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THE EFFECTS OF FOREIGN DIRECT INVESTMENT ON THE HOST COUNTRY ECONOMIC GROWTH - THEORY AND EMPIRICAL EVIDENCE

RUI MOURA [1]
ROSA FORTE [1 2]

[1] FACULDADE DE ECONOMIA, UNIVERSIDADE DO PORTO
[2] CEF.UP

U.PORTO
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THE EFFECTS OF FOREIGN DIRECT INVESTMENT ON THE HOST COUNTRY ECONOMIC GROWTH - THEORY AND EMPIRICAL EVIDENCE*

Rui Moura
Faculdade de Economia, Universidade do Porto

Rosa Forte†
CEF.UP; Faculdade de Economia, Universidade do Porto

Abstract:

Foreign direct investment (FDI) influences the host country's economic growth through the transfer of new technologies and know-how, formation of human resources, integration in global markets, increase of competition, and firms' development and reorganization. Empirically, a variety of studies considers that FDI generate economic growth in the host country. However, there is also evidence that FDI is a source of negative effects. Given this ambiguity of results, the present paper makes a review of the existing theoretical and empirical literature on the subject, intending to shed light on the main explanations for the divergence of results in different studies. The main idea that stands out in this review is that the effects of FDI on economic growth are dependent on the existing or subsequently developed internal conditions of the host country (economic, political, social, cultural or other). Thus, the host countries authorities have a key role in creating the conditions that allow for the leverage of the positive effects or for the reduction of the negative effects of FDI on the host country's economic growth.

Key-words: Foreign Direct Investment; Economic Growth; Literature Survey
JEL codes: F21; O40

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† Corresponding author. Email: rforte@fep.up.pt; Address: Faculdade de Economia do Porto, Rua Dr Roberto Frias, 4200-464 Porto, Portugal.

1. Introduction

Foreign direct investment (FDI) is generally considered, by many international institutions, politicians and economists, as a factor which enhances host country economic growth, as well as the solution to the economic problems of developing countries (Mencinger, 2003). Usually FDI is defined as an investment involving the transfer of a vast set of assets, including financial capital, advanced technology and know-how, better management practices, etc. 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). Since capital formation and technological improvement are the motor of economic growth, FDI is expected to promote host countries' economic growth (Wang, 2009). In 2002, OECD reports that countries with weaker economies consider FDI as the only source of growth and economic modernization. For this reason, many governments, particularly in developing countries, give special treatment to foreign capital (Carkovic and Levine, 2002). It is common that countries have public agencies whose aim is to attract foreign investments using public funds, which shows that governments are willing to bear some costs to attract such investments (Ford et al., 2008).[1]

Despite the fact that the impact of FDI on economic growth has been widely studied, there are still questions concerning the real effects of FDI, and also concerning the necessary conditions and the channels through which FDI leads to host country economic growth. In fact, although many studies have confirmed positive effects of FDI, some authors stress that there is still no consensus on the degree of these effects (Blomström and Kokko, 1998; Lim, 2001). Also Pessoa (2007) and Wang (2009) report that the main conclusion to be drawn from several studies is that results are ambiguous. Among the studies that have concluded that FDI does not cause economic growth are those of Haddad and Harrison (1993), Grilli and Milesi-Ferretti (1995) and Javorcik (2004). Others share the widespread view that FDI generates economic growth, especially Blomström (1986), De Gregorio (1992), Mody and Wang (1997), Nair-Reichert and Weinhold (2001), and Lensink and Morrissey (2006) studies. However, as Vissak and Roolaht (2005) pointed out, the number of studies that show positive effects of FDI is much higher than those that focus on negative effects.

Several explanations have been advanced for the presentation of mixed results. According to UNCTAD (1999), empirical studies show positive or negative effects depending on the

[1] The most common examples of special treatment given to foreign investments are tax holidays, exemptions from import duties, the provision of land for facilities, and the offer of direct subsidies (Hanson, 2001).

variables they use. Mohnen (2001) and Asheghian (2004) indicate that it may be caused by lack of analysis of host country domestic conditions. Nair-Reichert and Weinhold (2001) emphasize that it can be caused by potential errors in the estimation method. Wang (2009) suggests that one possible reason is the use of total FDI, rather than FDI by sector.

Given the lack of consensus regarding the effects of FDI in the host country, we consider it relevant to make a detailed analysis of the existing theoretical and empirical literature on this relationship. On the one hand, the theoretical literature will be useful to explain the mechanisms/channels through which FDI affects economic growth. Our survey of the existing theoretical literature allow us to conclude that FDI influences the host country economic growth through the transfer of new technologies and know-how, formation of the human resources, integration in global markets, increase of the competition, and firms' development and reorganization. On the other hand, an analysis of existing empirical studies will help to explain the ambiguity of results. The main idea that stands out in this review is that the effects of FDI on economic growth are dependent on the existing or subsequently developed internal conditions of the host country (economic, political, social, cultural or other). In this way, local authorities have a leading role in order to achieve the desired effects. These authorities can design more appropriate FDI policies so that the country has the necessary conditions to leverage the positive effects and mitigate the negative.

This paper is organized as follows. In Section 2 we present a review of theoretical literature focusing on the channels through which FDI affects host country economic growth. In Section 3 we set out some of the empirical studies of these effects, exploring the main explanations for the diversity of the results. Finally, in Section 4, we report the main conclusions.

2. The impact of FDI on economic growth: theoretical considerations

2.1. Introduction

According to De Mello (1997), the effect of FDI on economic growth can be analyzed considering two sources: factor accumulation and total factor productivity (TFP), according to neoclassical growth theory and endogenous growth theory, respectively.[2] On the one hand, it is expected that FDI will increase economic growth through capital accumulation in the host country. Moreover, it is expected that FDI contributes to increasing the stock of knowledge of

[2] Ozturk (2007) states that the empirical literature usually uses factor accumulation instead of TFP due to the fact that factor accumulation is easier to quantify and analyze while TFP leads to major measurement difficulties, due to the lack of suitable econometric models and the availability of appropriate data.

the host economy and a consequent increase in total factor productivity through the transfer and dissemination of knowledge.[3]

According to OECD (2002), there are several mechanisms / channels through which FDI can affect the host country economic growth, and the effects of FDI can be positive and / or negative. Table 1 presents a summary of these mechanisms, highlighting the impact that is expected (positive or negative), following OECD (2002).

Table 1: Factors explaining the impact of FDI on host country economic growth

FDI affects the host country economic growth through …	**Impact**	
	Positive	**Negative**
1. Transfer of new technologies and know-how	X	X
2. Formation of the human resources	X	X
3. Integration into the global economy	X	X
4. Increased competition in the host country	X	X
5. Firms development and restructuring	X	
6. Difficulty of implementation economic policies		X

Source: Own elaboration.

