The Impact of Foreign Direct Investments on SMEs’ Development

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Abstract

Foreign direct investment (FDI) is a crucial factor in international economic integration. FDI creates direct, stable and long-lasting links between economies. It promotes the transfer of new technology and know-how between countries, and provides the host economy to promote its products more widely in international markets. FDI is also an extra funding source for investment and, under the right policy environment, it can be an important channel for development of SMEs. Increased FDI inflows to a country can create several positive economic effects. Among others, FDI can affect labour and capital markets, trade patterns and economic growth. It is well known from the theory of host country effects of FDI that in order for FDI to occur, the multinational enterprise (MNE) must have some firm specific advantages compared to the enterprises in the host economy. These firm specific advantages may result in technology transfer from the parent firm to its affiliate in the host country of investment and related spillover effects in the host economy by firms. We survey the recent theoretical and empirical literature, but restrict our attention to the productivity changes that are induced by increased FDI inflows. We review both the aggregate productivity effects, as well as the spillover effects of FDI on SMEs.

Keywords: FDI, SME, spillover effects, productivity

1. Introduction

Foreign direct investment (FDI) is a direct investment into production or business in an economy by an individual or company of another country, either by buying a company in the target country or by expanding operations of an
existing business in that country. Foreign direct investment is different from the portfolio investment which is a passive investment in the securities of another country such as stocks and bonds.

Foreign direct investment plays various significant roles in a country’s economic development. While contributing to capital savings and production capacity of the host country, FDI also brings along technology and management skills as well. FDI has a positive effect on balance of payments and serves as a powerful tool for policy in economic integration.

The benefits from foreign investment to domestic economies have long been studied in literature. The standard theory of international trade saw investment abroad by private enterprises as arbitrating capital. Under this view, the gap between marginal product of capital and of labor will be reduced by FDI (Blomstrom and Kokko, 1996). This divergence is caused by the lack of capital in the many developing countries.

In the neoclassical model for economic growth, increases in capital stock and labor force contribute to higher economic growth. Therefore, the flow of FDI, by increasing the domestic capital stock, will accelerate to increasing the growth of the economy. More significantly, it has often been argued that FDI contributes to growth beyond the direct effect of increasing the capital stock (Colen, Maertens and Swinnen, 2008). As well as, FDI is also seen to bring to the host country accessive benefits, such as new technology, accessibility to foreign markets and managerial know-how opportunities. Expectations of these extra benefits are part of the reason why governments in developing countries provide special incentives to attract FDI especially.

Economic theory suggests that foreign direct investment (FDI) can generate positive spillovers to domestic firms in the host country. Since multinational corporations (MNCs) are an important source of international capital and technology, their entry can ease the transfer of technical and business know-how resulting in productivity gains and competitiveness among local firms in especial SMEs. These effects develop through best practice demonstration and diffusion, or through the creation of linkages with foreign and domestic firms becoming either suppliers or customers, or through the movement of experienced workers from foreign to local firms. The entry of MNCs may also increase competition and force domestic firms to imitate and innovate (Aldaba and Aldaba, 2010).

Along with the increased importance of MNCs for economies with lack of capital, research interest on FDI and its impact on economic growth in host countries have risen throughout since early 1990s. Besides, the academic papers on FDI has been facilitated by the availability of plant-level micro data for developing countries for longer time spans, allowing the use of more sophisticated micro and econometric methods to gain more credible empiric results.

Because FDI involves significant ownership control as well as the transfer of embodied and disembodied technology, its impact on economic growth can take place through increased productivity, human capital accumulation, R&D activity as well as technological and productivity spillovers. In addition, the impact of MNCs on economic growth can be greater if the types of FDI that the country receives stimulate, in other words crowd-in, domestic investment activity. Having firm-specific assets, such as production technology and know-how, marketing and management techniques among others, foreign-affiliates (FAs) of MNCs are expected to be more productive than local plants. With these firm-specific assets, multinational corporations start to generate technological externality on local plants once they invest in a country (Taymaz and Yılmaz, 2008).

