

RE-EXAMINING FOREIGN DIRECT INVESTMENT - GROWTH NEXUS

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Abstract

The nexus between foreign direct investment (FDI) and economic growth has been the main focus of extensive academic research over the past few decades. This paper contributes to the literature by investigating the effects of FDI on growth to identify the mechanism via which FDI affect growth, and to explain the reasons that account for ambiguity of empirical findings. This assessment was conducted through a review of available documentation. The study reveals that FDI promotes the recipient country's economic growth via various mechanisms: raises capital formation of the host country, increases growth by the transfer of new technologies and knowhow (new production processes and techniques, managerial skills, and varieties of capital goods) and increases competition in the host country. However, the majority of empirical investigations reveal that recipient countries need to pass a certain level of absorptive capacity (degree of financial development, human capital development, technology gap, institutional quality, trade openness and infrastructure development) known as development threshold, to be able to exploit FDI more efficiently. Thus, FDI positive impact on growth is contingent on local conditions and absorptive capacities of the host country. The study recommends that the host country should create the enabling environment to take advantage of the benefits of FDI and put in measures to attenuate the adverse effect of FDI on economic growth.

Keywords: *Foreign Direct Investment, Economic Growth, Mechanisms, Recipient Country, Sustainable Development*

INTRODUCTION

The International Monetary Fund (IMF) defined Foreign Direct Investment (FDI) as a cross border investment where a resident in one economy has control or a significant degree of influence on the management of an enterprise resident in another economy. This investment is carried out by an entity (a firm or an individual) in foreign firms, involving an important equity stake in, or effective management control (UNCTAD, 2007). Foreign direct investment (FDI) is regarded, as a factor which promotes recipient country's economic growth, as well as the panacea to the myriads of problems plaguing developing countries (Mencinger, 2003).

The theoretical literature in economics identifies a number of mechanisms through which FDI inflows may be beneficial to the host country. Yet, most empirical studies have generated mixed results or fail to reach any definite conclusion. Empirical investigations by Wang (1997), Nair-Reichert and Weinhold (2001), Lensink and Morrisey (2006) reveal a positive effect of FDI on growth. Grilli & Milesi-Ferreti (1995) and Javorcik (2004) find a negative impact of FDI on growth. Pessoa (2007) and Wang (2009) note that the main conclusion to be derived from several studies is that results are ambiguous. However, Vissak and Roolah (2005) note that the number of studies that reveal positive effect of FDI is overwhelming.

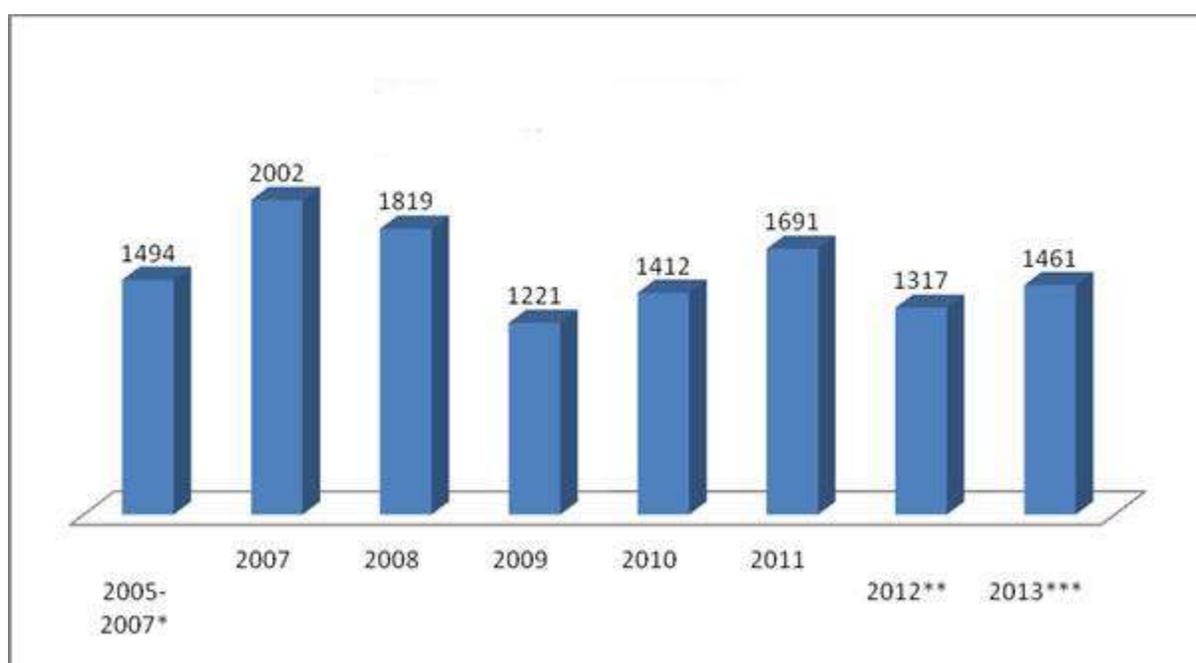
Notwithstanding the absence of any robust conclusions, most countries continue to vigorously pursue policies aimed at encouraging more FDI inflows. The effort by several African countries to improve their business climate stems from the desire to attract foreign direct investment (Funke & Nsouli, 2003). The World Investment Report (2012) revealed that among the top five in Africa, Ghana, Nigeria and South Africa pooled above US \$3 billion. Out of the five countries Ghana ranked third followed by Congo and Algeria. The two principal recipients of FDI in sub-Saharan Africa are the dominant oil producing countries, Angola and Nigeria. Nigeria was Africa's largest recipient of FDI flows (\$8.92 billion) in 2011, accounting for over one fifth of all flows to the continent.