As Table 1 shows, the effects of FDI on host country economic growth are, a priori, ambiguous. There are mechanisms through which it is expected that FDI positively affects growth but these mechanisms could also trigger a negative effect. So, in the following subsections we explore these mechanisms, and then we focus our attention on factors that may favor the occurrence of benefits to economic growth.

2.2. FDI and the transfer of new technologies and know-how

FDI can affect economic growth through the transfer of technology and know-how, and this impact can be positive and / or negative.

According to Frindlay (1978), FDI is a way to improve a country's economic performance through the transmission effect of more advanced technologies introduced by multinationals.[4] In fact, multinational firms are often regarded as the more technologically developed firms. As stated by Borensztein et al. (1998), this is explained by the fact that multinational firms are responsible for almost all the world's spending on research and development (R&D). Also Ford et al. (2008) consider multinationals as a major source of technology dispersion, due to their presence in various parts of the world.

[3] For an analytical framework concerning the idea of endogenous growth see Wang (2009).
[4] Firms engaging in FDI are usually defined as multinationals firms (because they own or control assets in different countries).

The growth rate of a country can be explained by the state of the technology it uses. In developing countries economic growth depends on the implementation of more advanced technology brought in by multinationals (Borensztein et al., 1998; Lim, 2001). The existence of new technologies introduced by multinationals leads to a reduction of R&D costs of firms that receive these technologies. In this way, these firms become more competitive (Berthélemy and Démurger, 2000). Loungani and Razin (2001) argue that the transfer of technology could achieve gains that could not be achieved through financial investments or the purchase of goods and services. FDI is considered by Saggi (2002), Hermes and Lensink (2003), and Varamini and Vu (2007) as a predominant way of increasing economic growth, since the transfer of technology and knowledge of multinationals improve local firms' productivity, which contributes to the growth of Gross Domestic Product (GDP).

The technology transfers are made to the local suppliers of multinational firms on a voluntary basis, to improve the products they deliver to them (Rodriguez-Clare, 1996). These new technologies are transferred in the form of training, technical assistance and other information provided in order to improve production quality and quantity of products that the multinational purchases (OECD, 2002). The same study states that usually multinationals also provide support to their local suppliers in purchasing raw materials and intermediate products, and even in the improvement of its facilities. However, in sectors of activity with rapid changes in technologies, the main benefits brought by multinationals are the new products and new production processes (Blomström and Kokko, 1998). Kottaridi (2005) still reports the link that multinationals establish with local research entities, such as public institutes and universities, as a strong source of technology transfer.

The transfer of technology, however, can also bring negative effects. According to Sen (1998) multinationals may have an adverse reaction to host country R&D in order to continue to hold a technological advantage compared to local firms.[5] This author also notes that with the same aim multinationals only transfer inappropriate technologies. Vissak and Roolaht (2005) add that the host country can become dependent on technologies introduced by multinationals. This study indicates that there is a decline in local firms' interest in the production of new technologies. In these circumstances, the host country dependence on multinationals technology will be perpetuated.

[5] As a consequence, Sen (1998) points out the increase in payments of royalties that will lead to a negative impact on the balance of payments, as we will report in section 2.4.

2.3 FDI and the formation of the human resources

A second channel through which FDI can affect the host country's economic growth is the formation of the human resources or labor force. This channel may facilitate the occurrence of positive effects but also negative effects.

Zhang (2001a) states that FDI is a source of economic growth because it carries with know-how in production and management methods, but also with highly skilled workers. Additionally, FDI fosters 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 (Loungani and Razin, 2001; Alfaro et al., 2004), and through formal training obtained (De Mello, 1999; Ozturk, 2007). As mentioned, FDI is a vehicle for the adoption of new technologies in the host country and because of this, it is necessary that the labor force is able to use them. What happens often is the lack of this capacity, which leads the multinationals to provide the necessary training and thus increase capacities in the host country (Borensztein et al. 1998). According to OECD (2002), multinationals are a larger source of training than local firms.

The training provided by multinationals has repercussions to the economy of the entire country, since local firms will then hire these workers (Hanson, 2001). Lim (2001) adds that many employees use new knowledge to create their own firms and then they will transmit their knowledge to the workers of this new firm. OECD (2002) states that multinationals are responsible for improving the training of the host countries, also because they demonstrate to local authorities the need to have a qualified labor force.

As regards the labor force, there also exist negative consequences from FDI inflows. The use of advanced technology by multinationals leads us to predict the need for fewer workers than that used by local firms, leading to the consequent increase in unemployment (OECD, 2002). Additionally, local firms will feel the reduction in the local authorities' support (Ford et al., 2008). These authors argue that local authorities, verifying that multinationals are a source of training and improving the levels of education in the country, reduce public spending in this area which mitigate the effect of training of the labor force provided by FDI. Another negative consequence is that workers with high education may leave the country, since there are no R&D activities that they can engage in in the host country (Vissak and Roolaht, 2005).

2.4. FDI and integration into global economy

FDI contributes to the integration of the host country into the global economy, particularly through the financial flows received from abroad (OECD, 2002). This relationship is also demonstrated by Mencinger (2003), who provides evidence of a clear link between the increase of FDI and the rapid integration into global trade. This integration generates economic growth which is increased as the country becomes more open (Barry, 2000). Blomström and Kokko (1998) explain that the local firms' integration in the global market is also made by copying and attaining of knowledge held by the multinationals. Multinationals have higher knowledge about internationalization because they have already gone through this process. Among the main competitive advantages held by multinationals are the expertise in marketing, establishment of networks, and creation and development of international lobbies. According to Zhang (2001a), the contact with multinationals networks is a very important factor, since there is a possibility that local firms learn from the operation of these networks or to integrate them.

Local firms can learn from multinationals in several ways. Blomström and Kokko (1998) suggest that some local firms become multinationals suppliers or subcontractors, which leads local firms to export, even if it is often with the multinational brand. The contact with the multinational brand is also useful in order to use the same channels of this brand already established in the international market (Zhang, 2001a). This will be the first experience in international markets which then serves to export products they developed, with its own brand, to independent customers gained by local firms (Moran, 1999).

Another form of local firms' integration in the international market is through their inclusion in the multinationals strategy. This may lead local firms to follow the multinationals to other markets or even replace other suppliers in multinationals subsidiaries in other countries (OECD, 2002). The OECD (2002) study refers to the trade associations that multinationals are generally prominent members, as important sources to pass knowledge about the world market, because they are a center for exchange of relevant experiences. It also says that in response to requests from multinationals, local authorities can create infrastructures (particularly transportation infrastructures) that will benefit international trade and local firms that also will use them successfully in their internationalization. This fact is evidenced by Gunaydin and Tatoglu (2005) which indicate that these consequences of FDI facilitate the distribution of raw materials that exist in the host country. Additionally, Ford et al. (2008) assert that multinationals tend to include their suppliers in international networks to which

they belong, so that local firms are involved in global trade by establishing relations with other international entities.