In particular, it appears that the globalization and regionalization of the international economy have made FDI incentives more interesting and important for developing countries.

This paper investigates the effects of FDI on SMEs productivity. This paper is structured in the following way: Section 2 provides an overview of FDI theory. Section 3 describes the different positive effects of FDI on local firms and relevant literature related to the spillover effects of FDI. Section 4 concludes.
2. Types of Foreign Direct Investment

FDI is defined as cross-border investment by a resident entity in one economy with the objective of obtaining a lasting interest in an enterprise resident in another economy. The lasting interest implies the existence of a long-term relationship between the direct investor and the enterprise and a significant degree of influence by the direct investor on the management of the enterprise. Ownership of at least 10% of the voting power, representing the influence by the investor, is the basic criterion used (OECD, 2014).

Broadly, foreign direct investment includes "mergers and acquisitions, building new facilities, reinvesting profits earned from overseas operations and intra company loans". In a narrow sense, foreign direct investment refers just to building new facilities. The numerical FDI figures based on varied definitions are not easily comparable.

As a part of the national accounts of a country, and in regard to the GDP equation:

\[ Y = C + I + G + (X - M) \]

[Consumption + Gross Investment + Government spending +(eXports - iMports], where I is domestic investment plus foreign investment, FDI is defined as the net inflows of investment (inflow minus outflow) to acquire a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor. FDI is the sum of equity capital, other long-term capital, and short-term capital as shown the balance of payments. FDI usually involves participation in management, joint-venture, transfer of technology and expertise. There are two types of FDI: inward and outward, resulting in a net FDI inflow (positive or negative) and "stock of foreign direct investment", which is the cumulative number for a given period. Direct investment excludes investment through purchase of shares. FDI is one example of international factor movements.

2.1. Horizontal FDI

Horizontal FDI arises when a firm duplicates its home country-based activities at the same value chain stage in a host country through FDI. Horizontal FDI occurs when MNCs roughly have the same production process in the home- and host country, with the headquarter in the home country and where each plant provides products for its local market (Protsenko, 2003). So, horizontal FDI may act as a substitute for exporting and a desire to be close to the foreign markets and thereby avoiding transportation cost and other trade barriers. Horizontal FDI is also often referred as market-seeking FDI.

2.2. Vertical FDI

Vertical FDI refers to multinationals that fragment production process geographically. It is called vertical because MNC separates the production chain vertically by outsourcing some production stages abroad. The basic idea behind the analysis of this type of FDI is that a production process consists of multiple stages with different input requirements. If input prices varies across different countries, it becomes profitable for the firm to split the production chain (Protsenko, 2003). The basic idea behind vertical FDI is that each production process has different input requirements. For example, processes like assembling need cheap labor and headquarter activities needs technology
and skilled labor. Through the differences in prices of these different kinds of input between countries, it generally becomes cost-effective to separate the production. Thus, the main motivation for vertical FDI is to lower the costs of the production. Furthermore, vertical FDI can be distinguished into backward and forward vertical FDI, based on where all the various kinds of input are coming from. In case of backward vertical FDI, foreign affiliates act as suppliers of input for the parent firm. This type of investments can typically be seen in primary sectors like mining, oil and agriculture. Consequently, backward vertical FDI is also referred to as resource seeking FDI. In case of forward vertical FDI, the parent companies export their products to foreign affiliates for further production, where intermediate or final products are send back to the home country or even exported to a third country (Doan,2009). Besides all these classifications; UNCTAD identifies four different types of FDI. These are listed below with key determinants.