FDI has grown dramatically, exceeding the growth of world production and the growth of international trade (Dierk et al. 2008). Figure 1 presents recent trends in global FDI inflows from 2005 to 2013. The Figure indicates that the highest global FDI inflows between 2005 and 2013 of US\$ 2002 billion occurred in 2007 and is above the pre-crisis average of US\$ 1494 billion. However, the lowest global FDI flow of US\$ 1221 which was recorded in 2009 is below the pre-crisis average.

The FDI inflows by major regions are also presented in Table 1. As indicated in the Table, global FDI flows rose by 11% in 2013 to an estimated US\$1.46 trillion, up from a revised US\$1.32 trillion in 2012. FDI inflows increased in all major economic groupings – developed, developing and transition economies. FDI flows to developed countries remained at a

historically low share of global total FDI flows (39%) for the second consecutive year. They increased by 12% to US\$576 billion, but only to 44% of their peak value in 2007. FDI to the European Union (EU) increased, while flows to the United States continued their decline. FDI flows to developing economies reached a new high of US\$759 billion, accounting for 52% of global FDI inflows in 2013. At the regional level, flows to Latin America and the Caribbean, and Africa were up; developing Asia, with its flows at a level similar to 2012, remained the largest host region in the world.

Figure 1. Global FDI inflows, average 2005-2007, 2007-2013 (Billion of US Dollars)
(UNCTAD Global Investments Trends Monitor, 2014)



*Pre-crisis average, **Revised, ***Preliminary estimates

Table 1. FDI inflows, by major region, 2011-2013 (Billions of US\$ dollars)
(UNCTAD Global Investments Trends Monitor, 2014)

Region/Economy	2011	2012 ^a	2013 ^b	Growth rate [2012-2013] %
World	1691	1317	1461	10.9
Developed economies	866	516	576 (39%)	11.6
Developing economies	729	715	759 (52%)	6.2
Transition economies	96	87	126 (9%)	45.1

^aRevised, ^bEstimated

FDI inflows to transition economies also recorded a new high of US\$126 billion – 45% up from the previous year, accounting for 9% of global FDI inflows. United Nations Conference on Trade and Development (UNCTAD) forecasts that FDI flows will rise gradually in 2014 and 2015, to US\$1.6 trillion with increased foreign presence .prompt investors to turn their cash holdings into new investments. However, uneven levels of growth, fragility and unpredictability in a number of economies, and risks related to the tapering of quantitative easing could dampen the FDI recovery. Empirically, a plethora of studies have arrived at the conclusion that FDI promotes economic growth. However, there is empirical evidence that FDI has adverse effect on economic growth of the host country. Giving that the effect of FDI on growth is uncertain, this paper reviews existing literature to identify the mechanism via which FDI affect growth and to explain the reasons that account for the lack of consensus on empirical findings. The rest of the paper is organized as follows: Section 2 reviews theoretical literature. Section 3 presents the empirical literature and the final section is the conclusion.

