RELATIONSHIP BETWEEN FDI INFLOWS AND ECONOMIC GROWTH: A REVIEW

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Abstract
The relationship between FDI inflows and economic growth has motivated voluminous empirical research focusing on both developed and developing countries. The literature provides conflicting results regarding the relationship between FDI inflows and economic growth. On the one hand, some researchers argue that, besides supplementing capital, Foreign Direct Investment (FDI), as a principal conduit of technology upgradation, know-how transfer and managing skills exchange, heralds the globalisation of host economies. They view FDI as an engine of economic growth and development. Other researchers argue that FDI carries various potential drawbacks including deterioration in the balance of payments as profits are repatriated, crowding-out effect in the host economy, dependence on external sources, dilution in control, destructive competition of foreign affiliates with domestic firms and loss of market to foreign firms due to weak competitive capability of the domestic firms. This study sums up the literature as well as research studies on the relationship between foreign direct investment inflows and economic growth and attempts to arrive at a meaningful conclusion.

Keywords: FDI Inflows, Economic Growth, Developing Countries

Introduction
The relation between FDI and economic growth has been extensively investigated by the researchers, practitioners as well as policy-makers. The opinions range from an unreserved optimistic view (based on the neo-classical theory or on new theory of economic growth) to a systematic pessimism (namely among radical economists) (Wan, 2010). There is a widespread belief among researchers and policymakers that FDI enhances growth of host countries through different channels. They increase the capital stock and employment; stimulate technological change through the adoption of foreign technology and know-how and technological spillovers, which can happen via licensing agreements, imitation, employee training, and the introduction of new processes, and products by foreign firms (Wan, 2010). Thus, FDI is expected to increase and improve the existing stock of knowledge in the host economy.

Literature Review
Numerous research studies have been conducted to verify the impact of FDI on Economic Growth in different countries. All studies done have come with different results. In the following passages these studies have been reviewed and the resulted put forth briefly thereof.
Balasubramanyam et al (1996) analysed how FDI affects economic growth in developing economies. By using cross-section data and OLS regressions he found that FDI has a positive effect on economic growth in host countries using an export promoting strategy but not in countries using an import substitution strategy.

Nasreen et al (2011) investigated empirically the relationship between FDI and economic growth for the period 1983-2008 using heterogeneous panel. The empirical findings of Larsson panel co-integration show that FDI and economic growth are co-integrated. It is also found by the FMOLS results that FDI and economic growth are positively related. The results of panel homogeneous causality hypothesis show the existence of bi-directional causality between FDI and economic growth while the results of panel homogeneous non-causality hypothesis confirm the existence of unidirectional causality running from FDI to economic growth in selected panel. On the other hand the results of heterogeneous causality hypothesis show the existence of bi-directional causality between FDI and economic growth only in case of Malaysia. In cases of Japan, Nepal, Thailand and Singapore the existence of uni-directional causality running from FDI to economic growth is observed whereas the uni-directional causality is also found running from economic growth to FDI for Pakistan, Sri Lanka and Bangladesh. However, no causality in any direction is found in cases of India, China, Philippines, Maldives, Singapore, Indonesia and Korea Dem.

Devajit (2012) found Foreign Direct Investment (FDI) as a strategic component of investment needed by India for its sustained economic growth and development.

Damooei and Tavakoli (2006) attempted to estimate the output elasticity of foreign direct investment (FDI) and imports in Thailand and Philippines during the period 1970-1998. It was found that the effect of foreign investment is more manifest in the Philippines during the second half of the 1990s, whereas since 1994 the imports in Thailand are more effective. Hence, the Philippine economy could gain more from directing its economic policies to further liberalize its foreign investments. On the other hand, the Thai economy should carry on its reliance on imported foreign technology in order to accelerate its economic growth.

