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IFN Working Paper No. 1400, 2021

# **Industrial Policy and Foreign Direct Investment**

Fredrik Sjöholm

# Industrial Policy and Foreign Direct Investment

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## **Abstract**

Foreign Direct Investment (FDI) can benefit host countries by facilitating access to sophisticated technologies, good management and global value chains. However, multinational firms have many alternative locations from which to choose. As a consequence, countries trying to attract inflows of FDI need to consider what types of industrial policies will increase the country's attractiveness to foreign firms. Moreover, different types of FDI are of different value for the host country and might require different sets of policies. This paper starts by examining and discussing the global evolution of FDI. It continues by examining determinants to FDI and the types of industrial policies that are effective in attracting FDI. It ends with a discussion on quality FDI and how host country governments can maximize the benefits of FDI.

Keywords: FDI, MNE, Industrial policy, Host country effects

JEL codes: F21, F23, F60

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## 1. INTRODUCTION

Multinational firms (MNEs) are key actors in the global economy, accounting for more than one-fifth of global output and more than two-thirds of global trade (Qiang et al. 2020). Moreover, around one-third of global trade is between firms within the same MNEs (World Bank 2020, 33). MNEs also conduct a large part of private-sector R&D and are of crucial importance in the development of new technologies.

Despite the importance of MNEs, the views on foreign direct investment (FDI) differ between countries. The overall trend is such that countries have become much more open to FDI in the last five decades. However, there has been a backlash to such liberalization in recent years, which has corresponded with stagnating and even declining amounts of FDI.

The importance of MNEs is based on their characteristics; MNEs are large firms with high productivity levels. This strength is what has enabled the firms to become multinationals and make investments in foreign countries, despite all the high costs that are associated with cross-border investments. It follows that a country can benefit from attracting these strong foreign MNEs. FDI will increase aggregate output, and can also have other positive effects such as increasing a country's involvement in global production chains and fueling the expansion of domestic suppliers. However, it is not easy to convince MNEs to invest in a country; MNEs tend to look carefully at different countries when they decide where to locate new foreign affiliates. Hence, there is room and need for industrial policies that increase the attractiveness of the country for FDI.

Not all FDIs are equally beneficial for the host country. The MNE's behavior in the host country is important. For instance, MNEs that develop linkages with domestic firms will be more beneficial than MNEs that operate in isolated segments of the economy. Accordingly, MNEs that continuously upgrade their operations are of particular benefit to host countries. Hence, the second objective of industrial policy is to maximize the positive effects of FDI by providing an environment where MNEs, for instance, use local suppliers and bring in sophisticated technologies.

This paper examines how FDI can contribute to host country growth and development. We start in section two with a description of how FDI has evolved in the last few decades. Section three summarizes the literature on FDI determinants that provides suggestions on a number of areas where industrial policies can be important. We continue in section four with a discussion on

how policies can be used to maximize the benefits of FDI, and we conclude the discussion in section five.

## 2. GLOBAL FDI FLOWS

The growth in FDI increased rapidly in the late 1980s, and in the 1990s in particular, as seen in Figure 1. More precisely, FDI flows increased by more than 400 percent between 1990 and 1999. There are two main reasons for the growth in FDI. First, the global attitude toward FDI changed from largely negative to welcoming. This change coincided with a more favorable attitude toward globalization in general, and a more hesitant view on regulations and import substitution.<sup>1</sup> The success of some of the early adopters on a development strategy based partly on foreign MNEs, notably some of the Southeast Asian countries, undoubtedly had an important impact on the policy change. Moreover, China opened up for FDI in the early 1990s, which had a large impact on global FDI flows because of China's large size and good conditions for manufacturing production.

The second reason for increased FDI in the 1990s was the rapid development in communication over long distances. Computers and improved telecommunications have enabled surveillance of production chains that are spread out over countries and regions. Together with low and even falling trade costs, this spurred a fragmentation of production chains where some parts were being produced in foreign affiliates. Hence, firms pursue FDI as a way to place production of different parts in different countries.

Growth in FDI continued until the tech crisis in the early 2000s, which had a severely negative effect on FDI. However, the decline was relatively short-lived and a new global peak in FDI was recorded in 2007. Levels of FDI declined again after the financial crisis in 2008–09, partly because banks and other financial institutions stopped providing credit for trade and investments (Bems et al. 2013). The financial crisis was largely over in 2010 but there was never any sustainable recovery of FDI. Instead, there was stagnation up until the Covid-19 crisis in 2020.