THEORETICAL LITERATURE

Neoclassical models of growth and endogenous growth models offer the foundation for most of the empirical studies on the impact of FDI on economic growth. Chowdhury and Mavrotas (2005) identified four main mechanisms through which this relationship has been studied. These mechanisms are the determinants of growth, determinants of FDI, the role of multinational firms in host countries, and finally the direction of causality between the two variables.

The neoclassical growth theory identifies two principal sources of economic growth: these are factor accumulation and total factor productivity (TFP). According to Ozturk (2007) the empirical literature usually uses factor accumulation instead of TFP due to the fact that factor accumulation is easier to quantify and analyse while TFP leads to major measurement difficulties, due to the lack of suitable econometric models and the availability of appropriate data. The endogenous growth literature suggests that, FDI contributes to economic growth through capital formation and technology diffusion (Blomstrom et al., 1996; Borensztein et al., 1995). In addition, FDI also contributes to economic growth through the augmentation of the level of knowledge through labor training and skill acquisition (de Mello 1997, 1999).

According to Ozturk (2007) there are many channels through which FDI affect economic growth. The framework of endogenous growth models specifically, identifies three main mechanisms through which FDI affects economic growth. First, FDI increases capital accumulation in the receiving country by introducing new inputs and technologies. According to Frindlay (1978), FDI is a way to advance the economic prospects of the host nation through the diffusion of sophisticated technologies by multinationals. Borensztein et. al. (1998), state that

multinational firms are responsible for almost all the world's expenditure on research and development (R&D).

According to Borensztein et al. (1998) and Lim (2001) the growth of developing countries is contingent on the implementation of advanced technology introduced by multinationals. The presence of advanced technology brought in by multinationals results in the reduction of R&D cost of firms of the host nation. The benefits associated with transfer of technology far outweigh the returns to financial investments or the purchase of goods and services (Loungani & Razin, 2001). Blomström & Kokko (1998) note that in sectors of activity with rapid changes in technologies, the main gains brought by multinationals are the new products and new production processes. Notwithstanding the positive effects of FDI on growth, some studies have found negative impact. For example, Vissak and Roolaht (2005) argue that the recipient country can become over dependent on foreign technology and this reduces the interest of local firms to develop new technologies.

Second, FDI raises the level of knowledge and skills in the host country through labour and manager training. Zhang (2001a) states that FDI promotes economic growth because it comes with technological know-how in production, management methods and highly skilled workers. Besides, FDI promotes economic development in the host country by increasing its productive capacity due to the improvement of the labor force. This improvement of the human capital can occur through informal training that workers receive during the observation of new operations developed by multinationals and through formal training (De Mello, 1999; Alfaro et al., 2004; Ozturk, 2007). The inflows of FDI could also have negative implications on the labour force of the host country. The use of advanced technology by foreign firms results in the need for fewer workers than that used by local firms, which aggravates the unemployment situation in the host country (OECD, 2002). In addition, it could potentially lead to brain drain since there are no research and development (R&D) activities that they can engage in the host country (Vissak & Roolaht, 2005).

Third, FDI increases competition in the host country industry by overcoming entry barriers and reducing the market power of existing firms. The entry of multinationals in the host country results in an increase in production and supply of goods and services in the host country's market. According to Pessoa (2007), local firms in an attempt to maintain their market shares are forced to respond to this competition, which results in an increase in output lower prices and a more efficient allocation of resources. Also the OECD (2002) study reveals that FDI has the potential to increase competitive pressures in the host country and that this rise is increased as the market is closed. These effects are directly related to the existing competition in the market and the response capacity of local firms.

Caves (1974), studied the effectiveness of FDI and found that FDI is one of the main drivers behind increase in productivity by means of competitive pressures and technology transfers. This study also found that with competitive pressures, all firms endeavour to improve the efficiency of their existing products and activities as well as to create new ones and allow inefficient ones to exit. With regard to technology transfer, Chung (1999:1) citing Caves (1974), stressed that incumbents apply useful practices learned from foreign firms.

Research by Blomstrom (1986) suggests that the modern sectors of the Mexican manufacturing industries become more productive with increased foreign presence. According to Chung (as cited in Haddad and Harrison, 1993), firm level data from Morocco in the 1980s on productivity and firm's international linkages, established that the greater the presence of foreign firms, the lower productivity dispersion among local firms; in terms of best practices.