The type of FDI is also a factor of integration into the global market. When the investment is only made in assembly lines it is clear the increase in imports of components, as well as the increase in exports of final products (Zhang, 2001b). Makki and Somwaru (2004) report that the increase in exports leads local firms to improve their productivity by better use of their capacity and access to economies of scale.

The further integration into the global economy provided by FDI can, however, have negative effects on the host country. Mecinger (2003) suggests that FDI has a far greater impact for imports than for exports, which influences negatively the balance of payments. This strong impact on imports is due to the fact that multinationals have great need of goods and raw materials, and most of the time, these are not available, either in quantity or in quality, in the host country (OECD, 2002). Another explanation is that the investment made may have as its main objective the supply of the local market and thus does not encourage exports (Ram and Zhang, 2002). Vissak and Roolaht (2005) note that FDI is the easiest source of spreading economic problems occurring in the world, particularly those that have occurred in the multinationals countries of origin. Host countries become more open economies and more subject to changes in the global economy. But the negative aspects do not stop there. In fact, the purpose of improving the balance of payments through the initial financial flows received is not always achieved in the long run. These effects can be mitigated or contradicted (in stages of low FDI inflows) through the usual repatriation of multinationals subsidiaries profits to their countries of origin (OECD, 2002; Hansen and Rand, 2006; Ozturk, 2007), or through the payment of licenses and royalties due to the use of technology held by headquarters (Sen, 1998). Ram and Zhang (2002) and Duttaray et al. (2008) show that in the long run the repatriation of profits is higher than the positive impact of the initial investment. The negative impacts caused by these outflows of capital, can be extended if these funds are obtained through credits obtained in the host country (Loungani and Razin, 2001).

2.5. FDI and increased competition

According to Lee and Tcha (2004), FDI plays an important role in improving the factors of production and accumulation of capital in the host country, due to the competition it creates. The entry of multinationals increases the supply in the host country's market, so local firms, in order to maintain their market shares are induced to reply to this competition, causing an

increase in productivity, lower prices and a more efficient allocation of resources (Pessoa, 2007). The increased competition causes an increase in R&D expenditures by local firms, and in some cases local firms take advantage of the improvements made to gain more market share and also become multinationals' suppliers (Blomström and Kokko, 1998). Existing firms are forced to improve their technology and methods to face competition, making investments in equipment and in its employees (De Mello, 1997; Driffield, 2000; Varamini and Vu, 2007). Also the OECD (2002) study states 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.

But the increased competition does not produce only positive effects on the host country. Zhang (2001b) and Ram and Zhang (2002) argue that this increased competition leads inevitably to the closure of some local firms (that can not 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. In order to face the strong competition from multinationals, concentration can also occur between local firms to achieve gains in economies of scale, reducing competition (Loungani and Razin, 2001). Other factors related to FDI could result in the disappearance of local firms. Hanson (2001) and Zhang (2001b) report that the increase in income in the national economy is not equal for all players in the economy: multinationals have increased income which justify the increases at the national level, but local firms are suffering a decline in income which may lead to their disappearance. Sahoo and Mathiyazhagan (2003) refer to the possibility of the emergence of a situation of multinational oligopoly which lead to the disappearance of local firms.

Competition between multinationals and local firms will also influences access to human resources. According to Sylwester (2005), multinationals more easily attract the more skilled workers, either through their economic power or through better career possibilities they are able to offer, removing the workers from local firms or hindering local firms to capture these workers. Local firms may also suffer from the increase in FDI due to their reduced structure compared to the multinationals. Vissak and Roolaht (2005) argue that to attract FDI local authorities bear additional costs, it being necessary to make cuts in public expenditures. These cuts will have a greater impact on local firms due to their smaller size and, therefore, they are more dependent on the government, including in some cases government subsidies that will be reduced or even canceled.

Finally, another effect that is recorded by several studies is that caused by the competition created in access to credit, which will bring negative consequences to the host country's economy. In fact, multinationals tend to be partly financed by the host countries financial markets. This increase in financing needs in the country will have effects in that market, so it is predicted that the costs of credit increase and that the access to credit changes (Lim, 2001; Carkovic and Levine, 2002; Sylwester, 2005). Multinationals financed in host countries will reduce their ability to grant loans, making it difficult for local firms to obtain loans. Additionally, FDI can cause a loss of domestic savings which further makes the availability to grant loans worse (Chakraborty and Basu, 2002). These problems in access to credit are mainly experienced by local firms which have a smaller structure, and then find it difficult to support the increased costs of credit, plus their weak bargaining power with financial institutions (compared to multinationals). This competition for funding could preclude some local firms from necessary investments for their development or even for their maintenance, which may lead to their disappearance.

2.6. FDI and firms' development and reorganization

According to Hansen and Rand (2006), FDI is probably a key element in the process of creating a better economic environment, with consequent positive effects on economic growth. In fact, FDI is a source of change in host countries firms. Two situations are identified in which local firms feel particularly those changes. First, because of their superior capabilities multinationals are able to enter into sectors with high entry barriers, in terms of local firms. This entry will reduce or eliminate existing monopolies in these sectors, which will change the structure of national economy (Blomström and Kokko, 1998). Second, in the case of FDI being achieved by takeover or by a process of privatization, multinationals force the adoption of their policies and procedures in the firms they acquire, and these measures are usually complemented by the incorporation of workers from other subsidiaries of the multinational (OECD, 2002). The changes are especially important if the practices used by the multinational are more efficient than existing ones, which will generate efficiency gains. The structure of local firms suffers also changes by copying the structures used by multinationals considered more efficient (Hansen and Rand, 2006).

Zhang (2001b) also mentions several changes experienced in businesses in China due to FDI. Firms, before public, were turned into private firms or public-private partnerships, many of them due to joint ventures with foreign investors. Another phenomenon observed by Zhang

(2001b) was the acceleration of policy changes through changes in laws and operating rules of the market, for an approximation to an open market economy.