This pandemic has had a sharply negative impact on FDI, which is not seen in Figure 1 because available data ends in 2019. However, FDI has been reported to have declined by 35 percent

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<sup>1</sup> Import substitution refers to industrialization and development with the use of tariffs and regulations to shield indigenous firms from foreign competition.

globally in 2020 (UNCTAD, 2021). This decline was substantially larger than the decline following the financial crisis in 2008–09, and FDI flows are now at the same level as in the 1990s. There are several reasons for the decline, one being that the pandemic increased uncertainty, which makes firms reluctant to pursue major investments. It also made travel more difficult, and travel is often necessary for the negotiations that precede a cross-country investment. Moreover, disturbances in global value chains occurred when factories were required to close down because of the pandemic. This made some MNEs concentrate and even re-shore foreign production. Finally, profits have been falling in many MNEs, which in itself reduces FDI since reinvested profits are an important part of registered FDI flows.

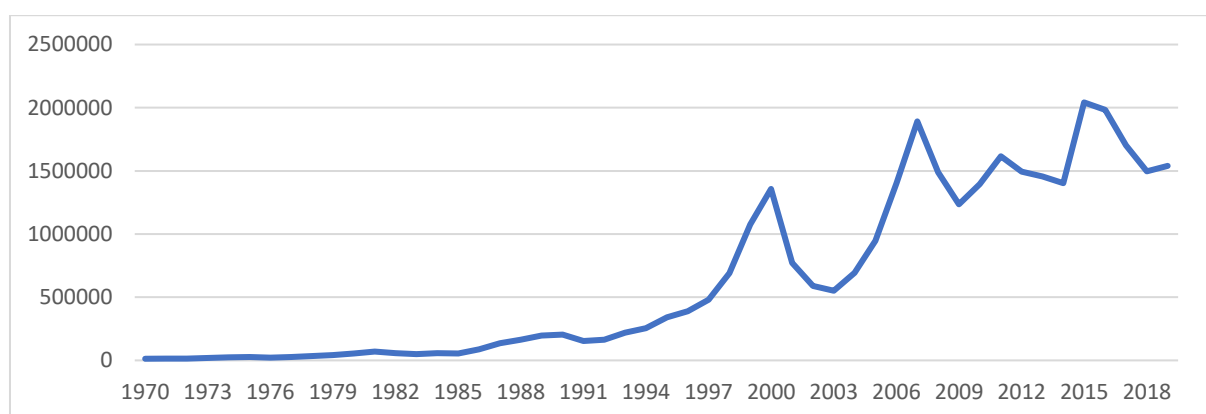
It seems that increased protectionism partly explains the stagnation in FDI. The positive views on globalization in the 1990s changed to more pessimistic ones after the financial crisis. This was partly caused by the large income redistributions taking place as a consequence of increased globalization, and which tended to hurt parts of the middle class in, for instance, the U.S. and the U.K. This had, in turn, political effects (Autor et al. 2020) and eventually contributed to both Brexit (Colatone and Stanig 2018) and the U.S. trade wars.

The home countries of FDI have also changed over time with an increase from countries such as China. State-owned companies and sovereign wealth funds are also large sources of FDI. This has triggered fear among some host countries that FDI is not done only for commercial reasons (Cuervo-Cazurra 2018). As a result, the screening of FDI as a way to address risks to security or national interests, in general, has increased substantially in recent years. Fear of being dependent on foreign powers for important goods and services, a desire to keep domestic technology within the country, and the prevention of sabotage of essential services, are different aspects of these national security concerns and reasons for screening (Ufimtseva et al. 2020). Another argument for a more restrictive view that has gained broader support in recent years, is that a country should not grant access to its domestic market if the same access for its own firms is restricted in foreign markets. This is a discussion that has become important in discussions on Chinese FDI.

The change in attitudes toward FDI is seen in Table 1. It shows the number of policy initiatives that are favorable or negative for FDI. The number of policy changes, including both restrictions and promotions, was higher before than after the financial crisis but has increased in recent years. The nature of these FDI policies has changed from a large share with a liberalizing aim to increasingly more policies aimed at restricting FDI. More precisely, more than five times as many policies liberalized the FDI regime than restricted the same in the five years before the

financial crisis. The ratio declined to an average of 3.4 in 2008–2019 and saw a large drop to 1.4 in 2020. The absolute number of policies restricting FDI went from around 20–30 between 2003 and 2019 to 50 in 2020. Restrictions on FDI are now claimed to be the highest in 20 years and include a range of different measures (UNCTAD 2019). For instance, and as previously mentioned, the screening of FDI has increased. There has been a particular increase in screening in areas such as health-related industries. Moreover, Hufbauer et al. (2013) found an increase in various forms of local content requirements after the financial crisis, which had clear negative effects on FDI.