In a study on Transnational Corporations (TNCs), Caves (1996) and Dunning (1981) realised that firms need to successfully take ownership of assets, e.g. technology, marketing, management and networks benefit developing economies through spillovers; location and internationalisation advantages in order to cross borders and engage in foreign direct investment.

MacDougall (1960) systematically reports spillovers among the possible consequences of FDI by analysing the general effects of foreign investment. In a study, Teece (1977), Gonclaves (1986), Teece (1993) and Kokko (1994) further contended that if local firms, through deliberate effort or spillover, obtain the superior practices it would improve industrial efficiency in host country. Aitken & Harrison (1999) emphasised that if TNCs help in faster diffusion of technology, then it leads to important industrial policy implications for the host country government. However, the increased competition does not produce only positive effects on the host country. Increased competition leads inevitably to the closure of some local firms (that cannot compete with multinationals due to the advantages they have), which leads to increased concentration in the sector, and in turn will lead to decreased competition (Ram & Zhang, 2002).

EMPIRICAL LITERATURE

Empirical studies on the relationship between FDI and Economic Growth have generated a lot of controversies as most of the studies either provide mixed results or fail to reach any definite conclusion. Depending on the choice of variables, empirical studies show positive or negative effect of FDI on growth (UNCTAD, 1999). Three main reasons have been advanced for the lack of consensus on empirical findings: First, the lack of analysis of the host country domestic conditions (Mohnen, 2001; Asheghian (2004)); second, the potential errors in estimation method

(Nair-Reichert and Weinhold, 2001); third, the use of total FDI instead of disaggregating FDI by sector (Wang, 2009).

Empirically, Borenstein et al. (1988) uses cross sectional data for 67 developing countries for the period 1970-1989. Using seemingly unrelated regression methods they find that FDI has a positive effect on economic growth due to both technology diffusion and the magnitude of the relationship is dependent on the quality of human capital of the host country. Balasubramanyam et al. (1996) uses cross sectional data for 46 countries for the period 1970-1985 to analyze the relationship between FDI and economic growth. Their results show that FDI has positive impact on economic growth of those countries which have followed inward looking development strategies.

Bende-Nabende (2001) conducts a cross-country study on Asian countries, using annual data for 1970-1996. The results show that FDI has a positive effect on GDP growth in Indonesia, Malaysia, and Philippines, but a negative impact in Singapore and Thailand. Bachtiar (2003) examines the impact of FDI in Indonesia using annual time series data covering the period 1970-2000. Employing a simple single equation model, the results show that FDI has a positive effect on growth. Choe (2003) examines the interaction between FDI and economic growth in eighty countries in the period 1971-1995. Using a panel VAR model, the study reveals a Granger causality relationship between FDI and economic growth in either direction but with stronger effects visible from economic growth to FDI rather than the opposite. Kohpaiboon (2003) employs data for the 1970-1999 periods and adding export openness, shows that FDI is positively correlated with GDP growth in Thailand.

Athukorala (2003) examines the FDI-led growth hypothesis in Sri Lanka from 1959 to 2002. Using cointegration and error correction mechanism, the regression analysis did not provide much support for the view of a robust link between FDI and growth. Marwah and Tavakoli (2004) test the effect of FDI on economic growth in Indonesia, Malaysia, Philippines, and Thailand. Using time series annual data over the period 1970-1998, they find that FDI has positive correlation with economic growth for all four countries.

Chowdhury and Mavrotas (2005) examine the causal link between FDI and economic growth over the period 1969-2000 for Chile, Malaysia and Thailand. They find bidirectional causality between FDI and economic growth in Malaysia and Thailand and one-way causality running from economic growth to FDI in Chile. Carkovic and Levine (2005) employ General Method of Moment (GMM) to examine the relationship between FDI and economic growth. They use data for 1960-1995 for a large cross-country data set, and find that FDI inflows do not exert influence on economic growth directly nor through their effect on human capital.

Ayanwale (2007) investigates the relationship between non-extractive FDI and economic growth in Nigeria for the period 1970 to 2002. Using the ordinary least squares and the 2SLS method the study reveals that the main determinants of FDI in Nigeria are market size, stable macroeconomic policies and a level of human capital. The study reveals that FDI contributes positively to Nigeria's economic growth and that the FDI in the communication sector currently has the highest potential to grow the Nigeria economy, especially the non-oil sector. Furthermore, the FDI in the manufacturing sector has a negative relationship with economic growth.