2.7. FDI and the difficulty of implementation economic policies

The host country economy may be affected by the difficulty of implementation of economic policies, resulting from FDI inflows. In fact, FDI inflows are sources of instability by the difficulty or even impossibility, of predicting these flows (Vissak and Roolaht, 2005). This may destabilize the country's economic development and affect negatively the implementation of economic policies (Sen, 1998; Vissak and Roolaht, 2005). Another harmful event to the host country economy occurs if there is a sudden and high capital inflow because it is likely to increase inflation in proportion to that inflow (Sen, 1998). Additionally, FDI can cause a decline in the local authorities' autonomy (Duttaray et al., 2008). Large multinationals get control over assets and employment, which enables them to influence the political and economic decisions of the host country authorities (Zhang 2001b). Pressures exerted by multinationals on local authorities to achieve gains in their operations can also be observed, which may result in policies that are not favorable to host country economic growth, only benefiting foreign investors (Zhang, 2001b; Rand and Zhang, 2002). Due to the multinationals size and their impact on local economies, their strategic decisions can cause significant changes in the host country, independent of the local authorities' strategies, and could even be contrary to the desired national policies (OECD, 2002).

2.8. Positive or negative impact? Explanatory factors

As we have emphasized in previous subsections, there are several channels through which FDI can affect the host country's economic growth and the effects can be positive and/or negative. The explanation of how these effects occur or what prevents them from occurring is also subject to discussion and / or explanation. In general, it is agreed that the positive impact of FDI on host countries economic growth depends on certain factors that exist or not in those countries, such as human capital, the trading system, the degree of openness of its economy (Chowdhury and Mavrotas, 2003), the economic and technological conditions (Hansen and Rand, 2006), and legislation and political stability (Asheghian, 2004).

An effect that has provided much discussion is the analysis of the impact of technology transfers. In this discussion we stress the argument based on the technological gap (between developed countries from which generally multinationals are originate, and the host countries) due to the total asymmetry of results. On the one hand Romer (1993) defends the ease of

transfer of technology to host country firms where the technology gap is pronounced. Also Sjöholm (1999) concludes that major technological gaps lead to major transfers. Due to its absence, any new technology brought into this country will be quickly implemented. On the other hand, Borensztein et al. (1998) and OECD (2002) suggests that the technological gap should not be very strong since when the technological gap between them is very sharp local firms do not have capabilities to absorb and / or copy the new technologies brought in by multinationals.

Additionally, some studies show that technology transfers from multinationals have a positive impact only when there is human capital development capable of absorbing and using these new technologies and methods (e.g. Berthélemy and Démurger, 2000; Zhang, 2001a; Hermes and Lensink, 2003; Makki and Somwaru, 2004; Khawar, 2005). Also Lim (2001), Barrios et al. (2004), and Ford et al. (2008) highlight that the impact FDI has on the host country economy is subject to a direct relationship with the existing skills of the labor force, because if these skills are low the host country can not assimilate and replicate the knowledge transmitted by multinationals. De Mello (1997) indicates that there is a direct proportionality between earnings from technology and knowledge transfers and the level of education of the host country's labor force. According to this argument, developed countries benefit more from FDI than the underdeveloped and developing countries because their human capital is higher (Li and Liu, 2005). However, Bende- Nabende et al. (2001) found a particular case that contradicts this idea. In a study that included four Asian countries, the impact of FDI is positive and significant in the Philippines and Thailand; however it is negative in Taiwan and Japan, the more developed countries and with a higher level of education.

Ozturk (2007) adds that, in addition to developing countries needs to obtain a certain level of education to gain from the transfers provided by FDI, the country also requires a minimum level of infrastructure. This need was suggested by Sen (1998) as an explanation for the lack of gains as well as the lack of raw materials or the wrong location of the host country.

The failure to take advantage of the transfer of knowledge to local firms can also be attributed to little or no recruitment of local workers for high positions, and low mobility of workers from multinationals to local firms (Aitken and Harrison, 1999). However, these authors also refer to other reasons for the reported failure: reduced subcontracting, lack of R&D in subsidiaries and few incentives for multinationals to transmit the technology they hold.

However, it is important to stress that the impact of technology transfers is only really noticed in the host country economy if this technology is relevant to several firms / economic sectors and not for only one firm / sector or just for the multinational engaging in FDI (OECD 2002). The unsuitableness of the technological investment regarding the existing local firms may not have a positive impact for economic growth (Berthélemy and Démurger, 2000) or even be harmful (Ram and Zhang, 2002). Different types of FDI affect growth in different ways because the nature of the investment defines how it affects the local economy (Beugelsdijk et al., 2008). Factors such as the size of the multinational advantage, the extent of R&D that it entails, and the growth potential of the sector in the host country is relevant to the impact it causes (Driffield, 2000). Sen (1998) suggests that skills of specific use to multinationals do not contribute to economic growth. The positive effect of FDI is only noticed if there are complementarities between FDI and investments made or encouraged in the host country (De Mello, 1997). It is also considered an obstacle to the positive effects on host country economic growth if the technology includes high costs, the products in which it is applied are inappropriate for the local economy, and the intensity of factors used may not be available in the economy (Duttaray et al., 2008).

Additionally, one could assume that the impact from these transfers would only be achieved in developing or underdeveloped countries, and in a country leader in technology such as the United States (USA), technology transfer from FDI should not be very important. However, Roy and Van den Berg (2006) report that the majority of developed economies depend on these flows of foreign technology for much of their technological progress.

Hermes and Lensink (2003) argue that the process of technology transfer reaches greater relevance in countries where there is protection for intellectual property rights. If this does not happen, multinationals do not use a high level of technology, which reduces the opportunities for innovative technology transfers. The same authors suggest the correct functioning of markets for the efficient transfer of technologies.

Omran and Bolbol (2003) report that FDI will only lead to increases in productivity when in the host country there is competition between multinationals and local firms and also a strong commitment to R&D. Moran (1999) suggests that FDI is harmful to host countries' growth when the investor is protected from competition in the domestic market, with requirements of joint ventures and transfers of technology. Several developing countries have imposed technology sharing rules with local firms in an attempt to offset the lack of internal conditions that encourage such a transfer (Nunnenkamp, 2004). Sohinger and Harrison (2004) pointed

out that in countries with requirements for investors, as a minimum of exports from production, technology transfer and joint ventures, affect negatively the impact that FDI causes, since multinationals do not have incentives to use advanced technology in subsidiaries located there.

De Mello (1997) stresses that the impact of FDI on the host country economy is expected to be larger the higher the value-added in production caused by the knowledge transferred by the multinational. Driffield (2000) highlights that investments that carry R&D, produce higher added value, as opposed to other projects that do not carry, and therefore the effect on growth will be smaller (as in the case of projects that are restricted to assembly).

A policy, followed by the host country, with the emphasis on promoting exports combined with a free and competitive market, fosters an ideal climate for exploiting the potential of FDI in promoting economic growth (Balasubramanyam et al., 1996; Mencinger, 2003). The export promotion policy as opposed to an import substitution policy is suggested as one explanation for the success or failure of the impact of FDI on economic growth (Li and Liu, 2005). According to Balasubramanyam et al. (1996) the trade openness is also a crucial factor for the acquisition of growth potential.