Figure 1. Global FDI flows 1970–2019 (current prices million US dollars)



Source: <https://unctadstat.unctad.org/wds>

Table 1. Changes in national investment policies, 2003–2020

	2003– 2007 (average)	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Number of countries that introduced changes	67	40	46	54	51	57	60	41	49	59	65	55	54	67
Number of regulatory changes	128	68	89	116	86	92	87	74	100	125	144	112	107	152
Liberalizations/Promotions	107	51	61	77	62	65	63	52	75	84	98	65	66	72
Restrictions/Regulations	20	15	24	33	21	21	21	12	14	22	23	31	21	50
Neutral/Indeterminate	1	2	4	6	3	6	3	10	11	19	23	16	20	30
Ratio Liberalizations/Restrictions	5.4	3.4	2.5	2.3	3.0	3.1	3.0	4.3	5.4	3.8	4.3	2.1	3.1	1.4

Source: UNCTAD (2021), Table III.1., p. 109.



### 3. THE EFFECT OF INWARD FDI ON ECONOMIC GROWTH AND DEVELOPMENT

To summarize the previous section, global FDI has increased substantially in a longer perspective. This development has, however, changed in accordance with the stagnation that occurred after the financial crisis, and experienced a sharp decline during the pandemic crisis. One crucial question to ask is whether this decline has any economic consequences? This brings us to a discussion on the economic impacts of FDI.

A discussion on MNEs and FDI might start from the observation that it is difficult to open up affiliates in foreign countries. Firms need to spend substantial amounts of money and efforts to do so. For instance, the firm needs to collect information on foreign rules and regulations, survey the country for good production facilities and qualified workers, and understand local preferences and tastes if the purpose is to sell its products locally. The firm needs to bear all of these costs before it can establish the foreign affiliate and before it receives extra revenue from this FDI. Moreover, firms establishing themselves abroad need to compete with local firms that often have superior knowledge of local conditions. The MNE, therefore, needs a firm-specific advantage to compete, such as a superior technology, management, distribution network or brand name. It follows that only relatively efficient and profitable firms can afford to take on the costs associated with FDI (Helpman et al. 2004). Empirical studies confirm that firms engaged in outward FDI are larger, more productive and more profitable than firms that restrict their activities to the domestic market (Temouri et al. 2008; Bernard et al. 2018).

The selection of good firms makes FDI attractive to many countries. Foreign MNEs will bring with them their superior firm characteristics, which could have a positive effect on the host economy. Most importantly, foreign firms will raise output and income. This is obvious if there are idle resources in the country (unemployment) but it will do so even when this is not the case, through a transfer of workers from local firms with relatively low productivity to foreign MNEs with relatively high productivity. This positive effect of FDI on the host economy will also benefit workers through higher wages (Lipsey and Sjöholm 2004; Heyman et al. 2007), and it might benefit governments through increased taxes. However, the latter aspect is more uncertain as MNEs typically pay relatively low corporate taxes (Davies et al. 2018). A network of affiliates in different countries makes it possible for MNEs to use transfer pricing to show

high profits in countries with low corporate taxes and low profits in countries with high corporate taxes.

There are several other effects of FDI on the host country. For instance, foreign MNEs might use and thereby increase the output of local suppliers. Moreover, some MNEs provide support to suppliers, which will have a positive effect on productivity. Hence, the presence of foreign MNEs could benefit firms providing inputs and components, including both manufacturing and service sector firms. Another indirect effect will occur if some of the business practices and technology in the foreign MNEs leak out to local firms. This externality is often referred to as “spillovers” from FDI (Blomström and Kokko 1998). One mechanism is if domestic firms become aware of technology and business practices when foreign MNEs establish themselves in the country and simply imitate the MNEs. Another mechanism could be if local business partners in joint ventures use the technology in other projects. The existing empirical literature is somewhat inconclusive but tends to find spillovers from FDI (Keller 2021). It is unclear if such spillovers only benefit local firms in up- and downstream industries, or also firms within the same industry as the foreign MNE, despite increased competition (Görg and Greenaway 2004).