Wu and Hsu (2008) use cross-sectional data of 62 countries for the period 1975 to 2000 and find positive and significant impact of FDI on economic growth only when the host countries have better level of initial GDP and human capital. Wang (2009) examines the heterogeneous effects of different sector-level FDI inflows on host country's economic growth using random effects estimation, weighted least squares (WLS) and feasible generalized least squares (FGLS) panel regression. Data from 12 Asian economies over the period of 1987 to 1997 are employed. Strong evidence shows that FDI in manufacturing sector has a significant and positive effect on economic growth in the host economies. FDI inflows in nonmanufacturing sectors do not play a significant role in enhancing economic growth. Furthermore, without the decomposition of total FDI inflows, the effect of manufacturing FDI on host country's economic growth is understated by at least 48%.

Samimi et al. (2010) investigate the role of FDI in economic growth of oil importing countries (OIC) countries employing panel data from 2000-2006 using panel Vector error correction model. The results indicate that FDI and openness contribute positively to the growth performance of OIC countries. Further, the study finds significant impact of FDI on growth in selected countries. Louzi & Abadi (2011) examine the FDI-led growth hypothesis in Jordan from 1990 to 2009. The study employs cointegration and error correction mechanism to capture the two way linkages between variables of interest. The study reveals that FDI inflows do not exert an independent influence on economic growth. However, domestic investment has a positive impact on economic growth.

Sackey et al. (2012) investigated the effect of FDI on economic growth in Ghana and tested for the presence of the long run linear relationship between FDI inflows and Economic Growth for Ghana. The study employs Vector Auto Regression (VAR) and Johansen Co-integration test. The study reveals a long run relationship between the different sample periods. It was revealed that there is no causality between FDI and growth for the total sample period and the pre-SAP period. However, a unidirectional relationship runs from FDI to GDP growth during the post- SAP period. Koojaroenprasit (2012) investigates the impact of Foreign Direct

Investment (FDI) on economic growth in South Korea for the period 1980 to 2009. The study finds that there is a strong and positive impact of FDI on South Korean economic growth while domestic investment has no significant impact on South Korean economic growth.

Ray (2013) examines the relationship between Foreign Direct Investment (FDI) and economic growth in India for the period 1990 to 2011. Employing the Least Square Method suggests that there is positive relationship between foreign direct investment (FDI) and economic growth. Insah (2013) examines the effect of Foreign Direct Investment and Economic Growth in Ghana between 1980-2010 using Dynamic Ordinary Least Squares. He found out that, the elasticity of economic growth with respect to FDI had a positive sign. However, the effect of a three year lag of FDI on economic growth had a negative effect. He recommends that, policy makers should not concentrate on current macroeconomic inflows but rather consider effects of past FDI inflows on current levels of economic growth.

Saqib et al (2013) examines the impact of foreign direct investment on Economic Growth in Pakistan for the period 1981 to 2010. Employing least square method, the results indicate a negative and significant relationship between FDI and GDP. The majority of empirical investigations reveal that recipient countries need to pass a certain level of absorptive capacity known as development threshold, to be able to exploit FDI more efficiently. Absorptive capacity includes factors such as the level of financial development, human capital development, technology gap, institutional quality, trade openness and infrastructure development. The following section discusses these factors:

Financial development

Alfaro et al. (2004) and Durham (2004) focus on the channels in which the FDI impact depends on the strength of the domestic financial markets of the host country. Alfaro et al. (2004) employ annual data for 1975-1995 for a large cross section of countries. The study reveals that only countries with well-developed banking and financial institutions gain from FDI. Durham (2004) finds that FDI only has a positive impact on growth in countries with strong financial systems. He adds that only countries with high quality governance, as evidenced by strong institutional development and investor friendly legal environment, enjoy positive effects of the FDI on growth.

Chee et al. (2010) examine if financial sector development is an important precondition for foreign direct investment (FDI) to enhance economic growth in the Asia-Oceania region. The study also examine whether the impact is dependent on the stages of development of the countries. Panel data methods (fixed effects-estimator and random effects-estimator) were used to analyse the relationship between FDI, financial sector development and economic growth on

a sample of 44 Asia and Oceania countries for the period 1996-2005. The empirical analysis shows that financial sector development enhances the contribution of FDI on economic growth in the region. It also shows that the complementary role of FDI and financial sector development on economic growth is most important for least developed economies in the region.