Table 1. UNCTAD- Different types of FDI

<table>
<thead>
<tr>
<th>Motive Of FDI</th>
<th>Key Determinants</th>
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<tr>
<td>Natural resource-seeking FDI</td>
<td>Abundance and cost of natural resources</td>
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<td>Physical infrastructure (ports, roads, railways, etc.)</td>
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<td>Price movements</td>
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<td>Market-seeking FDI</td>
<td>Market size and purchasing power (per capita income)</td>
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<td>Market growth</td>
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<td>Access to regional and global markets</td>
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<td>Tradability of product/service</td>
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<td>Structure of markets</td>
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<td>Efficiency seeking, export oriented FDI</td>
<td>Quality and cost of human resources</td>
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<td></td>
<td>Physical infrastructure (ports, roads, telecom, etc.)</td>
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<td></td>
<td>Trade costs</td>
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<td>Quality of suppliers, clusters, etc.</td>
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<td>Regional integration agreements</td>
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<td>Strategic asset-seeking FDI</td>
<td>Presence of firm-specific assets</td>
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<td>Ease of cross-border M&amp;As</td>
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<td>Efficiency and transparency of financial markets</td>
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3. Spillover Effects of Foreign Direct Investment on SMEs

Foreign direct investment is a leading force of growth for every developing country. It brings new capital, technology and know-how directly to host country. The main idea underlying the FDI liberalization policies of many developing countries and the FDI promotion efforts of international donors such as the World Bank and the IMF is the notion that FDI inflows foster economic growth. As FDI is a composite bundle of capital stocks, know-how, and technology, its impact on economic growth is expected to be manifold (De Mello, 1997; Dunning, 1992). In the ways through which FDI can affect economic growth we can distinguish direct and indirect effects. In this section we review the economic arguments and empirical evidence on the direct contribution of FDI to economic growth while the next section deals with the indirect or spillover effects.

FDI can contribute to economic growth by expanding capital accumulation and technology advances. Following the traditional neo-classical approach to growth, this capital accumulation can affect growth only in the short run (Solow, 1956 and 1957). Long run growth is only possible through a permanent increase in the level of technology and is taken to be exogenous in neo-classical growth models. Yet, more recent growth models consider technology to be
endogenous and see a role for capital in the creation of technological advances (Romer, 1990). Capital allows for investment in the development of new ideas and skills, and since knowledge is – to some extent at least – a public good, it raises the level of technology not only within the firm, but in the entire economy. These externalities account for the permanent advance of the level of technology, which is needed to promote growth in the long run. Thus, according to the new growth theories, capital – including FDI – can permanently affect output growth through increased investment in technology and know-how, increasing the overall level of knowledge and technology in the economy.

Indirect effects of FDI on economic growth can be classified by two main subtitle. Blomström and Kokko (1998) identify two types of spillover effects from FDI to the host country: productivity spillovers and market access spillovers. Productivity spillovers take place when the entry of MNCs in the host country leads to productivity or efficiency benefits in the local firms. Market access spillovers take place when the entry of multinational firms improves the access to export markets for local firms.

Economic theory improves that foreign direct investment (FDI) can generate positive spillovers to domestic firms in the host country. Since multinational corporations (MNCs) are an important source of international capital and technology, their entry can facilitate the transfer of technical and business know-how resulting in productivity gains and competitiveness among local SMEs. These spillover effects develop through best practice demonstration and diffusion, or through the creation of linkages with foreign and domestic firms becoming either suppliers or customers, or through the movement of experienced workers from foreign to local firms. The entry of MNCs may also increase competition and force domestic firms to imitate and innovate. These firm specific advantages may result in technology transfer from the parent firm to its affiliate in the host country of investment and related spillover effects in the host economy by firms.

On the expectation that foreign MNCs will raise employment, exports, or tax revenue, or that some of the knowledge brought by the foreign companies may spill over to the host countries domestic firms, governments across the world have lowered various entry barriers and opened up new sectors to foreign investment. An increasing number of host governments also provide various forms of investment incentives to encourage foreign owned companies to invest in their jurisdiction. These include fiscal incentives such as tax holidays and lower taxes for foreign investors, financial incentives such as grants and preferential loans to MNCs, as well as measures like market preferences, infrastructure, and sometimes even monopoly rights. Domestic firms also benefit from spillovers and externalities associated with FDI through exports and/or international integration (Costa and de Queiroz 2002). MNCs have established global or regional production bases where domestic firms, particularly small and medium enterprises, can participate by serving as potential suppliers of outsourced parts or services. Participation in these networks can also provide domestic firms access to export markets. Global/regional production networks have increasingly grown in sectors such as automotive, machineries, electronics, and garments (Aldaba and Aldaba, 2010)

According to Javorcik (2004), “Spillovers from FDI take place when the entry or presence of multinational corporations increases the productivity of domestic firms in a host country and the multinationals do not fully internalize the value of these benefits”.