Hence, FDI can be an important contribution to economic growth and development. However, based on empirical studies, it is difficult to say exactly how important and to identify the exact mechanisms. One reason is that the relationship between economic growth and FDI is complex. Causality is likely to run in both directions; FDI increases growth in host countries but high economic growth is also attracting more FDI. The effect of FDI on economic growth does also seem to vary between countries that differ in different institutional- and socio-economic contexts. For instance, a high level of human capital seems to increase the growth effect of FDI, perhaps by facilitating technology transfers and externalities (Su and Liu 2016). Moreover, it seems likely that different types of FDI differ in their impact on the host country, and also that countries at different stages of development benefit from different types of FDI. For instance, labor-intensive manufacturing has been of significant importance in many countries in earlier stages of development, whereas technology-intensive FDI might be of relatively large importance in high-income countries.

Moreover, one often distinguishes between three different motives for FDI: market-, resource-, and efficiency-seeking FDI. The first is FDI that is pursued to be close to a market where the firm wants to sell its products, and the second is done to gain access to natural resources. Efficiency-seeking implies that firms divide the production chain into different parts and place

production of these parts in countries where it is done in the most cost-efficient manner. Another distinction is between horizontal and vertical FDI, where the former replicates the home country operation in a foreign country while the second divides the production chain into different parts. As we will discuss below, different types of FDI can and do have different effects on the home country.

## 4. ENCOURAGING INFLOWS OF FDI

### *4.1 Restrictions and hurdles*

The above discussion shows that there are positive host-country effects of FDI. It follows that countries will benefit from implementing policies that are viewed favorably by MNEs. The first step is to allow MNEs to enter and abolish different types of restrictions. As previously discussed, many countries have restrictions on FDI, and restrictions have increased in the last decade. However, the avoidance of restrictions is a necessary but insufficient measure for attracting more substantial amounts of FDI inflows. The second step is to make it easier to invest in the country. Bureaucracy, red tape and various forms of legislation can be a major hurdle for FDI. Cumbersome business licensing and permit procedures have negative effects on FDI (De la Medina Soto and Ghossein 2013; Hufbauer et al. 2013). Examples of entry barriers include restrictions on hiring foreign personnel, discriminatory licensing requirements, approval by multiple government agencies, and requirements to provide detailed forward-looking information on various aspects of the operation (World Bank Group 2017, 22). The procedures and efforts that are required to establish a company vary substantially between countries (World Bank Group 2017), and they negatively impact FDI inflows (Hufbauer et al. 2013). Hence, the simplification of these procedures is an important way by which to improve the country's attractiveness for FDI.

One way to reduce barriers to FDI is to make bilateral or multilateral investment agreements (IIA). Such agreements are based on the judgement that investments are good and that various policies can increase them. Areas and issues that are included in IIAs include the admission, protection and treatment of FDI. A dispute settlement procedure is often included. A large part of IIAs is the attempt to increase transparency on rules and regulations and thereby reduce uncertainty for firms interested in pursuing cross-border investments. However, the empirical literature does not provide strong evidence of a positive effect of IIAs on the volume of FDI (e.g., Yackee 2009). One reason could be that IIAs are negotiated between countries that are

well integrated in terms of cross-border investments; the causality goes from integration to IIAs rather than the other way around. Another reason could be that cross-country studies fail to find any effect since there is significant heterogeneity between industries, countries and types of IIA, a hypothesis that receives some support in the literature (Colen et al. 2014; Berger et al. 2013; Haftel et al. 2010).

It should be noted that many IIAs include problematic aspects. According to some observers, IIAs do not give sufficient rights to host countries and responsibilities to foreign investors (Sauvant 2021). In particular, there are arguments that the restrictions on what economic and social policies host country governments can implement without compensating foreign investors are too severe. Some countries are therefore renegotiating bilateral investment agreements, a development in which the EU has been particularly engaged (UNCTAD 2021, 108). How agreements can be designed to both increase FDI and account for aspects such as corporate social responsibilities are now negotiated and discussed in several different forums and international organizations (Sauvant 2021).