Lo (2004) attempted to assess the role of FDI in China’s economic development with reference to the broader literature on FDI and late development. It is found that FDI tends to promote the improvement in allocative efficiency, while having a negative impact on prolific efficiency. Also, insofar as FDI does promote general productivity growth, this tends to be a matter of cumulative causation rather than one of single-direction causation. Furthermore, in the context of a comparative analysis of two distinctive regional models, the economic impact of FDI tends to be more favourable in the inward-looking, capital-deepening pattern of development (the ‘Shanghai model’) than that in the export-oriented, labour-intensive pattern (the ‘Guangdong model’). Additional analyses, however, suggest that the ‘Shanghai model’ has its intrinsic problems of sustainability. The scope for applying it to China as a whole is thus judged to be limited.

Khan & Khan (2010) over the period 1981-2008, an empirical relationship between industry-specific Foreign Direct Investment (FDI) and output under the framework of Granger Causality and Panel Co-integration for Pakistan was established. The evidence of panel co-integration between FDI and output is supported by the result of this study. It is also found that FDI has a positive effect on output in the long run. Additionally, the result also supports the evidence of long-run connection running from GDP to FDI, while in the short run, the evidence of two-way causality between FDI and GDP is identified.

Bang et al (2007) attempted to estimate the impact of FDI on growth using sectoral data for FDI inflows to China and Vietnam. Results suggest that, for the two developing-transition economies, FDI has a statistically significant positive effect on economic growth operating directly and through its interaction with labor.
FDI was found as a significant factor influencing the level of economic growth in India. Also, the results of Economic Growth Model and Foreign Direct Investment Model reveal that FDI plays a crucial role in enhancing the level of economic growth in India. Roy and Berg (2006) examined whether FDI inflows have stimulated growth of the U.S. economy by applying time-series data to a simultaneous-equation model (SEM) that explicitly captures the bi-directional relationship between FDI and U.S. economic growth. It is found that FDI have a positive significant and economically important impact on U.S. economic growth. Also SEM estimates reveal that FDI growth is income inelastic. The results imply that even a technologically advanced country such as the U.S. benefits from FDI, FDI gains are very substantial in the long run and the U.S. current account deficit’s sustainability is enhanced by FDI’s positive effect on productivity but undermined by the income inelasticity of FDI. Overall, it is suggested by the results that U.S. policies should concentrate on keeping the country attractive to foreign direct investors.

Ayanwale (2007) in a study on Foreign Direct Investment (FDI) and Economic Growth investigated the empirical relationship between non-extractive FDI and economic growth in Nigeria and examined the determinants of FDI into the Nigerian economy. The study found that FDI in the communication sector has the highest potential to grow the economy and further found that FDI has a negative effect on manufacturing sector of the economy.

Sethi and Sucharita (2010) examine the effect of FDI on economic growth in Bangladesh and India respectively by using the data for the period 1974-2009 and concluded that FDI is positively correlated to the economic growth of Bangladesh but it has not yet been established as a significant determining factor for the economic growth. On the other hand, FDI is negatively correlated to the economic growth in India and it has not yet been established as a significant determining factor for the economic growth. The overall results conclude that the effect of FDI on economic growth is ambiguous for both India and Bangladesh.

Attari, Kamal and Attaria (2010) examines the causal relationship between FDI and economic growth by using an innovative econometric methodology based on the Toda-Yamamoto test to study the direction of causality between the two variables. The study used the time-series data covering the period 1969-2000 for three developing countries, namely Chile, Malaysia and Thailand and suggest that it is GDP that causes FDI in the case of Chile and not vice versa, while for both Thailand and Malaysia, a strong evidence of a bi-directional causality between the two variables is present.

Kherfi & Soliman (2005) examined the effect of Foreign Direct Investment (FDI) on economic growth in 23 countries of two regions, 6 countries from Middle East and North Africa (MENA) and 17 countries from Central and Eastern Europe (CEE) by using data averages from four periods: 1979-1984, 1985-1990, 1991–1996, and 1997-2002. Their main findings suggest that FDI has a positive effect on growth only in EU accession countries while the effect of FDI on growth in MENA and non-EU accession countries is negative.