3.1. Productivity Spillover Effects

We focus now on the effects of FDI on domestic firms. Following Blomström and Kokko (1998), we define FDI productivity spillovers as the increase on productivity or efficiency of the host country’s local firms as a consequence of the entry or presence of a MNE affiliate. Where, in addition, the MNE cannot internalise the full value of these
benefits. Through this indirect channel, FDI can affect aggregate national productivity. Since this relationship is more complex, we distinguish in this section a theoretical and an empirical subsection.

The common aim of these studies was to identify the various costs and benefits of FDI. Productivity externalities were discussed together with several other indirect effects that influence the welfare assessment, such as those arising from the impact of FDI on government revenue, tax policies, terms of trade, and the balance of payments. The fact that externalities were taken into account was generally motivated by empirical evidence from case studies rather than by comprehensive theoretical arguments. Yet, the early analyses made clear that multinationals may improve allocative efficiency by entering into industries with high entry barriers and reducing monopolistic distortions, and induce higher technical efficiency if the increased competitive pressure or some demonstration effect spurs local firms to more efficient use of existing resources. They also proposed that the presence may lead to increases in the rate of technology transfer and diffusion. More specifically, case studies showed that foreign MNCs may (Blomström and Kokko, 1996):

- contribute to efficiency by breaking supply bottlenecks (but that the effect may become less important as the technology of the host country advances);
- introduce new know-how by demonstrating new technologies and training workers who later take employment in local firms;
- either break down monopolies and stimulate competition and efficiency or create a more monopolistic industry structure, depending on the strength and responses of the local firms;
- transfer techniques for inventory and quality control and standardization to their local suppliers and distribution channels; and,
- force local firms to increase their managerial efforts, or to adopt some of the marketing techniques used by MNCs, either on the local market or internationally.

We explore in detail two mechanisms through which FDI exerts positive spillovers on domestic firms with higher initial productivity: the labor mobility channel and the network effect channel. In particular, firms that are able to hire managers and engineers from the foreign firms have higher productivity. This is supporting evidence that labor mobility provides a channel for FDI spillovers. In addition, firms that hire younger and more skilled labor force tend to have higher productivity when there is more presence of FDI in their city and industry. This is consistent with the argument that learning and interaction among employees (especially skilled labor such as managers and engineers) is a mechanism for FDI spillovers.

Blomstrom, Globerman, and Kokko (1999) argue that the technical capacity of domestic firms increases the likelihood of positive spillovers and hence a smaller technology gap between foreign and local firms results in larger spill overs. In contrast, the theoretical model developed in Wang and Blomstrom (1992) predicts that a larger technology gap between foreign and domestic firms leads to larger spillovers.

The most important reason for countries to seek investments by multinationals is to acquire modern technology and knowledge. As mentioned above all these indirect effects can be summarized by Blomström and Kokko (1998) in four channels. It is also suggested that new technology and knowledge could spill over to local firms which will enhance their productivity. These spillovers and externalities are known to occur through different channels. First of all is labor mobility (Fosfuri, Motta and Ronde 2001; Glass and Saggi 2002; Görg and Strobl 2005) spillover may take place through the movement of workers when well trained employees of foreign firms establish their own firms or take employment in domestically owned firms. Secondly, the presence of multinationals may lead to the spread of information on new technology and production processes also known as “the demonstration effect” (Findlay 1978,

3.2. Literature review

The existing FDI literature shows an increasing number of studies examining the technology spillovers from FDI to domestic firms. However, the evidence that foreign presence generates positive productivity externalities remains limited since the empirical literature indicates mixed results. Many show significant positive spillover effects from FDI while some find no or statistically insignificant result from technology spillover. The diverse results may be attributed to differences in countries’ ability to benefit from foreign investment reflecting varying levels of absorptive capacity and market structure.