#### *4.2 Country characteristics and FDI*

In addition to the legal framework, there are obvious country characteristics that foreign MNEs favor and an equally obvious variety of country characteristics that discourage FDI. Guidance on important country characteristics can be found in the existing literature on FDI determinants. However, one should bear in mind that there are two serious shortcomings with most of the empirical literature, which make strong policy recommendations difficult. The first problem is that the studies differ substantially in scientific quality. For instance, most papers measure correlations between FDI and host country characteristics, rather than causal relationships. More precisely, few studies have used common tools for measuring causalities, such as instrumental variables, regression discontinuity and natural experiments.

The second methodological problem concerns data on FDI. Most studies on FDI suffer from a problem with measurement errors. There are a few studies using industry or firm-level data on output to measure determinants to FDI; however, most use the financial flows from the balance of payments data, which are affected by various factors and only have a weak link in regard to actual production by MNEs (Lipseý and Sjöholm 2011). FDI flows in balance of payments data often do not originate from the countries to which they are attributed, do not enter the countries

that are their supposed destinations and, if they do enter the declared destinations, do not remain in those destinations. They often represent bookkeeping entries in corporate accounts, but no economic activity such as the employment of labor, the production of goods and services, or the installation of capital assets. For instance, many tax havens are among the largest receivers of FDI despite the fact that no actual production in MNEs is taking place in these countries.

From the discussion above, it is clear that there is room for more research on FDI determinants, research that will attempt to estimate causal effects using appropriate methodologies and data. Because of the aforementioned caveats, the variables included in Table 2 are a somewhat subjective assessment of the literature.

Some country characteristics can be seen as exogenous to the country, or outside the control of governments and policymakers, and others as endogenous, or affected by economic policies. The distinction is a simplification in the sense that it might be possible to change some exogenous variables. For instance, market size is one of the most robust factors affecting FDI inflows. Whereas the size of a country is difficult to change, better infrastructure will make the domestic market more integrated and larger, and regional integration might make foreign firms treat the country as part of a larger market.

Other exogenous characteristics include a strong geographic aspect; FDI flows are relatively high between countries located in close proximity. This has meant that some countries and regions benefit by being located close to large home countries of MNEs. For instance, Southeast Asia has received large amounts of FDI from Japan; Mexico from the U.S.; and East Europe from the EU. There are different reasons for a strong geographic component in FDI. A short geographic distance typically means large similarities in preferences, culture, and other such factors, which can positively impact FDI. Moreover, MNEs prefer to have foreign affiliates within the same time zone and close enough to make travelling and visits easy. Finally, short distances reduce transport costs, which is another positive determinant to FDI, especially for efficiency-seeking FDI.

Table 2. Host country determinants to inflows of FDI.

Type	Variable/Host-Country Characteristics	Effect
Exogenous	Geography  Market Size	Relatively large FDI inflows from nearby countries  Large countries receive large FDI inflows
Endogenous	Taxes  Labor Costs/Productivity  Human Capital  Stability  Infrastructure  Openness to Trade	Low taxes increase FDI inflows  Low wages and high labor productivity increase FDI inflows  High human capital endowments increase FDI inflows  High economic and political stability increase FDI inflows  Good infrastructure increases FDI inflows  Openness increases FDI inflows

From a policy perspective, it is more interesting to look at the endogenous variables. A number of such country characteristics are seen in Table 2.

Low taxes increase FDI. The effect of low taxes is perhaps surprising in light of our previous discussion on the ability of MNEs to avoid taxes through transfer pricing. Taxes seem to matter most for location decisions among countries that are similar in other respects, and low taxes cannot compensate for a poor and unattractive investment climate (Echandi et al. 2015, 14–15). One example is that FDI to the U.S. declined substantially between 2017 and 2019, despite the fact that corporate taxes were cut from 35 percent to 21 percent (Djankov and Zhang 2020). The cut in tax rates could not balance other aspects that were seen as negative by foreign MNEs, such as increased tariffs and non-tariff barriers.

The estimated elasticities, or how much FDI declines when taxes increase, varies between studies. It seems that the effect is larger in Europe than in most other places. For instance, in a slightly dated study, Desai et al. (2002) found that a 10 percent higher tax rate in Europe is associated with a 7.7 percent decline in FDI inflows.

Not only do corporate taxes matter for FDI, but in fact, some other taxes might be more important since MNEs are good at moving profits to countries where corporate taxes are low. Other taxes are more difficult to avoid and therefore relatively important for location choices. This could, for instance, include environmental taxes. Moreover, empirical studies have found effective average tax rates, effective marginal tax rates, and statutory tax rates to have an impact on FDI (Echandi et al. 2015, 14). Finally, different types of FDI are more or less sensitive to taxes. Empirical studies tend to suggest that efficiency-seeking FDI tends to respond most to taxes (Azémar and Desbordes, 2010).