Chowdhury & Mavrotas (2005) examine the causal relationship between FDI and economic growth by using an innovative econometric methodology based on the Toda-Yamamoto test to study the direction of causality between the two variables. The study used the time-series data covering the period 1969-2000 for three developing countries, namely Chile, Malaysia and Thailand and suggest that it is GDP that causes FDI in the case of Chile and not vice versa, while for both Thailand and Malaysia, a strong evidence of a bi-directional causality between the two variables is present.

Hansen and Rand (2006) analyse the casual relationship between Foreign Direct Investment (FDI) and GDP in a sample of 31 developing countries covering 31 years by using estimators for heterogeneous panel data and found a unidirectional causality between FDI to GDP ratio implying that FDI causes growth.

Borensztein, Gregorio & Lee (1998) found that the higher productivity of FDI holds only when the host country has a minimum threshold stock of human capital. The host country, to avail fructification of growth effect of FDI, needs adequate infrastructure as a pre-requisite.
Pradhan (2009) found that Foreign Direct Investment (FDI) and economic growth are co-integrated at the panel level. His findings are based on empirical observations of five ASEAN countries. While using Granger Causality test he found that high level of FDI can generate high level of economic growth.

Flexner (2000) employs Ordinary Least Squares (OLS) estimation to examine the effect of FDI on per capita GDP growth in Bolivia over the period 1990-1998 and finds that FDI has a statistically significant impact on per capita GDP growth.

According to Rappaport (2000), FDI may improve the productivity not only of the firms receiving investments, but also of all firms of the host countries as a consequence of technological spillovers. Olofsdotter (1998) in her study by using cross-sectional data finds that an increase in the stock of FDI is positively related to growth and that the effect is stronger for host countries with a higher level of institutional capability as measured by the degree of property rights protection and bureaucratic efficiency in the host country.

Chakraborty and Nunnenkamp (2008) said that booming foreign direct investment in post-reform India is widely believed to promote economic growth.

Balasubramanyam and Mahambre (2003) established that FDI is a very sound resource for the transfer of technology and knowhow to the developing countries.

Iqbal et al (2013) found that foreign direct investment has a positive impact on economic growth of Indian and Chinese economies. FDI positively impacts GDP growth rate of these countries that lead to increase in their per capita income.

Hayami (2001), advocates that FDI may help the host country to break out of the vicious cycle of under-development.

Jenkins and Thomas (2002) in their study conclude that the benefits accrued from FDI may include the acquisition of new technology, employment creation, human capital development, contribution to international trade integration, enhancing domestic investment and increasing tax revenue generated by FDI.

Bartels and Pass (2000) found that FDI inflows can contribute to poverty reduction in a particular country only when the enabling environment and actual FDI flows are enveloped by a policy coherence that is well-attuned to prevailing economic conditions and well-articulated by that particular host country’s policy-makers, to local, regional and global investment dynamics.

Mathiyazhagan (2005) examined the long-run relationship of Foreign Direct Investment (FDI) with the Gross Output (GO), Export (EX) and Labour Productivity (LPR) in the Indian economy at the sectoral level by using the annual data from 1990-91 to 2000-01. The Panel co-integration (PCONT) test is used in the study and results exhibit that the flow of FDI into the sectors has helped to raise the labour productivity, output and export in some sectors but a better role of FDI at the sectoral level is still expected. It is also revealed through results that there is no significant co-integrating relationship among the variables like FDI, LPR, GO and EX in core sectors of the economy. This indicates that when there is an increase in the labour productivity, output or export of the sectors it is not due to the advent of FDI. Therefore, it could be concluded that the advent of FDI has not helped to exert a positive impact on the Indian economy at the sectoral level. Hence, in the eve of India’s plan for further opening up of the economy, it is worthwhile to open up the export oriented sectors so that a higher growth of the economy could be achieved through the growth of these sectors.

Laura Alfaro (2003) finds that FDI flows into the different sectors of the economy (namely primary, manufacturing, and services) exert different effects on economic growth. Like, into the primary sector FDI inflows tend to have a negative effect on growth, whereas in the manufacturing sector FDI inflows has positive one. The foreign investments evidence in the service sector is ambiguous.

