



A Literature Review on the Relationship between Foreign Direct Investment and Economic Growth

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Abstract

During the last decades, the relation between FDI and economic growth has been extensively discussed in the economic literature. Theories and existing literature provide conflicting results concerning this relationship. On one hand, some scholars argue that foreign direct investment could stimulate technological change through the adoption of foreign technology and know-how and technological spillovers, thus boosting host country economies. On the other hand, other pessimists believe that FDI may bring about crowding out effect on domestic investment, external vulnerability and dependence, destructive competition of foreign affiliates with domestic firms and “market-stealing effect” as a result of poor absorptive capacity. This paper sums up the literature as well as empirical studies on the relationship between foreign direct investment and economic growth, trying to arrive at a meaning revelation eventually.

Keywords: Foreign direct investment, Economic growth, Technological spillovers

In literature, there exists an agreed framework definition of foreign direct investment (FDI). That is, foreign direct investment is an investment made to acquire a lasting management interest (normally 10% of voting stock) in a business enterprise operating in a country other than that of the investor defined according to residency (World Bank, 1996). FDI can be divided into two forms: “greenfield” investment, which is also called “mortar and brick” investment, as well as merger and acquisition (M&A), which entails the acquisition of existing interest rather than new investment.

In corporate governance, a direct investment relationship is established when at least 10% of the ordinary shares or voting stock is owned. Ownership of less than 10% is regarded as portfolio investment. Besides greenfield investment and M&A, reinvesting earnings and loans and similar capital transfer between parent companies and their subsidiaries also belong to foreign direct investment. Countries could be both host to FDI projects in their own country and a participant in investment projects in other counties. A country’s inward FDI position is made up of the hosted FDI projects, while outward FDI comprises those investment projects owned abroad.

An important aspect of globalization during the last few years has been the impressive surge of FDI by multinational corporations, which has become the primary source of external financing for countries all over the world. During the past few years, the role of foreign direct investment (FDI) has become more and more important for developing countries and less developed countries. Indeed, it increased rapidly during the late 1980s and the 1990s. According to the UNCTAD database, FDI flows to less developed countries have been multiplied by 7 between 1991 and 2000, while the stock of FDI has been multiplied by 5. The inward FDI flows to less developed countries considered as a whole increased again by 52% between 2001 and 2005, as figure 1 has pointed out. Such a high growth is unprecedented.

According to the World Bank (2007), global FDI flows reached a record of 1.1\$ trillion in 2006 and there has been a continuing rise in FDI inflows to developing countries. In recent years, FDI outflows from large developing countries are also on the rise. For example, since 2004 FDI flows from India into the United Kingdom have exceeded flows from the United Kingdom to India. This evolution and changing patterns in world FDI flows has been synchronous with a shift in emphasis among policymakers in developing countries to attract more FDI (through tax incentives and subsidies to foreign investors). Nowadays, the total FDI stocks represent more than 20% of the global GDP. The rapid growth of FDI and its overall magnitude had sparked numerous studies dealing with the relationship between FDI and economic growth. While the explosion of FDI is unmistakable, the growth effects of FDI still remain controversial, both theoretically and empirically.

During the last decades, the relation between FDI and economic growth has been extensively discussed in the economic literature. The positions range from an unreserved optimistic view (based on the neo-classical theory or, more recently, on the new theory of economic growth) to a systematic pessimism (namely among ‘radical’ economists). There is a widespread belief among researchers and policymakers that FDI boosts growth for 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. As it eases the transfer of technology, FDI is expected to increase and improve the existing stock of knowledge in the recipient economy through labor training, skill acquisition and diffusion. It contributes to introduce new management practices and a more efficient organization of the production process. As a consequence, FDI can play an important role in modernizing a national economy and promoting economic development.