Labor costs are important for FDI. But the cost and wages should be put in relation to the productivity of the labor force. Hence, it is the per-unit cost of production that matters for FDI rather than the wages themselves. Moreover, the importance differs between different types of FDI. In comparison to MNEs that open foreign affiliates in order to sell on the domestic market, efficiency-seeking FDI is more sensitive to labor costs.

Labor productivity is affected by a range of factors including human capital, which in itself is found to have a positive effect on FDI; foreign MNEs are attracted to countries with well-educated populations. However, the discussion in the literature on the roles of human capital and education is rather vague. For instance, what does a skilled labor force mean? Is it a pool of experienced and well-trained workers, a highly educated population or something else? There seems to be a need for more research on how skills affect FDI since the literature provides little guidance on these issues.<sup>2</sup>

Infrastructure is found in many studies to positively affect FDI. But infrastructure is another vague concept including different aspects. Different types of infrastructure are presumably important for different types of FDI. Some firms might be concerned about ports and airports that connect the host country to the rest of the world, whereas other firms are more interested in the domestic transport system. Others yet might look at some detail on the cost and reliability of electricity supply.

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<sup>2</sup> Many studies use the share of the population with university education as a way to measure skills, and this variable has a positive effect on FDI.

Openness to international trade is important for FDI in most empirical studies (e.g., Görg and Labonte 2012), even though the theoretical effect of increased openness is unclear. More precisely, FDIs and exports can sometimes be substitutes rather than complements; firms might choose between serving a foreign market through exports or through a foreign affiliate. High tariffs will make export more expensive and the firm will then choose FDI. However, a more important and dominating factor is that MNEs are trade intensive: they export more of their output and import more of their inputs than local firms do (e.g., Bernard et al. 2018). This is of course most pronounced in MNEs that have divided up the value chain and produce inputs and components in different countries; however, it is also the case for other types of FDI. Hence, trade barriers will make the operation of MNE networks more difficult and expensive, which will tend to discourage them from investing in the country.

Conflicts and turmoil are typically found to be negative for FDI. This is the case when it comes to economic turbulence but also when it comes to political and social turbulence. Economic instability includes high and volatile inflation and deep recessions. Political instability includes dramatic changes in political power or in the policies favored by different parties. Exactly how important stability is for FDI is difficult to judge from the literature but surveys by the World Bank found that investors regard political risk as one of the main negative aspects that they take into account (MIGA 2014). It seems reasonable that the importance of stability differs between different types of FDI.

The discussed policies are not discriminatory; they will benefit foreign and domestic firms alike. Hence, a key conclusion is that the most important policies to attract FDI are the same policies that encourage domestic firms and domestic entrepreneurship. A good business environment, in the many different dimensions described above, will bring strong domestic and foreign firms alike. One difference between local firms and MNEs, however, is that MNEs have more location choices than domestic firms, at least in comparison to small domestic firms. More specifically, MNEs are relatively good at locating where the conditions are best, whereas domestic firms face larger hurdles and are more constrained in location decisions. Hence, a poor business environment will presumably have a larger negative impact on FDI inflows than on domestic business activities.

Moreover, some policies will have an impact on the inflows of FDI but not necessarily on domestic firms. The provision of information is one such aspect. Foreign firms know less about a country than domestic firms. Host country governments can provide information and help to foreign MNEs on various practicalities for investments, as one way to overcome this hurdle for



FDI. The work in attracting FDI is often organized by investment promotion agencies (IPAs). There are, according to the World Bank Group (2017, 18), more than 200 national IPAs and around 2,000 local IPAs that are part of subnational governments. IPAs are typically organized around targeted industries with specialized staff working in these different units. Many IPAs offer investment incentives and investor facilitation to firms in targeted industries (Alfaro and Charlton 2013). It seems reasonable to assume that such activities have a positive effect on FDI but the magnitude of the effect is unclear, as judged by the empirical literature. How IPAs work differ between countries which could be one reason to why studies differ in their findings. A recent study on IPAs in Europe suggests that sub-national IPAs that target specific sectors have positive effects on FDI (Crescenzi et al. 2021).

