cannot be easily liquidated. It typically takes the form of starting a new venture or subsidiary, acquiring a stake in an existing firm or starting a joint venture in the foreign country. FDI can fuel DI in the host countries, diffuse technology, enhance competition in the local market, reduce saving and investment gap, increase employment opportunities, reduce poverty, increase efficiency and productivity, increase export, facilitate import, increase standard of living, create more competitive business environment, improves human capital formation, provide access to international market for local products and create externalities and knowledge spillovers and in this way it works as vehicle to build the "idea gap" between rich and poor country. FDI will certainly improve the integration of one economy into the global economy and foster growth and development. Due to positive and multiple impact of FDI, it is believed that it will offset the negative effects and helps in enhancement of economic growth and development.Gorg & Greenaway (2004) mentioned FDI as "a key driver of economic growth and development. FDI not only tonics capital formation but also improves the quality of investment". Ajayi (2006)underlined FDIas an engine of growth.

The relationship between FDI and economic growth has been a debatable topic because of contradictory view of researchers and policy makers regarding the positive and negative aspect of FDI and economic growth. Various studies have been conducted to study the nexus between FDI and economic growth under various circumstances but there is shortage of studies relating to the review of literature focusing FDI and economic growth relation to arrive at certain valuable conclusion. However while reviewing literature I found only one paper ofOzturk (2007)who worked on the review of literature since 1986 and highlighted the positive role of FDI on economic growth. He suggested strengthening certain deficient areas and promoting FDI policy to attract FDI.Including the areas focused in his studies, this survey covers few more areas which have not been given importance in his studies like effect of corruption, sectoral growth, poverty and impact on DI. In this paper various theoretical and empirical literatures have been reviewed not only to study the relation between FDI and economic growth but also relation between FDI and DI and economic growth and FDI. This review of literature has covered the literatures published since 1959 while earlier studies covered the literatures published since 1986. This paper also highlighted the various techniques used by the

researchers. This paper will suggest whether country should adopt FDI-led growth policy or export-led growth. Hence in this way this paper will prove to be beneficial to the student, academicians, researchers and policy makers.

The rest of the paper consists of theoretical base of FDI and economic growth relationship, literature survey, interpretation of survey results and lastly conclusion.

2. Theoretical Background :

Various growth models have been developed that focuses on the importance of capital for economic growth. Some important FDI growth model is neo-classical and endogenous growth model. According to both the model, capital plays an incredible role on the economic growth of any country. Adegboyega & Odusanya (2014)emphasized on the concept of both the model that FDI not only supplement the physical investment but also increases its efficiency thus promote the economic growth. In neo-classical growth model, FDI was regarded as the capital that can be provided to the capital deficient productive sectors of the economy, which increases the marginal productivity of the capital and which, in turn, boosts up the economic growth. In this model the FDI act as supplement to the DI which helps in capital formation. Adams (2009) highlighted one basic economic principle that, the economic growth requires long-term capital investment.

On contrary to this theory, the endogenous growth model underlines that long run economic growth of the country is not only effected through the supply of capital but by its effective utilization. In this theory the role of FDI is more productive than DI. This is due to the fact that FDI inspires the incorporation of new technologies in the production function. Romer P. (1990) andMankew et al. (1992) indicated diminishing return to capital is being compensated through the effect of technological spillover that stimulates the economic growth. This assists the economy to move on the path of long-term growth process. Romer P. (1986), Paugel (2007), Lucas (1988) andMankiw et al. (1992) suggested that FDI helps in long run growth in an economy as it boosts the existing stock of knowledge through labour training and skill procurement, introduce different management practices and organizational arrangements. In this way FDI seems to play an important role in economic growth. Also it permits the use of those techniques that are not available domestically. Hence for continuous and sustained growth there must be regular investment in human capital, knowledge and innovations as they are regarded as important contributors to economic growth. UNCTAD (1999) reported that inflow of FDI increases the rate of competition which motivates domestic firms and industries to increase their efficiency to stand in the international competitive market.