Zhang (2001) studies the connection between FDI and economic growth by using data for 11 developing countries in Latin America and East Asia. Using co-integration and Granger causality
tests, Zhang finds that economic growth is enhanced by FDI in five cases but that host country conditions such as trade regime and macroeconomic stability are important. Johnson (2005) argues that it is technology spillovers from MNEs to domestic firms from the two primary channels for FDI effects on economic growth, i.e. inflows of physical capital and technology spillovers respectively, that provide the most important link for a positive effect of FDI on economic growth in the host country. Using panel data analysis the empirical part of the paper finds indications that FDI inflows enhance economic growth in developing economies but not in developed economies. Jajri has examined the impact of FDI on the growth of Malaysian manufacturing sector. A framework is used that accounts for the endogeneity of and interactions between FDI and economic growth using a relatively more recent data compiled from various sources. The study also scrutinizes the factors that determine FDI inflows into the country. Simultaneous equation system approach has been used in estimating both the things. It is found in the empirical investigation that FDI has played an important role in stimulating the growth of the Malaysian economy and a strong market and macroeconomic stability promote FDI while capital flight and current account balance have the opposite result. Also it is suggested that a strong market and macroeconomic stability encourages foreign investment in Malaysia while capital flight and current account balance discourages foreign investment. In wholeness, since FDI has become gradually important, the policy direction focusing on improving productivity, human capital and innovative capabilities of the economy (especially manufacturing sectors) and strengthening the supporting industries and institutions are proposed. This in turn will promote and make Malaysia as an attractive destination for FDI.

Mun, Lin and Man (2008) attempted to study for the period 1970-2005 in Malaysia the relationship between FDI and economic growth by using time series data. Sufficient evidence is provided by Ordinary least square (OLS) regression to show that there is significant relationship between economic growth and foreign direct investment inflows (FDI) in Malaysia. It is found that FDI has direct positive impact on RGDP, with 1% increase in FDI forcing the growth rate to increase by 0.046072%. Furthermore, FDI also has direct positive impact on RGNI because when FDI rate increase by 1%, RGNI increases by 0.044877%.

Li and Liu (2005) to investigate the influence of FDI on growth the panel data of 84 countries have been used. A significant relationship between FDI and economic growth is found. Additionally, a stronger relationship was extracted when FDI interacted with human capital, since a stronger human capital poses better absorptive capacities due to the complementary nature of the FDI and the human capital, most importantly for the developing countries.

Marwah and Takavoli (2004) studied the effect of FDI and imports on economic growth in four ASEAN countries. They establish that the elasticity of the estimated production function of FDI was significant in explaining the economic growth of all the four countries. It was found that estimated foreign capital elasticity was 0.086 while in the case of Malaysia import contributed 0.443 to growth. Evidently, they conclude that both imports and FDI had a significant impact on growth.

Bengoa and Robles (2003) investigated the relationship between FDI, economic growth and economic freedom using panel data for Latin America. Comparing random and fixed effects estimations they conclude that FDI has a significant positive effect on host country economic growth but its magnitude depends on host country conditions.

De Gregorio (2003) advocates that knowledge and technologies that are not readily available to host country investors may be brought to them along with FDI, and thus directed to productivity growth throughout the economies. FDI may also bring in proficiency that the country does not possess, and foreign investors may have access to global markets. Veritably, through empirical studies he found that increasing aggregate investment by 1 percentage point of GDP increased economic growth of Latin American countries by 0.1% to 0.2% a year, but increasing FDI by the same amount increased growth by approximately 0.6% a year during the period 1950–1985, hence signifying that FDI is three times more efficient than domestic investment. Furthermore, the advocates of FDI have argued
that FDI could help promote economic growth through technology diffusion and human capital development (Van Loo 1977; Borensztein, Lee and De Gregorio 1998; de Mello 1999; Shan 2002a; Liu, Burridge and Sinclair 2002; and Kim and Seo 2003).