Finally, in terms of financial markets, it is considered that economic growth is only achieved through FDI when the host country has a sufficiently developed financial market (Alfaro et al., 2004; Hansen and Rand, 2006). Countries with better financial systems and better regulation of financial markets can exploit FDI more efficiently and thus achieve higher growth rates (Ozturk, 2007). A "healthy" financial market allows entrepreneurs to easily obtain credit to start new projects and / or expand existing ones (Ozturk, 2007).

3. Impact of FDI on economic growth: empirical evidence

3.1. Initial considerations

There are a variety of empirical studies that focuses on the influence of FDI on the host country's economic growth which includes many countries with different levels of development, and a more or less long-term analysis. Despite the alleged benefits of FDI on host country economic growth, the empirical literature has not succeeded in establishing a definitive positive impact (Campos and Kinoshita, 2002). UNCTAD (1999) analyzed 183 studies covering 30 countries since 1980 and concluded that in the majority (55% to 75%) large positive effects were found but in the remaining the effect found was clearly negative.

OECD (2002) also reports that only 11 in each 14 studies concluded that FDI contribute positively to economic growth.

In the analysis of some empirical studies carried out we realize that most of these studies have concluded that FDI has a positive effect on host country economic growth, although there also exist studies who have found a negative impact. While aware that this literature survey does not cover all the existing studies, we tried the broadest possible, considering a wide range of countries, including countries with different levels of development and geographically dispersed. We considered studies of 10 developed countries and 41 developing countries, as given in Table 2.[6]

Table 2: Countries analysed in the studies surveyed

Developed countries	USA; United Kingdom (UK); Slovenia; Czech Republic; Hungary; Poland; Slovakia; Estonia; Lithuania; Latvia
Developing countries	Hong Kong; South Korea; Brunei; Singapore; Kuwait; United Arab Emirates; Bahrain; Qatar; Chile; Argentina; Mexico; Oman; Saudi Arabia; Bulgaria; Romania; Malaysia; Brazil; Turkey; Lebanon; Colombia; Thailand; Ukraine; Jordan; China; Tunisia; Algeria; Philippines; Syria; Indonesia; Vietnam; Egypt; Morocco; India; Laos; Myanmar; Cambodia; Yemen; Mauritania; Sudan; Nigeria; Taiwan

This analysis of major empirical studies that address the relationship between FDI and host country economic growth is organized as follows. First we focus on the studies carried out on groups of countries (Section 3.2). Then we present the studies that have been produced on a single country or on a limited number of countries, the result for each being easily identifiable (Section 3.3). Section 3.4 focuses on the main explanations for the ambiguity of the results. Finally, we present some comments about the direction of the relationship of FDI to economic growth (Section 3.5).

3.2. Studies on groups of countries

Focusing on the empirical studies of the impact of FDI on host country economic growth, whose sample includes several countries, Table 3 presents a summary of several studies, which are ordered chronologically. This summary focuses on the sample period, the countries involved, the variables used and the main results.

[6] The number of studies considered at each level of development results mainly from the availability of studies. The diversity of country development was verified by the World Investment Report (UNCTAD, 2007).

Table 3: FDI and host country economic growth - results of empirical studies on various countries

Study	Period	Countries	Variables (*)	FDI impact on growth
Balasubramanyam et al., 1996	1970 - 1985	46 developing countries	**GDP**; employment; domestic capital stock; stock of foreign capital; exports	+ (with more significance in countries with export promotion policies)
Borensztein et al., 1998	1970 - 1989	69 developing countries	**Per capita GDP growth**; FDI; stock of human capital; initial GDP per capita	+ (magnitude depends on the existing capital stock)
De Mello, 1999	1970 - 1990	15 countries from OECD and 17 non-OECD countries (Africa and America)	**Total factor productivity (TFP)** growth; Capital stock; FDI	+ / - (positive within OECD countries but negative in other countries)
Campos and Kinoshita, 2002	1990 - 1998	25 countries in transition from Central and Eastern Europe and ex-Soviet republics	**Annual growth rate of GDP per capita**; initial GDP per capita; enrollment ratio in primary education; government consumption as a percentage of GDP; FDI; percentage of domestic investment in GDP; population	+
Carkovic and Levine, 2002	1960 - 1995	72 countries	**Growth rate of GDP per capita**; FDI	FDI has no strong positive impact
Basu et al., 2003	1978 - 1996	23 developing countries	**GDP**; FDI	+ (and enduring)
Bengoa and Sanchez–Robles, 2003	1970 - 1999	18 countries of Latin America	**GDP**; FDI; economic freedom	+
Choe, 2003	1971 - 1995	80 countries	**Annual growth rate of GDP per capita**; percentage of FDI in GDP; percentage of domestic investment in GDP	+
Omran and Bolbol, 2003	1990 - 2000	Arab countries	**Per capita income growth rate**; initial per capita income; percentage of FDI in GDP; percentage of investment in GDP; financial development	+ (after economic reforms)
Janicki and Wunnava, 2004	1997	Bulgaria, Czech Republic, Estonia, Hungary, Poland, Slovakia, Slovenia, Romania; Ukraine	**GDP**; FDI; imports; the cost of labor; the country political risk	+ (gains are note easily achieved)
Li and Liu, 2005	1970 - 1999	84 countries	Investment, population growth, initial GDP per capita, initial human capital and FDI inflows by GDP	+ (only from the 80's)
Hansen e Rand, 2006	1970 - 2000	31 developing countries: 10 from Africa; 11 from Latin America Latina; 10 from Asia	**GDP**; FDI	+
Duttaray et al., 2008	1970 - 1996	66 developing countries: 12 Asian countries, 30 Africans, 21 South America and Caribbean, and 3 other island countries	**Growth rate of GDP**; exports as a percentage of GDP; ratio of FDI to the GDP	+ (but only in 29 countries - 44% of the sample; great impact in South America countries, lower impact in Asian countries)

(*) The dependent variable is marked in bold.
Source: Adapted from Ozturk (2007)

It is important to stress that the conclusions obtained in these studies are for the group and it is not possible to confirm the result obtained for any of the countries individually. By considering more than one country, the studies present an "average" view of the effects. In this type of study situations occur in which a single very large positive effect can offset a lot of negative effects of smaller size, and vice versa. If this occurs, the effect with less weight will be neglected in the analysis, only the final result prevailing. The advantage of these studies is that at one view we get an overview of the relations.

Analyzing Table 3 we realize that from the 13 studies analyzed, 11 of them reach a positive result, one concludes that FDI has no impact on economic growth in the host country, and De Mello (1999) study obtains opposite results in several countries. In order to avoid some of the problems caused by analysis of groups of countries, in the next section we present several empirical studies that examine the impact on a single country, or in which one can observe the outcome for each individual country.