Starting with the pioneering work of Caves (1974), his country case studies and industry level cross sectional studies led him to conclude that there exists a positive correlation between the productivity of a multinational enterprise (MNE) and average value added per worker of the domestic firms within the same sector. Later, in 1996, Caves has observed several positive effects of FDI that has brought about increasing efforts to attract more of it. Among these were productivity gains, technology transfers, the introduction of new processes, managerial skills and know-how in the domestic market, employee training, international production networks and access to markets. Findlay (1978) has postulated that FDI, through a “contagion” effect, increased the rate of technical progress in host country from the more advanced technology, management practices, etc., used by foreign firms. In addition, FDI may contribute to economic growth where the transfer of technology raised the stock of knowledge in host country through labor training and skill acquisition, new management practices and organizational arrangements (De Mello, 1999). Borensztein et al. (1998) pointed out that FDI, an important vehicle for the transfer of technology, has contributed to growth in larger measure than domestic investment. 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. These spillover effects were generated from both intra-industry (or horizontal, i.e.: within the same sector) externalities and inter-industries (or vertical) externalities through forward or/and backward linkages (Javorcik, 2004; Alfaro and Rodriguez-Clare, 2004). De Gregorio (2003) has noted that technologies and knowledge that are not readily available to host country investors may be brought to them along with FDI, and in this way led to productivity growth throughout the economies. FDI may also bring in expertise that the country does not possess, and foreign investors may have access to global markets. In fact, 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, thus indicating that FDI is three times more efficient than domestic investment. Furthermore, the advocator of FDI have argued that FDI could help promote economic growth through technology diffusion and human capital development (Van Loo 1977; Borensztein, De Gregorio and Lee 1998; de Mello 1999; Shan 2002a; Liu, Burridge and Sinclair 2002; and Kim and Seo 2003). When multinational corporations have vertical inter-firm linkages with domestic firms or have subregional clusters of inter-related activities, through formal or informal links or social contacts among the employees, multinational corporations could diffuse technology and management know-how to local firms. Moreover, as Noorzooy put forward in 1979, FDI could help host countries overcome capital shortage and complement domestic investment when FDI flowed to high risk areas or new industries where domestic investment is limited. When FDI is attracted for resource industries, for instance petroleum, domestic investment in related industries may be stimulated. Also, FDI may boost exports for the host countries. Empirical studies supporting these arguments include Sun (1998) and Shan (2002). 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 (2002) have used a VAR model to examine the inter-relationships between FDI, industrial output growth and other variables in China. He has concluded that FDI has a dramatically beneficial impact on the Chinese economy when the ratio of FDI to industrial output rose. Nevertheless, some macroeconomic studies, using aggregate FDI flows for a broad cross section of countries, generally have suggest a positive role of FDI in generating economic growth under particular environments. For instance, Blomstrom, Lipsey, and Zejan (1994) believed that FDI had a positive growth effect when the country was sufficiently wealthy, that is, FDI could exert a positive effect on economic growth, but that 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 because 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. Besides, Alfaro et al. (2003) has argued that FDI promoted economic growth in economies with sufficiently developed financial markets, while Balasubramanyam, Salisu, and Sapsford (1996) have stressed that trade openness was crucial for obtaining the growth effects of FDI.

However, the positive effects of FDI on economic growth have not won unanimous support recently. This pessimist view, having risen during the 50s and the 60s, is still now defended by several recent firm or industry level studies which emphasize poor absorptive capacity, crowding out effect on domestic investment, external vulnerability and dependence, a possible deterioration of the balance of payments as profits are repatriated and negative, destructive competition of foreign affiliates with domestic firms and “market-stealing effect”.

In an influential study, Aitken and Harrison (1999) did not found any evidence of a beneficial spillover effect from foreign firms and domestic ones in Venezuela over the 1979-1989 period. Similarly, Haddad and Harrison (1993) and Mansfield and Romeo (1980) found no positive effect of FDI on the rate of economic growth in developing countries,

namely in Morocco. As De Mello (1999) has pointed out: "whether FDI can be deemed to be a catalyst for output growth, capital accumulation, and technological progress seems to be a less controversial hypothesis in theory than in practice" (1999, p. 148). Moreover, Lipsey (2002), after surveying the macro empirical research, claimed that a consistent relation between the size of inward FDI stocks or flows relative to GDP and growth did not exist. He further argued that there was need for more consideration of the different circumstances that obstructed or promoted spillovers. Later, Lipsey and Sjöholm summarized that evidence of positive spillovers of FDI had been found by researchers in some countries and some industries, though, country-specific and industry-specific factors seemed so crucial that these results did not support the overall conclusion that FDI brought about substantial spillover effects for the entire economy. In addition, the industrial organization theory brought forth by Hymer (1960) and Caves (1971) has stipulated that FDI is an aggressive global strategy by MNEs to advance monopoly power over and above indigenous firms of the host economy. The particular advantages of multinational corporations (such as advanced technologies, management know-how skills, transaction cost minimizing and other intangible advantages) could be transformed into monopoly power, which could be further strengthened by the other two advantages of multinational corporations: the market internalization advantage and the location-specific advantage (Dunning 1981). For instance, multinational corporations could control supplies of inputs in an industry in the host country and gain the benefits of tax subsidy provided by the host government. This may strengthen the competitive advantages of MNEs over domestic firms. Eventually, domestic firms will be forced to exit. Empirical studies backing up those 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 found that FDI had crowded out domestic investment in China. They pointed out that benefits of FDI 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. Moreover, as Huang (1998, 2003) pointed out, with Chinese investment policies being more friendly 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.