Sghaier et al. (2011) examines the causal linkage between foreign direct investment (FDI), financial development, and economic growth in a panel of 4 countries of North Africa (Tunisia, Morocco, Algeria and Egypt) over the period 1980-2011. Using Generalized Method of Moment (GMM) panel data analysis, they find strong evidence of a positive relationship between FDI and economic growth. The study further reveals that the development of the domestic financial system is an important prerequisite for FDI to have a positive effect on economic growth. Adeniyi et al. (2012) examine the causal linkage between foreign direct investment (FDI) and economic growth in selected West African countries with financial development. They employ a trivariate framework which applies Granger causality tests in a vector error correction (VEC) setting. They find that the extent of financial sophistication matters for the benefits of foreign direct investment to register on economic growth.

In a related study, Havi and Enu (2014) use the simple dynamic ordinary least squares regression to analyse how financial sector development contributes in attracting foreign direct investment to promote economic growth in Ghana from 1981 to 2012. The study reveals that improvement in financial sector in Ghana leads to more inflows of foreign direct investment. The foreign direct investment with the interaction term and financial sector development has a significant positive impact on current real gross domestic product. The Granger causality test also show that there is unidirectional causality from real gross domestic product to foreign direct investment, financial sector development to foreign direct investment. The study recommends that prudent financial policies being implemented should be continued since financial sector development leads to increase in foreign direct investment inflows which in turn impact positively on economic performance.

In a recent study, Hosein (2015) examines the growth-effect of FDI in a selected sample from developing countries (Asian, African and Latin America) from 1970 to 2005 using GMM panel data technique. The study finds that FDI has in general a positive impact on economic growth and sustainable development. The results show that domestic investment, human capital, infrastructure development, financial market development, trade openness and institutional quality positively related to economic growth. The results show that the technology gap is negatively related to economic growth.

Human Capital

The quality of human capital is also critical for a recipient country in absorbing FDI externalities. Empirically, Borensztein et al. (1998) examine the effect of foreign direct investment (FDI) on economic growth in a cross-country regression framework, utilizing panel data on FDI flows from industrial countries to 69 developing countries over two decades 1970–79 and 1980–89, and were estimated using the seemingly unrelated regressions technique (SUR). The study reveals that the effect of FDI on economic growth is dependent on the level of human capital available in the host economy. There is a strong positive interaction between FDI and the level of educational attainment (proxy for human capital). However, the same interaction is not significant in the case of domestic investment, possibly a reflection of differences of technological nature between FDI and domestic investment. Evidence was also found of a crowding-in effect, namely that FDI is complementary to domestic investment. This effect, however, seems to be less robust than other findings.

Olajide et al. (2009) investigate the ways in which foreign direct investment (FDI) has affected economic growth in Mexico over the period 1970 - 2004 testing the FDI-led growth and export-led growth hypotheses with multivariate analysis using a Autoregressive Vector model. The results show that support for FDI-led growth is not as strong as for export-led growth. The estimates show that both private and foreign capitals have statistically significant effects on growth. They also show that manufacturing FDI, exports, labour force and human capital have significant positive effects on the economy.

On the contrary, other empirical investigations have revealed that the growth effect of FDI is not dependent on human capital. For example, Blomstrom et al. (1992) investigate the impact of FDI on economic growth for 101 countries over the period 1960-1985 and find that educational attainment is not crucial to achieve FDI growth effect. Carkovic and Levine (2002) also find that the growth effect of FDI is not contingent on human capital. In a similar study, Adefabi (2011) used a panel of 24 countries in Sub-Saharan Africa, over the period 1970 - 2006. The study estimated fixed effect model, on different levels of human capital that are capable of interacting with foreign direct investment to increase growth. The major finding of the study is that there exists weak effect of different measures of human capital on economic growth in Sub-Saharan Africa.

Technology gap

An effect which has stimulated much debate is the analysis of the impact of technology diffusion. Colen et al. (2008) contend that the effect of FDI on economic growth is expected to depend on the technology gap between the foreign and the recipient country. A sharp

technology gap might slow down the knowledge and technological spillovers. If the technology gap is too wide to bridge, the spillovers may not spread to the domestic economy. Sjöholm (1999) concludes that a huge technological gap leads to major transfer. He argues that the absence of a new technology in the host country makes it possible for new technology to be quickly implemented. However, Castellani & Zanfei (2005) argue that a higher technology gap may in principle increase the possibility that multinationals tend to crowd out domestic suppliers and competitors. Borensztein et al. (1998) and OECD (2002) suggest that technological gap should not be very huge since when the technological gap between foreign country and the host nation is large local firms do not have the capacity to either absorb or copy the new technologies brought in by multinationals.