A related policy measure is subsidies for MNEs located in the country. Such support is common and has been in place for a long time in, for instance, the EU, the US and many other developed countries (Echandi et al. 2015, 15). The reason behind subsidies is a belief that the social value of the investments is larger than the private value. In other words, society is to gain more from the FDI than what is captured by production by the firm. Studies on such financial incentives suggest that the effect on FDI is, at best, very limited. For instance, Wren and Jones (2011) examine a large program in the UK that provided grants to FDI located in some specific areas. The estimated effect was positive but very small.

The discussion above is based on results from econometric studies. An alternative approach is to distribute surveys among firms and ask about important factors behind investment decisions. Such surveys have the advantage that they can capture more subtle aspects that are difficult to measure in econometric studies. One example of a survey-based paper is Ohmic and Stephenson (2019), who survey firms and IPAs. They find that aspects such as transparency and predictability of investment measures; streamlined and fast administrative procedures and requirements; and arrangements to enhance coordination and cooperation, are viewed as important determinants to the location of FDI.

## 5. MAXIMIZING THE BENEFITS OF FDI

### *5.1. Choosing the type of FDI*

The discussion above describes some important determinants of FDI. A host country government might also be interested in attracting some specific types of FDI that are seen as being particularly valuable. Around 70 percent of all countries target specific industries

(Charlton et al. 2004). Moreover, policymakers are not only interested in attracting FDI but also in maximizing the host country's benefits by affecting the MNE's behavior. Hence, there is room for policies that improve upon conditions crucial for some types of (valuable) FDI, and policies that affect the behavior of entering MNEs. The latter could, for instance, include collaboration with local firms, technology transfer, and industrial upgrading. Again, this is important if the economic effects differ between different types of FDI. Previous studies suggest that this is the case; the growth effect of FDI depends on aspects such as, for instance, the MNE's skill intensity, suggesting that targeting might be appropriate (Alfaro and Charlton 2013). It should also be noted that the perceived value of FDI might not be restricted to economic aspects but could include, for instance, social aspects. FDI that has a broader positive impact on the host country is sometimes referred to as "sustainable FDI" (Sauvant and Gabor 2021) or "quality FDI" (OECD 2019).

Two different factors are typically taken into account when the value of a particular FDI is being discussed. The first one is the degree of possible externalities. High-tech MNEs tend to be viewed as valuable because of the presumed technological spillovers. Host governments hope that technology-intensive FDI will spur the development of a domestic high-tech industry. Whether technology-intensive FDI is really more valuable than other FDI is questionable and seems to depend on the context: the host country must have the right conditions for utilizing and benefitting from technology-intensive FDI, for instance, through a sufficiently skilled workforce and sufficiently developed domestic firms.

Job creation from FDI is another aspect that is often looked upon. MNEs do create many jobs in comparison to local firms (Lipsey et al. 2013), and MNEs contribute to a substantial share of total employment in most countries, for instance, 22 percent of total private industry employment in the U.S. and 6.4 percent of total urban employment in China (Qiang et al. 2020).

Job creation is often an argument used by policymakers in favor of subsidies to FDI. However, subsidies to FDI can sometimes amount to huge sums for every new job. Delevic (2020) reported that Nissan received subsidies amounting to 11,000 USD per new job when it established an automotive factory in the U.S. and Subaru received 50,000 USD per job for a similar establishment. Moreover, India gave subsidies to Ford amounting to over \$200,000 per job created in a new factory (Thomas 2010). These huge sums could be justified only if there is a crowding-in of jobs (i.e., if the new factory increases employment in many other firms). It is unclear if such crowding-in typically takes place, at least to the magnitude that would make

cost–benefit analysis justify the subsidies. Delevic (2020) found no effect on employment in Serbia beyond the subsidized jobs (i.e., there is no additional job creation).

Hence, externalities from high-tech industries or job creation are two aspects that are often important in shaping the FDI policies of a country. One difficulty with an overly strong focus on, for instance, externalities is that it might make governments target firms in industries where the country has no clear competitive edge, and where the externalities, therefore, never materialize. An alternative approach is to favor FDI in industries where the country already has a strong base. In other words, the host country tries to strengthen already established clusters by encouraging FDI within the same industry or in industries with backward and forward linkages to the industry.