Noorzoy (1979) advocates that FDI could help host countries overcome capital shortage and complement domestic investment when FDI flows to high risk areas or new industries where domestic investment is limited.

When FDI is attracted for resource industries, such as petroleum, domestic investment in related industries may be stimulated. Also, FDI may boost exports for the host countries. Some of the empirical studies supporting these arguments include Sun (1998) and Shan (2002b). Using the conventional regression model and panel data, Sun (1998) has found out a high and significantly positive correlation between FDI and domestic investment in China. Shan (2002b) have used a VAR model to examine the inter-relationship between FDI, industrial output growth and other variables in China. He concludes that FDI has a dramatically beneficial impact on the Chinese economy when the ratio of FDI to industrial output rose.

Some macroeconomic studies institute a positive role of FDI in generating economic growth under particular environmental conditions. For instance, Blomstrom, Lipsey, and Zejan (1994) believe that FDI had a positive growth effect when the host country is sufficiently wealthy, that is, FDI could exert a positive effect on economic growth, however there seemed to be a threshold level of income above which FDI had positive effect on economic growth and below which it did not. This was since only those countries that had reached a certain income level could absorb new technologies and thus benefit from technology diffusion, reaping the extra advantages that FDI could offer. Farkas (2012) found that the contribution of FDI to economic growth is positive and significant but the relationship between FDI and economic growth is shaped by absorptive capacities that consist of development of financial markets, endowment of human capital, trade openness, agricultural intensity and natural resources abundance. Besides, Alfaro et al (2003) argue that FDI promotes economic growth in economies with sufficiently developed financial markets, while Sapsford et al (1996) has stressed trade openness as a crucial factor for obtaining the growth effects of FDI.

Agrawal (2000) attempted to infer the economic impact of foreign direct investment in South-Asia by using time-series cross-section analysis of panel data from the five main South-Asian countries to estimate the impact of FDI inflows on nationally owned investment and on GDP growth. He found that increase in the FDI inflows in South Asia is associated with a manifold increase in the investment by national investors, suggesting that there exist complementary and linkage effects between foreign and national investment. It is further found that the impact of FDI inflows on GDP growth rate is found to be negative prior to 1980, somewhat positive for early eighties and intensely positive over the late eighties and early nineties, ancillary the view that FDI is more likely to be beneficial in for open economies.

In contrast, there are several studies indicating a negative or no relationship between FDI and economic growth. These studies argue that some studies have exaggerated the positive effect of FDI on economic growth, besides obscuring the influence of economic growth on FDI.