Furthermore, the influence of particular environments for growth-effect of FDI have been questioned. As having been discussed above, Blomstrom et al (1994) has showed that a positive growth-effect of FDI may be real whether the country was sufficiently rich. However, Carkovic and Levine (2002) has rejected this finding, taking account of an interaction term from income per capita and FDI. Alfaro et al (2007) suggested that FDI had a positive growth-effect in countries with sufficiently developed financial markets. According to Carkovic and Levine (2002), this view was not true since FDI flows did not exert an exogenous impact on growth in financially developed economies. Finally, Balasubramanyam et al (1996) contended that trade openness is very important in order to obtain the growth-effect of FDI, which was defended by Kawai (1994). Carkovic and Levine (2002) also have challenged this standpoint.

Generally, existing literature have provided conflicting predictions concerning the growth effects of FDI. Scholars supporting the positive effects of FDI on economic growth believe that it could stimulate technological change through the adoption of foreign technology and know-how and technological spillovers, thus modernizing host country economy. The opponents hold that FDI may bring about crowding out effect on domestic investment, external vulnerability and dependence, destructive competition of foreign affiliates with domestic firms and "market-stealing effect" as a result of poor absorptive capacity. These findings must be viewed skeptically, however. Because existing studies did not fully control for simulative bias, country-specific effects as well as industry-specific effects. The routine use of lagged dependent variables in growth regressions also is a problem. These weaknesses can bias the coefficient estimates as well as the coefficient standard errors. Thus, it is needed to reassess the present evidence with econometric procedures that eliminate these potential biases.

Insert Figure 1 Here

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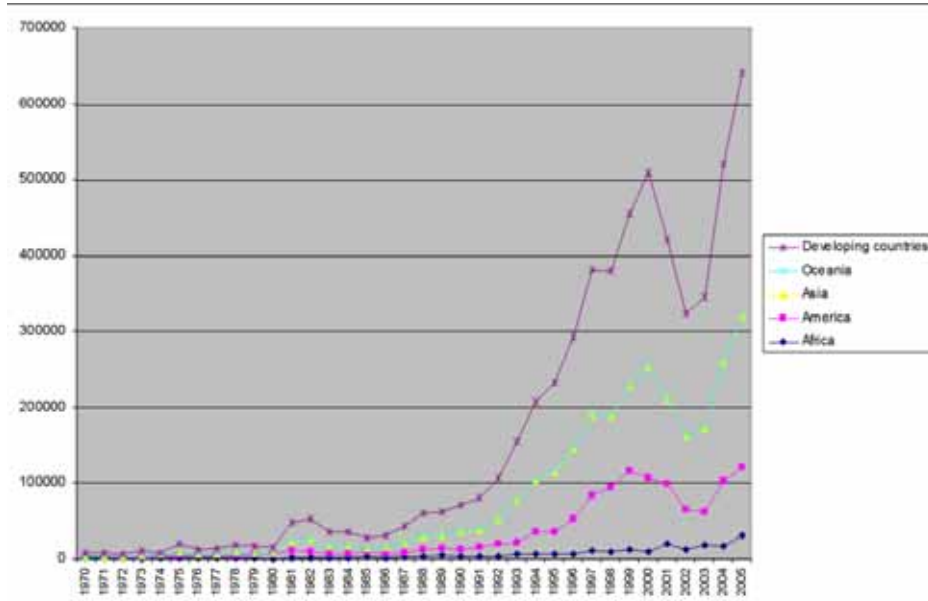


Figure 1. Inward FDI flows to developing countries
(US dollars at current prices in millions)
Source: UNCTAD FDI database