3.3. Studies of individual countries

Results obtained by studies which focus on individual countries are summarized in Table 4. As in Table 3 studies are ordered chronologically, and we focus on the same aspects (the sample period, the countries involved, the variables used and the main results).

As Table 4 shows, the majority of studies have demonstrated that FDI leads to positive effects on host country economic growth. Although only one study concluded that FDI causes adverse effects (Mencinger, 2003), there is, however, some studies that found no statistical evidence of any relationship, either positive or negative, between the FDI and economic growth (e.g. Zhang (2001a), for some of the countries analised. We can also emphasize that several papers did not identify whether it was FDI that caused economic growth, or whether the economic growth was causing an increase in FDI (Gunaydin and Tatoglu, 2005; Kasibhatla et al., 2008). Finally, in the Chowdhury and Mavrotas (2003) study it was shown that for Chile the economic growth was the cause for increases in FDI and not the opposite.

Table 4: FDI and host country economic growth - results of empirical studies on individual countries

Study	Period	Countries	Variables (*)	FDI impact on growth
Bende - Nabende and Ford, 1998	1959 - 1995	Taiwan	**Output growth**; FDI; capital stock; labor force; openness; technology transfer; saving; human capital	+
Bende – Nabende et al, 2001	1970 - 1996	ASEAN countries	**Output growth**; FDI; human capital; labor force; technology transfer; international trade; learning by doing	+
Zhang, 2001a)	1980 - 1997	Argentina, Brazil, Colombia, South Korea, Hong Kong, Taiwan, Indonesia, Malaysia, Mexico, Singapore; Thailand	**GDP**; FDI	+ (only in Hong Kong, Indonesia, Taiwan, Mexico and Singapore)
Zhang, 2001b)	1984 - 1998	China	**GDP**; FDI; employment; stock of domestic capital; total factor productivity	+
Chakraborty and Basu, 2002	1974 - 1996	India	**GDP**; FDI; unit labor costs; share of import taxes in total tax revenue	+ (in the long run)
Chowdhury and Mavrotas, 2003	1969 - 2000	Chile, Malaysia; Thailand	**GDP**; FDI	+ (only for Malaysia and Thailand)
Kohpaiboon, 2003	1970 - 1999	Thailand	**GDP**, FDI, employment, capital stock, total factor productivity; stock of human capital	+
Mencinger, 2003	1994 - 2001	Slovakia, Slovenia, Estonia, Hungary, Latvia, Lithuania, Poland; Czech Republic	**Growth rate of GDP**; share of FDI in GDP; initial GDP per capita; growth of gross fixed investment; growth of employment; growth of GDP in EU countries	-
Akinlo, 2004	1970 - 2001	Nigeria	**Real GDP**; Stock of foreign investment; private capital stock; human capital; economically active labour force; real government consumption; real export	+ (only after a long period)
Asheghian, 2004	1960 - 2000	USA	**GDP**; stock of capital; labor	+
Gunaydin and Tatoglu, 2005	1968 - 2002	Turkey	**GDP**; FDI stock	Authors cannot prove the causality of the relationship
Chang, 2006	1981 - 2003	Taiwan	**GDP**; FDI inflows; FDI outflows; unemployment rate; exports	+
Roy and Van der Berg, 2006	1970 - 2001	U.S.	**GDP**, FDI; domestic investment; exports; imports; stock of human capital	+
Oladipo, 2007	1970 - 2004	Mexico	**Real output**; private capital stock; raw labor input; level of human capital; educational level; return to education relative to raw labor input; efficiency production; externality generated by additional stock of FDI	+ (but smaller than that those caused by domestic investment)
Varamini and Vu, 2007	1988 - 2005	Vietnam	**GDP**; FDI; exports; imports	+
Xu and Wang, 2007	1980 - 1999	China	**GDP**; FDI; domestic investment; imports; exports	+
Kasibhatla et al., 2008	1970 - 2005	China, USA, India, Mexico; UK	**GDP**; FDI	+ (only in India)
Vu, 2008	1990 - 2002	Vietnam	**Real GDP**; labor; physical capital; human capital; FDI stock	+
Baharumshah and Almasaied, 2009	1974 - 2004	Malaysia	**Growth rate of real GDP per capita**; initial income; human capital; FDI; domestic investment	+

(*) The dependent variable is marked in bold.

Source: Adapted from Ozturk (2007).

3.4. Ambiguity of results: explanations

3.4.1. Initial considerations

Several explanations have been advanced for the presentation of mixed results in different studies. According to UNCTAD (1999), empirical studies show positive or negative effects depending on the variables they use. Mohnen (2001) and Asheghian (2004) indicate that it may be caused by lack of analysis of the host country domestic conditions. Most of the studies share the assumption that all nations share common features.[7] According to Asheghian (2004), this presumption is not valid, since there are differences between the host countries, not only in economic, political and institutional structures, but also in how they react to external "shocks". Nair-Reichert and Weinhold (2001) emphasize that it can be caused by potential errors in the estimation method. Wang (2009) suggests that on possible reason is the use of total FDI.[8] In the next subsections we explore the difference of the variables and the differences between countries analyzed, since these are the two factors most discussed in the literature.

3.4.2. The variables used

As noted previously, the vast majority of empirical studies point to the existence of a positive relationship between FDI and host country economic growth. This idea is also supported by our analysis, as suggested by the observation provided on Tables 3 and 4. However, among the studies analyzed, we found that for similar periods and for the same countries some of the results obtained were divergent. It is important to stress that these studies include countries with different levels of development, different sizes, opposing political structures, dispersed locations. Due to these factors we will detail the differences in the studies that focus on the following countries: Chile, China, USA, Malaysia and Thailand.

In the first place, it should be noted that the studies use different variables which may explain the different empirical results. In fact, according to UNCTAD (1999), empirical studies show positive or negative effects depending on the variables they use. The explanation may be that FDI affects growth through several channels, as evidenced in Section 2, and which are not

[7] This idea is confirmed because in most studies presented the variables used are generic and do not examine the particular characteristics of the host country. The exception is the Bengoa and Sanchez-Robles (2003) study which use as variable the freedom of the economy. However, as this work was done on a number of countries, any analysis of a particular country is lost due to the overall result presented.

[8] Using data from 12 Asian economies over the period 1987 to 1997, the author found strong evidence that FDI in the manufacturing sector has a significant and positive impact on host country economic growth while FDI inflows in nonmanufacturing sectors do not play a significant role in enhancing economic growth.

always correctly measurable (Sohinger and Harrison, 2004). In fact, the conventional way to investigate the relationship between economic growth and FDI consists of estimating regressions between the growth rate of GDP and the growth rate o FDI. However, usually, other variables are included (such as, human capital, international trade, initial GDP, etc.) in order to capture other influences on economic growth.