Various empirical studies have been conducted depending on the relationship between FDI-led-growth. Some study favors FDI-led growth while some rejects. Boyd & Smith (1992) and Alege & Ogundipe (2014) claimed that the FDI inflow negatively affect economic growth as it disturbs the allocation of resources in already existed domestic market and trade. OECD (2011) highlighted the cost associated with inflow of FDI. It stated that due to increased market share and reorganization of the economy, the problem of unemployment increases. Hence the economy has to bear the reduction in employment opportunities upto certain extent due to inefficient human capital. On the other hand Ajayi (2006) mentioned significance of FDI inflows to alleviate poverty by generating new employment opportunities.

Borensztein et al. (1998), Hermes & Lensink (2003)mentioned that FDI fails to augment economic growth in those developing countries that lacks in required absorptive capacity. UNCTAD (2001), Hermes & Lensink (2003) focuses on some determinants of absorptive capacity like the efficiency of human capital, technological development, infrastructural condition, growth and progress of financial sector and government policy. Hence, absorptive capacity refers to those factors that have the capacity to make optimum utilization of FDI and which brings multiplier effect of FDI on economic growth.This absorptive capacity helps the economy to develop the investment climate which stimulates the FDI. Thus, the positive effect of FDI on economic growth depends on number of important factors, such as human resources, trade condition, degree of openness in the economy, the level of development of financial sector, infrastructure quality, technological

development, level (stage) of development of the country concerned, availability of physical resources, available incentives, sectoral development, DI, lower level of corruption, lower level of poverty, supportive policy, political stability, favourable socio-economic condition, capability of macro-economic environment, etc. These necessary factors represent the absorptive capacity of the country which extracts the benefits from FDI inflow.Besides availability of these factors, many countries offer various special schemes and financial incentives like tariff reductions, tax concessions, subsidies in infrastructural facilities, etc.

3. Literature Review

The incredible role of FDI had sparked numerous empirical and theoretical studies in this field with different sample country, period, statistical tools and variables. But the results of those studies are contradictory. Some studies favor the FDI inflow in an economy while other restricts it. Due to intense importance assigned to this topic, this study deals with the survey of detailed literature to study the impact of FDI on economic growth.The results of various studies are sensitive to the choice of sample period, condition of countries studied, techniques employed and absorptive capacity of country concerned.(Table 1)

4. Analysis of Contradictory Results

Ample of research was conducted to relate FDI and economic growth but the results of those studies are contradictory. Therefore this study was conducted to reach at certain conclusion.Various literatures either focus on positive relation, negative relation or conditional positive relation. The analysis of results will be done on the basis of role of sectoral distribution, role of corruption, existence of poverty, absorptive capacity, country's stage of development, government policy, social, economic and political stability, etc. This study analyses not only the FDI and economic growth relation but also the impact of economic growth on FDI inflow, impact of FDI on DI, and at last it will suggest whether country should adopt FDI-led growth policy or export-led growth.

In the era of globalization, it is necessary for the country to produce goods of international standard, to capture larger market share in the international platform. This requires huge DI, better technology, sound socio-economic and political condition and better economic growth rate. Flow of FDI not only supplements the DI but also brings latest technology which is not available domestically.Khaliq & Noy (2007) found FDI to be an important driver of modern technology, promoting growth in host countries and produce multiplier effect when combined with efficient human capital. Romer P. (1993) claimed about the existence of "idea gap" between rich and poor countries and this idea gap can be easily met through the inflow of FDI which lead to technological diffusion.

The review of various literature suggested that to reap the benefit of FDI, countries must have adequate absorptive capacity like existence of supportive social, economic and political climate, infrastructural facilities, efficient human capital,higher level of education, openness of economy, lower level of risk, lower growth rate of population, better financial market, technological development, favourable FDI policy, WTO accession, sound financial structure, low level of poverty, etc.Toulaboe et al. (2009) mentioned on the conditional positive relation of FDI and economic growth that the country lacking in this supportive investment climate will face little or even hostile effect on growth.

While emphasizing on FDI inflow, it should be remembered that the FDI must supplement DI rather than substituting.Mello & Luiz (1999) also emphasized the extent to which FDI is growth amplifying depends on the degree of complementarity and substitution between FDI and domestic investment. P.B (2012) found FDI flow and imports act to substitute and impede DI while exports accumulates DI. This is because enhanced exports generate additional demand which require further investment to meet enhanced demand.Therefore attracting FDI is not the only solution to secure growth but efforts must be done to increase the openness of economy and productivity of human capital.