Lian and Ma (2013) analyzed causal relationship between foreign direct investment (FDI) and economic growth from 1986-2010 in western regions of China using time-series data. The study is steered by the means of time-series estimations through ADF unit root test, error-correction analysis, co-integration tests, and Granger causality test. The results suggest that inward FDI flow does not lead to Granger-cause economic growth and economic growth also does not exert significant impact on FDI inflows. The empirical finding that FDI does not promote economic growth implies that FDI may have crowded-out domestic investment rather than having a complementary relationship with domestic investment, which has partially offset the influence of investment on economic growth in the host country. The result suggest that host government should take measures to improve the quality of utilizing FDI, so as to achieve the goal of promoting economic growth as far as possible.
Additionally, the result specifies that an equal competing environment should be provided for FDI and domestic investment, to enhance the combined effect of investment on economic growth. Hussein (2009) examines and analyses the effects of Foreign Direct Investment (FDI) in the six countries (United Arab Emirates, Oman, Qatar, Kingdom of Saudi Arabia, Kuwait and Bahrain) comprising the Cooperation Council for the Arab States of the Gulf (GCC) countries by using recent growth theories and statistical techniques to empirically test for the association between FDI and economic growth, i.e. growth of Gross Domestic Product (GDP). Results indicate a weak relationship between FDI and GDP in the panel of the GCC. De Mello (1999) weak indications of a positive relationship was found between FDI and economic growth despite using both time series and panel data fixed effects estimations for a sample of 32 developing and developed countries. According to the findings of Choe (2003), connection between economic growth and FDI runs in either direction but with a tendency towards growth causing FDI; there is little evidence that FDI causes host country growth. An increase in FDI inflows is a result of rapid economic growth. Akinlo (2004) investigated the impact of FDI on economic growth in Nigeria using the ECM showed an insignificant negative influence of FDI on growth. Furthermore, the author argued that extractive FDI might not extract significant impact on growth compared to the FDI in manufacturing sector. Also, FDI may influence growth negatively once there is an evidence of the foreign investors transferring profits or other investment gains to their home country. Aitken and Harrison (1999) did not found any evidence of beneficial spillover effect from foreign firms and domestic ones in Venezuela over 1979-1989. Haddad and Harrison (1993) and Mansfield and Romeo (1980) found no positive effect of FDI on the rate of economic growth in developing countries. Lipsey (2002) claimed that a consistent relation between the size of inward FDI stocks or flows relative to GDP growth did not exist. He further argued that there was need for more consideration of different circumstances that obstructed or promoted spillovers. The industrial organization theory brought forth by Hymer (1960) and Caves (1971) has stipulated FDI as a belligerent approach used by MNEs to advance monopoly power over the indigenous firms of the host economy. Multinational corporations could control supply of inputs in an industry in the host country and gain the benefits of tax subsidy provided by the host government. By this the competitive advantages of MNEs over domestic firms may be strengthen. Eventually, domestic firms will be forced to quit. Charkovic and Levine (2002) claim that FDI creates the crowding-out effect on domestic capital and hence the effect of FDI on growth is either insignificant or negative. Empirical studies holding such views could be found in Braunstein and Epstein (2002) and Huang (2003). Using a regression model with province-level panel data from 1986 to 1999, Braunstein and Epstein (2002) found that FDI has crowded out domestic investment in China. The benefits of FDI that had almost disappeared as a result of intense competition for FDI among the regions in China, which has forced regions to reduce taxes, regulations on environmental protection, wages and working conditions were pointed out. Likewise Huang (1998, 2003) pointed out, with Chinese investment policies being friendlier to foreign invested enterprises than to domestic firms, Chinese partners were eager to form foreign invested enterprises with foreign investors. Having exploited the preferential policies and even possessed privileges in competing for local scarce resources, these joint ventures eventually crowded out domestic investment.

**Conclusion**

This paper conducts an extensive review of the literature and empirical studies on FDI and Economic Growth and examines both the aspects, positive as well as negative, of FDI on host economy. The study provides contradictory conclusions regarding the growth effects of FDI. Researchers
advocating significant effects of FDI inflows on economic growth view FDI as a catalyst for economic growth. They believe that, besides supplementing capital, FDI inflows kindle growth through the adoption of foreign technology, technological spillovers, human capital (knowledge and skill) enhancement, and so on. They argue that FDI inflows supplement and complement domestic investment to trigger economic growth of the host economy. The opponents hold that FDI may bring about crowding-out effect in host economy. They smell monopoly intentions of MNCs in making FDI in host economies. They argue that FDI exposes host economy to external vulnerability and dependence, destructive competition of foreign affiliates with domestic firms and market-stealing effect as a result of poor absorptive capacity.

However, a larger number of studies favour the conventional postulation that FDI spurs positive effect on economic growth of the host economy. The study has come up with a number of policy implications for the host economy for reaping the benefits from FDI inflows. The host countries should device such policies that will promote the inflow of FDI to the high growth and priority sectors of the host economy. The host economy should develop absorptive capacities as a pre-requisite in terms of infrastructure, financial markets, human capital base, market size, economic and political stability, etc. The host economy should take reform measures to lessen barriers and create congenial atmosphere for foreign investments.

References

- Agrawal Pradeep (2000). “Economic Impact of Foreign Direct Investment in South-Asia”. Indira Gandhi Institute of Development Research, Gen. A.K. Vaidya Marg, Goregaon (E), Bombay - 400065, India. Email: pradeep@igidr.ac.in


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