Zhang (2001b) and Xu and Wang (2007) analyzed the effects of FDI on economic growth in China (a developing country, as reported in Table 1) and concluded that they are positive. Moreover, Kasibhatla et al. (2008) in an analysis covering several countries did not find a positive impact for China. Kasibhatla et al. (2008) limited their analysis to checking the relationship between FDI and GDP. Authors who concluded with positive effects also used labor, stocks of domestic capital and total factor productivity (Zhang, 2001b) and domestic investment, imports and exports (Xu and Wang, 2007). Therefore, we realize that the inclusion of variables led to the finding of positive effects. We also note the interest to include the labor force and integration into the global economy, which are channels through which FDI can affect economic growth, mentioned above.

Kasibhatla et al. (2008) study is also divergent on the impact of FDI on economic growth in the USA (a developed country) contrary to those obtained by Ashegian (2004) and Roy and Van der Berg (2006) that have shown positive effects. As we have mentioned above, Kasibhatla et al. (2008) only used the analysis of FDI and GDP, although studies that have concluded with positive effects used more variables. Ashegian (2004), in addition to GDP, used the existing FDI capital and labor. Roy and Van der Berg (2006) included, in addition to GDP and FDI, the domestic investment, exports, imports, and human capital existing in the USA. It is noteworthy that in two studies that have found positive effects were introduced the variables labor (Ashegian, 2004) and existing human capital (Roy and Van der Berg, 2006). The use of these variables is, again, of particular interest because, as we have mentioned in Section 2.3, the formation of human resources is one of the channels through which FDI can cause positive and / or negative effects. It should be noted that these studies also include variables that are closely related to the integration into the global economy, which is another channel than can produce opposite effects. In effect, Roy and Van der Berg (2006) study include exports and imports.

The same differences can be found in the analysis to other countries like Malaysia, Thailand and Chile. Zhang (2001a) did not find positive impact on economic growth in Malaysia or Thailand (developing countries) while Kohpaiboon (2003) found positive effects in Thailand.

Bende-Nabend et al. (2001) in an analysis of the ASEAN[9] countries, found a positive impact for these two countries. The same result was obtained by Baharumshah and Almasaied (2009) for Malaysia, as well as by Chowdhury and Mavrotas (2003) for the two Asian countries mentioned. The contrary results for Malaysia and Thailand may also be explained by the large difference in the variables used. Zhang (2001a) used only the stock of FDI and GDP. Kohpaiboon (2003) used GDP, labor, capital stock, total factor productivity and stock of human capital of Thailand. Bende-Nabend et al. (2001) used as variables, human capital, labor force, technology transfer, international trade, and learning by doing, and Chowdhury and Mavrotas (2003) used only the FDI and GDP. Also Baharumshah and Almasaied (2009) found positive effects of FDI for Malaysia, using human capital, FDI, domestic investment, and the initial situation of the country.

For Chile (a developing country) the study of Chowdhury and Mavrotas (2003) found no positive effects of FDI on economic growth. Bengoa and Sanchez-Robles (2003), in a study that included Chile concluded that FDI brings benefits. Note that these two studies also present great discrepancy in the variables used: the former study used only the FDI and GDP, while the latter also included an index that measures the freedom with which the economy works. However, this comparison should be analyzed taking into account that the study of Bengoa and Sanchez-Robles (2003) does not have the specific outcome of Chile but only for the group of countries analyzed.

In summary, the results obtained seem to indicate that the effects of FDI on host country economic growth are dependent on the variables used. In the examples that have obtained opposite results, we realize that they use different variables and / or almost always more variables. This conclusion may also indicate that studies which have not obtained positive effects have neglected channels through which FDI can affect economic growth. In cases where there is the inclusion of more variables it appears that the purpose of this addition is to include domestic conditions of the country under study. The studies that have found that FDI causes economic growth, almost all have used variables related to the labor force.

In fact, in most empirical studies presented we note that they pay particular attention to the capabilities of the labor force. These capabilities are, however, analyzed by using variables measured in different ways. We also note that there is a high focus on integration in the global market, often measured by exports and imports as variables. However, there are other channels through which FDI can positively or negatively affect host country economic growth

[9] ASEAN - Association of Southeast Asian Nations.

(as stated in Section 2). For instance, the transfer of new technologies and know-how, and increased competition. In the studies presented we found that variables used did not give particular importance to these two factors. Transfer of technology is used in two studies (Bende-Nabende and Ford, 1998; Bende-Nabende et al., 2001), despite having a common author. However, we did not find in any study analyzed the presence of a variable that could measure the effects of FDI on host country economic growth through increased competition. We also noted that no empirical study introduced a variable to measure the effects of firms development and restructuring, a channel that was highlighted as a source of positive effects of FDI on host country economic growth. Additionally, with regard to the difficulty of the implementation of economic policies (a channel that was highlighted as a source of negative effects) we cannot find any study that attempts to measure its impact. Concerning the difficulties in obtaining credit, it is also difficult to find a study analyzing the effects it causes, however, in three studies were used variables related to investment (Choe, 2003; Mencinger, 2003; Li and Liu, 2005). These variables, although not measuring the impact that difficulties in obtaining credit due to FDI causes on economic growth, may help understand this phenomenon because if obtaining credit becomes difficult the investment will be lower. However, these variables do not allow us to know if this investment is made by multinationals or by local companies, and it is not possible to know the source of financing. These constraints do not give a clear view of the effect of difficulties in access to credit on economic growth.

A fact which also can be seen in the studies reviewed is that those that focus on groups of countries, although several have been made in the same period, with the same variables and even countries with similar levels of development, show different results. Duttaray et al. (2008) in a set of 66 geographically dispersed countries, only found positive effects in 29 of them. The same happened in Zhang (2001a) study which only has found positive effects for half of the countries, and has found no relationship between FDI and economic growth in the other countries surveyed. Chowdhury and Mavrotas (2003) have found positive effects for Malaysia and Thailand, but in Chile the evidence shows that it was the economic growth that led to increased FDI. Kasibhatla et al. (2008) have analyzed five countries and only have found positive effects for India. Since these studies use the same variables for all countries and the results differed according to the country studied, we can conclude that the variables used should not be seen as the only explanation for the ambiguity of the results.

3.4.3. Differences between countries analyzed

Differences between countries under study (in terms of development, geographical location, political regime, country's culture) have also been highlighted as an explanation for mixed empirical results.