Various studies such as Bashir (1999), Hassen & Anis (2012), Chowdhury & Mavrotas (2006), Tintin (2012), etc.mentioned that the benefit of FDI is unevenly distributed across various countries, sectors and local areas, differs overtime. Studies found that that the FDI stimulates growth in developing countries to greater

extent than developed and least developed countries. Alfaro (2003) and Massoud (2008) stated that FDI is not a collective or aggregate phenomenon.

There are ample of studies such as Lautier & Moreaub (2012), Lean & Tan (2011), Athukorala (2003), etc. that focus on the existence of bi-directional liaison between FDI and economic growth. The flow of FDI is mostly directed towards the developing countries having robust investment rate, dynamic process of economic growth and development. Hence it's not only the FDI that influence economic growth but economic growth also determines the magnitude of FDI inflow.

If the spillover effect of FDI is optimally and efficiently utilized in the economy then it will lead to sustainable economic growth. Ndikumana & Verick (2008) expressed that the FDI will help to attain sustainable growth if it boost the effective and optimum utilization of domestic factors of production through employment generation and enhancing private investment.

There are many other factors which must be kept in mind that either lowers down or eats up the benefit of FDI or impede the flow of FDI like higher level of unemployment, existence of poverty, excessive population, higher level of risk, corruption, etc. Freckleton et al.(2010)stated that corruption lowers down the benefit of FDI by 70 points on economic growth. (Table 2)

5. Export-led growth v/s FDI-led growth

This paper suggested that the export-led growth is better than FDI-led growth in the initial stage of development because in the initial stages of development countries do not have sufficient financial resources either to develop infrastructure or to import advanced technology and if FDI is encouraged in the initial stages of development than it will bring advanced technology with itself which will give challenge of cut-throat competition to the domestic firms and if domestic firms fails to compete with them then, it will lead to shutting down of domestic business, which create unemployment, reduce market share, reduce export, exploit available natural resources, reduce living standard, assert negative impact on balance of payment position and thereby reduces the prestige of economy at world platform. This is because FDI bring spillovers effects with itself and if country is not in position to reap the benefit of that, then it will negatively affect the domestic economy. Therefore it is believed that FDI must be encouraged after strengthening the internal socio-economic and political environment of the country so that foreigners cannot exploit and conquer domestic country. Therefore moving ahead on the path of export will be more feasible for the country lacking in sufficient resources in the initial stages of development and after attaining the required growth, the FDI-led growth will be feasible for the country. As it has been clear from the study of Lyroudi et al. (2004) and Stanisic (2008) who have studies the countries that are in transitional process stated that FDI has no positive and significant relation with economic growth.

6. Conclusions

Ample of theoretical and empirical studies were reviewed since 1959. Most of the studies favored the positive relation between FDI and economic growth. This study concluded that the positive relation between these two variables depends on the existence of absorptive capacity, favourable FDI policy, sound socio-economic and political condition, lower level of risk, openness of an economy, lower level of corruption, sound economic growth, and higher rate of DI in the host countries to optimally utilize the spillover effect of FDI. This study found the existence of bi-directional relation between these two variables. FDI supplements DI in the presence of sufficient and sound absorptive capacity rather than substituting it. But it would be beneficial for the economy in transitional process to adopt export-led growth rather than FDI-led growth due to lack of absorptive capacity and inefficient socio-economic and political condition.

FDI stimulates sustainable growth, when it enhances economic growth with increasing the overall productivity in the economy.

While formulating the FDI policy, policymakers should be cautious regarding the absorptive capacity and socio-economic and political condition of the economy so that FDI must augment and enhance economic growth rather than substituting and retarding economic growth. Limit of FDI must be increased slowly and gradually to check and curb the negative sides of FDI flow. There must be proper check and monitoring on the sectors attracting FDI flow. Since the positive effects of

FDI varies across different region, sectors and countries, therefore, country specific studies must be done to check the relation between FDI and economic growth.