The earliest discussions of spillovers in the literature on foreign direct investment date back to the 1960s. The first author to systematically include spillovers (or external effects) among the possible consequences of FDI was MacDougall (1960), who analyzed the general welfare effects of foreign investment. Other early contributions were provided by Corden (1967), who looked at the effects of FDI on optimum tariff policy, and Caves (1971), who examined the industrial pattern and welfare effects of FDI (Blomstrom and Kokko, 1997).

There is a substantial and growing number of papers that test for these spillover effects. Based on Nicolini and Resmini (2006) and Alfaro and Rodriguez-Clare (2004), we classify this large current empirical literature into four generations:
Table 2. Literature Review

<table>
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<tr>
<th>Industry-level studies</th>
<th>Firm-level studies</th>
<th>Panel-data firm-level studies</th>
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<tr>
<td>a) Cross-section</td>
<td>Haskel et al. (2002) look at the aggregate productivity changes associated with the share of MNEs in total employment. Using micro-level panel data for the UK, they find that a 1% increase in the measured MNE presence in an industry raises TFP of that industry by 0.05%. Nonetheless, these positive effects are not consistently found in developing countries and tend to be negative in Central and Eastern European Countries. Djankov and Hoekman (2000) find negative spillovers in the Czech Republic, Yudaeva et al. (2003) report positive horizontal but negative vertical spillovers in Russia, while Konings (2001) finds negative spillovers to domestic firms in Bulgaria and Romania, but no spillover effects in Poland. Girma et al. (2001) report no evidence for spillovers on average but instead, they find evidence for spillovers to firms with a low technology gap with MNEs. This relation between spillovers and absorptive capacity was also found in Girma (2005). Moreover, Peri and Urban (2004) also report a positive spillover effect conditional on the technological gap for German and Italian firms. Sembenelli and Siotis (2005), using a panel data of Spanish firms, find that positive spillovers are larger in R&amp;D-intensive sectors.</td>
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<tr>
<td>b) Panel data</td>
<td>This last group of studies use the semi-parametric estimation method proposed by Olley and Pakes (1996). This methodology deals with the influence that productivity shocks may cause on the endogeneity of the firm’s input selection. Smarzynska Javorcik (2004) looks separately for both vertical and horizontal spillovers in Lithuania. She finds positive backward linkages, but the evidence is not robust for horizontal spillovers or forward linkages. Consistent with the study of Aitken and Harrison (1999), she also concludes that the positive productivity effects originate mainly from joint ventures. Keller and Yeaple (2003) estimate that a 1% increase in the share of foreign-affiliate employment in total employment, increases TFP of local firms by 1.1%. They estimate that FDI spillovers account for about 14% of productivity growth of US firms in the period from 1987 to 1996. Nicolini and Resmini (2006) check for both horizontal and vertical spillovers in Bulgaria, Poland and Romania. They find positive relations but conditional on the absorptive capacity and technological levels in the host country. López-Córdova (2003) finds that FDI increases TFP using manufacturing data for Mexico. This is the result of positive vertical spillovers outweighing negative horizontal effects.</td>
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4. Conclusion

In this paper we surveyed the existing literature on the productivity spillovers of FDI. Our discussion suggests that many of the empirical estimates of productivity spillover from FDI to domestic firms in economies are biased. Foreign Direct Investment (FDI) is considered, in most countries, to be an important component of their development strategy, and policies are accordingly designed to stimulate inward flows. The spread of productivity spillovers is thus a matter of externalities being transmitted from established foreign producers to domestic ones. FDI presence may also improve the infrastructure, quality of labor force and R&D activities of domestic firms, which would have long term positive effects, but would not show up in productivity measures. In transition economies, the regulatory environment might improve in response to the FDI presence. We are leaving the exploration of these issues to future research.

References