The absorptive capacity of the host country measured by the technology gap has been employed extensively in the FDI - growth literature. Kokko (1994) employs the technology gap between the foreign and domestic firms, as a proxy for absorption capacity in 216 Mexican manufacturing industries. The study reveals that domestic firms can benefit from technology transfer if the technology gap between them is narrow.

Xu (2000) investigates US multinational enterprises MNEs. as a channel of international technology diffusion in 40 countries from 1966 to 1994 employing two stage least squares. Using data on technology transfer to distinguish between the technology diffusion effect and other productivity-enhancing effects of MNEs, the study reveals that the technology transfer provided by US MNEs contributes to the productivity growth in DCs but not in LDCs. The results indicate that a country needs to reach a minimum human capital threshold level in order to benefit from the technology transfer of US MNEs; however, most LDCs do not meet this threshold requirement.

Li and Liu (2005) investigate whether foreign direct investment (FDI) affects economic growth based on a panel data of 84 countries over the period the period 1970 – 1999 with the use of both single and simultaneous equations systems techniques. The study reveals that FDI with interaction between human capital exerts a strong positive effect on economic growth in developing countries, while that of FDI with technology gap has significant negative effect. They suggest that for the host country to benefit from attracting FDI, it must have a certain level of technological development. They contend that for a country above a certain level of technology gap, FDI inflows will no longer be beneficial.

Institutional Quality

Olofsdotter (1998) contends that the ability to absorb new technology provided by FDI inflows can be emphasised in counties with better institution quality. Empirically, Fukumi et al. (2009)

investigate the interaction between Foreign Direct Investment (FDI) and institutional quality using a panel analysis of 19 countries in Latin America and the Caribbean. The study employs a simultaneous equation approach to avoid endogeneity biases and find that FDI could improve the quality of institutions, while better institutions attract more FDI into the region. As a policy implication, their results indicate that during the process of reform, the relation between FDI and institutional quality warrants a certain amount of attention.

Alguacil et al. (2011) contributes to the discussion on the role played by the absorptive capacities within host economies in their ability to grow and to exploit FDI efficiently. The outcomes for a sample of developing economies during the period 1976–2005 show differences associated to both the method of estimation (the system GMM versus OLS method) as well as the level of economic development. The study reveals the importance of controlling for those local capacities related to the macroeconomic and institutional environment. They suggest that host country governments should develop a set of policies that are not only focused on inward FDI promotion but also on the improvement of their political and economic framework.

In a similar study, Bonnie et al. (2012) examine the impact of institutional quality on foreign direct investment (FDI) levels and volatility based on a panel data analysis of 164 countries from 1996 to 2006. They find that good institutional quality provide evidence that institutional quality has a positive and significant effect on FDI. More specifically, the study reveals that a one standard deviation change in institutional quality improves FDI by a factor of 1.69. Their results suggest that if there are institutional determinants of FDI volatility and if such volatility is associated with lower economic growth, then the usual policy prescription of attracting FDI into countries by offering the “correct” macroeconomic environment would be ineffective without an equal emphasis on institutional reform.

In a recent study, Baklouti et al. (2014) use the fixed effects models on the panel data of 8 selected developing countries in the Middle East and North Africa (MENA) over the period 1996 to 2008. The results of this estimation indicate that the quality of the institutional environment which presents itself as a relevant factor in the attraction of FDI and the indicators of corruption and regulatory quality have a negative influence on FDI while the indicator of the effectiveness of public action has a positive influence.

Trade openness

There exists scores of studies on the relationship between FDI inflows and the importance of trade openness as one factor in host country’s absorptive capacity. According to Frankel & Romer (1999) trade openness can facilitate efficient production of goods and services through shifting production of goods and services to economies that have comparative advantage.

Empirically, Dash et al. (2007) re-examine the relationship among FDI, trade and economic growth covering the period 1996Q4 to 2007Q4 in India based on Vector Auto Regressive (VAR) model applying Granger non-causality. The study reveals that there is a bi-directional causality which runs from FDI to export and economic growth and a unidirectional causality, which runs from FDI to export as well as from FDI to import.