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Table 1
FDI and Economic Growth: A Review of Literature

Study	Sample Period	Countries	Technique Used	Results
Chowdhary & Kushwaha (2013)	1992-2012	India	Granger Causality	No effect
Lautier & Moreaub (2012	1984-2004	68 Developing Countries	Regression	Bi-directional Causality
Carkovic & Levine (2002)	1960-1995	72 countries	Ordinary Least Squares (OLS) regression and Generalized methods of Moments (GMM) panel estimator	No positive and independent effect
Freckleton et al. (2010)	1998-2008	42 developing countries	Panel Dynamic Ordinary Least Squares (PDOLS)	Higher impact with lower level of corruption.
Tintin (2012)	1980-2010	125 countries (38-Developed, 58-Developing, 29-Least Developed)	Panel OLS Method with Fixed Effect	Positive relation
P.B (2012)	1970-2008	ECOWAS Countries	Recent Panel Cointegration Estimation	FDI substitute the DI (crowds out DI)
Qin et al.(2005)	1990-2004	China	Macro econometric model (VAR model, Single equation OLS model, Cointegration analysis, Granger Causality test)	Long run positive relation
Patidar & Malviya (2013)	1992-2010	India	Multiple Regression and Correlation	Strong positive relation but impact of DI is more than FDI
Lean & Tan (2011)	1970-2009	Malaysia	Conventional Augmented Dickey-Fuller (ADF), Plillips-Perron (PP) Unit Root Test, Johansen and Juselius Multivariate Cointegration and Granger Causality Test	Positive long run impact while DI has negative impact. FDI complements DI.
Lim (2001)	-	-	Literature Summary	Significant positive support but other determinants also affect FDI.
Khaliq & Noy (2007)	1997-2006	Indonesia	A case study (single-country) regression-based approach	Positive effect at aggregate level but impact varies across sectors.
Chowdhury & Mavrotas (2006)	1969-2000	Chile, Malaysia and Thailand	Toda-Yamamoto causality test	GDP causes FDI in Chile and not vice versa. Strong indication of a bi-directional causality Malaysia and Thailand.
Adeniyi et al. (2012)	1970-2005	Cote' d'Ivoire, Gambia, Ghana, Nigeria and Sierra Leone	Granger causality tests in a vector error correction(VEC) setting	Positive impact in Ghana, Gambia and Sierra Leone. No evidence in Nigeria Non-existence of relation in Cote'd'Ivoire
Stanisic (2008)	1997-2006	Romania, Bulgaria, Serbia and Montenegro,	Correlation	No positive relation in transitional countries.

Anwer & Sampath (1999)	1960-1992	90 countries	Unit Root, Cointegration Technique, Granger Causality Test	Positive Bi-directional causality
Alfaro (2003)	1981-1999	47 countries	Cross-section regression	Negative effect in primary sector. Positive effect in manufacturing sector. Ambiguous effect in the service sector.
Lyroudi et al. (2004)	1995-1998	Albania, Azerbaijan, Belarus, Bosnia, Georgia, Kazakhstan, Kyrgyz Republic, Latvia, Lithuania, Moldova, Mongolia, Romania, Russia, Slovenia, Tajikistan, Turkmenistan, Uzbekistan	Bayesian analysis	No significant relationship in the transitional countries.
Chien & Linh (2013)	2000-2010	Vietnam	Regression analysis	Positive bi-directional linkage
Vo & Batten (2006)	1980-2003	79 countries	Panel data modeling technique	Strong positive impact
Mello & Luiz (1999)	1970-1990	OECD and Non-OECD countries	Time series analysis	Not strong-Positive for OECD countries and negative for non-OECD.
Athukorala (2003)	1959-2002	Sri Lanka	Cointegration and error correction mechanism	No robust and independent effect
Bashir (1999)	1975-1990	Middle Eastern and North African (MENA) countries	OLS and generalized least squares (GLS)	Positive impact
Oyatoye et al. (2011)	1987-2006	Nigeria	OLS	Positive relation
Ekanayake & Ledgerwood (2010)	1980-2007	85 Developing Countries	OLS	Positive and Significant effect
Alege & Ogundipe (2014)	1970-2011	ECOWAS countries	GMM panel estimation technique	Negative and insignificant effect
Karimi & Yusop (2009)	1970-2005	Malaysia	Granger no causality test (by Toda and Yamamoto) and ARDL bounds test for long run relationship.	Indirect effect
Kotrajaras (2010)	1986-2007	15 East Asian countries	Panel Unit root test, Panel cointegration test	Positive relationship
Li (2005)	1970-1999	84 countries	Regression analysis	Positive direct and indirect effect
Al-Iriani & Al-Shamsi (2007)	1970-2004	6 countries covering the Gulf Cooperation Council (GCC)	Heterogeneous panel cointegration test and heterogeneous panel causality test	Bidirectional Positive link
Chien et al. (2012)	2000 – 2010	64 provinces and cities in Vietnam	Fixed-effect estimation method for econometric models	Strong and positive impact