Regarding the level of development or the geographical location of the recipient country we realize that they can not be regarded as the sole explanation. As Zhang (2001a) study shows, there are positive effect of FDI on economic growth in developing countries, such as Hong Kong, Indonesia and Singapore in Asia and Mexico in Latin America. On the other hand, the same study was not able to find the relationship between FDI and economic growth in countries with similar levels of development (developing countries) and geographical proximity, such as South Korea, Malaysia and Thailand that are located in Asia, and Argentina, Colombia and Brazil in America.

The same analysis can be done considering countries with different political regimes, such as the USA and China. Several studies analyzed concluded that FDI causes economic growth in these two countries as is the case of Zhang (2001b) and Xu and Wang (2007) for China and Ashegian (2004) and Roy and Van der Berg (2006) for the USA. We can also emphasize the Kasibhatla et al. (2008) study that analyzes the two countries and concluded that FDI did not cause economic growth in either country. In this way, we realize that there exist contradictory results for countries with very different political systems, and in a study that analyzes the two countries with the same conditions (time and variables) the results are similar. It should be noted, however, that none of these studies have used variables that could measure the effects that this feature causes this relationship. Despite this absence we consider that the political system of the host country cannot be portrayed as the cause that explains the different results for the effects of FDI on economic growth in these two countries, since the Kasibhatla et al. (2008) study have used identical measures and obtained the same result for the two countries.

Another aspect that can be considered as an explanation for the different results is the country's culture. Considering China and Taiwan as countries with a major cultural proximity, also here there is different conclusions in the studies that included these countries. In the studies about Taiwan (Zhang, 2001a; Chang, 2006) the results provide evidence that FDI causes economic growth. However, in the case of China we verify that different studies show different results. In this way, we may conclude that the cultural effect by itself cannot explain the differences in results.

These differences serve to highlight the recommendations by Ashegian (2004), mentioned earlier, which argues that the studies do not consider the internal characteristics of the host country of FDI. As we have mentioned, countries with similarities in several aspects had different results, adding that in these cases the variables used are the same and do not justify the differences in the results.

3.5. The direction of the relationship of economic growth / FDI

So far we have only noted the results of various studies in terms of whether FDI has a positive or negative impact on economic growth. However, the analysis of these studies, allow us to conclude that the causal relationship may be the opposite. That is, several studies suggest the existence of a causal relationship in both directions between FDI and economic growth. In fact, several studies (e.g. Chowdhury and Mavrotas, 2003; Gunaydin and Tatoglu, 2005; Kasibhatla et al., 2008) found evidence that it is possible that is not FDI that causes economic growth, but the opposite: the host country's economic growth attracts FDI. This relationship was proved by Chowdhury and Mavrotas (2003). Using the same methodology and variables to study three countries they found opposite results. In two of the countries the result indicates that FDI causes economic growth. However, the authors concluded that in the case of Chile it was the economic growth that led to increases in FDI captured. The other two studies did not find results so clear. Gunaydin and Tatoglu (2005) have studied only one country (Turkey) and show doubt as to the direction of this relationship. Kasibhatla et al. (2008) have analyzed a number of countries with some heterogeneity and only concluded that FDI has caused economic growth in India. In the other countries included in the study (China, USA, Mexico and UK) the conclusion was that FDI causes economic growth but also that economic growth is the cause for attracting FDI. So the authors cannot clearly conclude that the FDI is the source of the relationship and not the reverse.

To sum up, we realize that in many of the studies that were analyzed the possibility that the direction of relationship is that economic growth lead to FDI and not the opposite was not considered. This lack of concern may indicate that some of the results obtained could be different if studies have attended to the bidirectional relationship. In this way, future research in this area should not neglect this causal relationship.

4. Conclusion

As we have already mentioned, existing literature on the impact of FDI on the host countries' economic growth is quite divergent**.** In fact, despite the vast majority of empirical studies pointing to the positive impact of FDI, there are those who cannot demonstrate this effect. This difference in results is also subject to contrary explanations.

There are explanations that point to the fact that analyses show positive or negative effects depending on the variables they use. Regarding this explanation, we realize that there are still gaps in the empirical studies, particularly those related to the omission of some channels through which FDI can affect the host country's economic growth. We cannot also consider that the effects of FDI on economic growth are dependent on the host country's level of development or its location. Studies in developed countries obtained different results, as well as studies carried out in developing and underdeveloped countries with many locations. The same happens with samples including a heterogeneous group of countries.

Additionally, some authors (Mohnen, 2001; Asheghian, 2004) indicate that this may be caused by lack of analysis of the host country's domestic conditions. From the analysis carried out we have found a common feature in most of the studies analyzed. Almost all of the works suggest that the effects of FDI depend on the most varied conditions existing in each country, when FDI occurred or provided subsequently, whether they can be economic, political, social, cultural or other. The reasons most frequently mentioned derived from the way the country can benefit from the presence of multinationals and the advantages they carry and that can be used to improve the host country's economy performance. Among these, the most mentioned is how the host country can gain by using more advanced technologies and knowledge. Another gap that has particular relevance is the lack of studies that examine the existence of technological gaps in the results of FDI on economic growth. As noted in Section 2.8., this factor is the subject of sharp debate. We consider that it would be relevant the existence of studies which measure the existing technological level of the host country in order to obtain results for countries with low and high technological levels. Among the studies analyzed, we did not find any that answer this issue.

Another explanation, advanced by Wang (2009), suggests that one possible reason for the ambiguity of empirical results is the use of total FDI. This is an aspect that deserves attention in future work, since the majority of existing work uses the total FDI rather than by sectors. Furthermore, some studies stress that most analysis focuses only on whether FDI causes

economic growth and do not examine whether the host country's economic growth increases FDI. In these cases results are also ambiguous. There are studies that analyzed the duality of relations obtaining contradictory results. These results point to the need that future research in this area should seek to deepen the type of relationship between FDI and economic growth.

Another conclusion that emerges from the literature survey is that the majority of studies do not take into account the way FDI can be established in the host country. In fact, FDI can be achieved through a greenfield investment or a merger or acquisition of an existing business. These two modes of entry will have different consequences both in terms of increased competition and in terms of corporate restructuring, and consequently in terms of economic growth. Future investigations in this area should not neglect this aspect, which may help explain the divergent results of existing empirical studies.

Finally, the main idea that stands out in our review is that the effects of FDI on economic growth are dependent on the existing or subsequently developed internal conditions of the host country (economic, political, social, cultural or other). In this way, local authorities have a leading role in order to achieve the desired effects. These authorities can design more appropriate FDI policies so that the country has the necessary conditions to leverage the positive effects and mitigate the negative. Another possibility is to select the foreign investment projects that best meet the country needs.

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Faculdade de Economia da Universidade do Porto
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