Lettao et al. (2013) examine the link between economic growth and foreign direct investment for Portugal. Using a panel data approach, the results show that there is convergence among Portugal and her trading partners. The study results also demonstrate that foreign direct investment and bilateral trade promote economic growth. However, growth is negatively correlated with inflation and the initial level of GDP per capita. In a recent study, Tabassum et al. (2014) examine the relationship between foreign direct investments and economic growth of Bangladesh during the period 1972–2011. This study evaluates the association between FDI and economic growth using multiple regression method by considering relationship between real gross domestic product, foreign direct investment, domestic investment and openness of the trade policy regime. The results indicate that domestic investments exert positive influence on economic growth whereas foreign direct investments, openness of trade are less significant.

In a related study, Adegboyega et al. (2014) examine the nexus between trade openness, foreign direct investment (FDI), capital formation, and economic growth rate in Nigeria which spanned over a period 1986 – 2011 using time series data analysis. The study shows a significant positive effect between the degree of trade openness, level of capital formation while a positive but insignificant relationship exist between the volume of FDI and gross domestic product growth rate. The study recommends that the Nigeria government should increase the efficacy of its fiscal and monetary policies to increase more on its exports as well as rates of GDP growth.

Infrastructure

A plethora of studies also exist on the critical role that infrastructure plays in economic growth. Khadaroo and Seetanah (2008) claim that gains rendered by infrastructure growth are associated with greater accessibility and reduction in transportation costs. Furthermore, public goods reduce the cost of doing business for foreign enterprises which leads towards maximization of profit. Empirically, Wylie (2005) examines the effect of infrastructure capital stock on growth and productivity in Canadian goods production in aggregate production functions over the 1946-1991 period using translog and Cobb-Douglas production functions. Aggregate production function methods yield estimates of high returns to infrastructure

investment in terms of goods-sector productivity. The study further reveals a complementarity between infrastructure and goods-sector capital and labour inputs.

Kinishita & Lu (2006) examine the impact of FDI on economic growth when the host country has adequate stock of infrastructure for 42 non-OECD countries. The study reveals that technology spillovers via FDI take place only when the host country exceeds a certain threshold of infrastructure development. Yami & Sinkovics, (2009) also note that the build-up of infrastructure and enhancement of domestic capabilities are important underpinnings of sustainable development. The study indicates that good infrastructure, especially basic social infrastructure, is the rock on which otherwise marginalised individuals, groups and country governments can build capabilities.

Akram et al. (2011) investigate the effects of host country's infrastructure availability along with exchange rate and market size on inflows of FDI towards Pakistan. The study employs autoregressive distributed lag (ARDL) approach to cointegration and an error correction model based on ARDL approach using time series data for the period 1975-2008. The paper reveals a strong positive impact of infrastructure in attracting foreign direct investment, in short and in long run, in case of Pakistan.

In a recent study, Melnyk et al. (2014) investigate the impact of foreign direct investment on economic development of post Comecon transition economy countries. Neoclassical growth theory model is used to analyse the effects of FDI on economic growth. The results show significant FDI influence on economic growth of host countries. The paper concludes that host countries do develop their economies faster with higher indicators of infrastructure, bank reforms and institutional policies. Therefore, transition and developing economies should pay more attention to the business climate and positive institutional changes.

CONCLUSION

This paper reviews the theory that underlies the FDI - growth nexus and the results of empirical studies. The study reveals that foreign direct investment (FDI) promotes the recipient country's economic growth via various mechanisms: raises capital formation of the host country, increases growth by the transfer of new technologies and knowhow and increases competition in the host country.

However, FDI positive impact on growth is contingent on local conditions and absorptive capacities of the host country. The study identifies the lack of studies on the use of technology gap and its effect on FDI effectiveness. Most studies also focus on the impact of FDI on growth and not the mechanism via which FDI affect growth. In addition, most of the studies also focus aggregate FDI instead of FDI by sector. The study recommends that the host country should

create the enabling environment to take advantage of the benefits of FDI and put in measures to attenuate the adverse effect of FDI on economic growth.

WAY FORWARD

The study recommends further investigation to compare the effect of foreign direct investment on growth for resource rich and resource poor countries in sub-Saharan Africa. Further, there is the need to examine simultaneously the effect of two or more absorptive capacity on growth.

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