Adegboyega & Odusanya (2014)	1986-2011	Nigeria	Augmented Dickey- Fuller test, Phillips-Perron test, OLS, VAR and VECM	Positive but insignificant relation
Leitao & Raseki (2013)	1995-2008	Portugal	OLS	Positive impact
Makki & Somwaru (2004)	1971-2000	66 Developing Countries	Seemingly Unrelated Regression (SUR) method, Three Stage Least Squares (TSLS) approach.	Strong and Positive relation
Berthelemy & Demurger (2000)	1985-1996	24 Chinese Provinces	Simultaneous-equation model, GMM approach	Positive Impact
Adames (2000)	1971-1995	Mexico	Multiple Regression Analysis Technique	Long run positive impact
Lan (2006)	1996-2003	61 Provinces of Vietnam	GMM approach	Positive Impact
Roy & Mandal	1975-2010	27 Asian Economies	Panel CointegrationTechnique	Positive Impact
Khan (2007)	1972-2005	Pakistan	Bound testing approach of cointegration	Positive Impact both in short-run and in long-run
Hassen & Anis (2012)	1975-2009	Tunisia	Cointegration Analysis	Long-run Positive relation
Tiwari & Mutascu (2011)	1986-2008	23 developing Asian countries	Pooled OLS regression, panel-data model, Hausman test	Positive relation
Massoud (2008)	1974-2005	Egypt	Two stage least square (TSLS), Fry's Model, Pooled Least Square method	Positive impact on manufacturing sector Negative impact on primary sector

Table 2
Determinants of FDI and their Impact

Basis	**Impact**
Host Country's economic growth	Countries with higher rate of economic growth attract greater FDI inflow.
Domestic Investment	Country with sound domestic investment position attracts greater FDI and enhanced FDI further boosts domestic investment by creating competitive environment.
Financial structure	Healthy financial structure attracts greater FDI flow and allows host economy to maximize the benefit from FDI inflow.
Corruption	Lower level of corruption maximizes the benefit of FDI.
Level of Poverty	Lower level of poverty attracts greater FDI.
Openness of an economy	Liberal rules and regulation attracts greater flow of FDI and secure higher rate of economic growth.
Socio-economic infrastructure	Better condition of socio -economic infrastructure attracts greater FDI and plays positive and significant growth.
Availability of Physical resources	Sufficient availability of physical resources attracts greater FDI.
Government Policy	Liberal FDI policy attracts greater FDI.
Political condition	Favourable political condition and peace attract greater FDI.
Efficiency of human capital	Efficient human capital can optimally and efficiently utilize the modern technology and reap the benefit of FDI.
Country's level of development	In developing country the role of FDI in stimulating growth is greater than in developed and least developed countries.
Level of Population	Higher level of population eats up the enhanced economic growth.
Absorptive Capacity of host country	Higher absorptive capacity can have greater spillover effect of FDI.
Sectoral Distribution	Primary sector shows negative impact of FDI Secondary sector shows positive impact of FDI Service sector shows ambiguous results.
Employment Generation	FDI by supplementing domestic investment boost employment opportunities.
Trade condition	Better trade condition reflects better economic position and boost FDI flow.
Idea gap	FDI bridges the technological gap and produce multiplier effect with the help of efficient human capital.
Level of risk	Lower level of risk encourages greater flow of FDI than higher level risk.

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