### *5.2.Affecting the behaviors of MNEs*

The benefits of FDI increase if the foreign MNE gets rooted in the local economy, for instance, by using local suppliers. Linkages will increase output and employment in local firms and could also involve flows of tangible and intangible assets (UNCTAD 2001). Alfaro-Urena et al. (2020) examine the effect of linkages with MNEs in Costa Rica. The positive effect on local firms is relatively large; they grow in size, productivity increases, and they are also able to start to sell their products to other new buyers. The positive effect is caused by MNEs demanding that local suppliers improve management, change sourcing strategies, and hire more skilled workers.

Most MNEs seem to have relatively few direct linkages of this sort with the local economy, even in developed countries. This is particularly true for relatively new FDI whereas, under the right conditions, linkages might materialize and expand over time. For instance, Scott-Kennel (2007) examines linkages between MNEs and local firms in New Zealand. Only around 14 percent of the MNEs are classified as having a broad set of linkages with the local economy. The amounts of linkages were positively related to the age of MNEs and also affected by the line of businesses.

Moreover, different types of FDI are associated with different amounts of linkages. Market-seeking FDI tends to develop more forward and backward linkages with local firms, compared to resource or efficiency-seeking FDI (Farole and Winkler 2012; Sánchez-Martín et al. 2015). Efficiency-seeking FDI is often viewed as particularly valuable for host countries since it

enhances participation in global value chains. However, high-quality suppliers are typically required for efficiency-seeking FDI to materialize, since that is necessary for MNEs to compete globally.

There is a role for governments to play in the development of linkages, mainly because of market failures, such as asymmetric information. Good information about local suppliers is being highlighted by MNEs as important for where to locate their foreign operations (Omic and Stephenson 2019). Accordingly, local firms might need help to gather information on the presence of MNEs and what their demand for inputs looks like. It is costly and cumbersome for individual firms to collect such information. IPAs can play an important role simply by providing information on potential suppliers to MNEs, and information on potential customers to local firms, for instance through an accessible database. In addition, more active work to match MNEs with local suppliers can be pursued. Some countries have successfully invested significant effort into such activities. For instance, the development of Singapore's strong electronics industry was enhanced by a government program that matched local suppliers and foreign MNEs, with the hope that such meetings would develop into a mutually beneficial collaboration (Brown 1998).

Some governments instead try to force through linkages between MNEs and local firms. The local content requirement is a policy often used in developing countries, although they tend to be prohibited by the WTO (Echandi et al. 2015, 27). The intention is that local content requirements should accelerate the integration of foreign MNEs with the local economy. However, its benefits are highly questionable since it tends to make more competitive MNEs shy away and invest in other countries. This is the case for efficiency-seeking FDI in particular, where any policy that runs the risk of increasing the cost of production will discourage MNEs. Hufbauer et al. (2013) examined the effect of 117 local content requirements across the world and found that it negatively affects FDI, trade, and employment.

Instead of policies trying to force MNEs to engage with local firms, local firms need to upgrade their operations and be able to compete internationally to become of interest as suppliers to the MNEs. There are several advantages for MNEs with using local suppliers. For instance, it might reduce trade costs, and locally produced input goods might help to adapt products for the local market. Hence, MNEs will use local suppliers if they can. However, MNEs often indicate that lack of direct linkages with domestic suppliers is caused by the poor quality of inputs, poor cost-competitiveness of suppliers, or poor reliability of supply (Jordaan et al. 2020, p. 7). MNEs make a simple cost–benefit analysis when they decide on their sourcing strategies and the poor

quality of suppliers or even uncertainties regarding the quality make it less likely that sourcing will be local. Governments might reduce uncertainties by providing quality and certification schemes for local producers. Moreover, government organizations can complement efforts by the MNEs and local suppliers, and together strive for a broad and competitive supply base. It seems that such programs rely on the active engagement of all three parties to be successful: the host country government, local suppliers, and foreign MNEs (UNCTAD, 2001). In particular, cost-sharing increases the commitments of participating firms.

Erchandi et al. (2015, 25) argue that host countries can improve upon linkages by paying attention to aspects such as the “learning and innovation infrastructure, trade policy business and investment climate, access to finance, and labor market regulations.” Referring to the mentioned Singapore case, the government-supported local firms’ quality upgrading programs in various ways (Brown 1998). Moreover, MNEs had managers working full time in conjunction with the supplier to improve quality, which benefitted both suppliers and MNEs.

Finally, it is desirable with FDI that strive to upgrade production over time, to increase productivity and avoid industrial stagnation. Such upgrading will depend on the context and takes place if there is, for instance, a sufficient skill base in the host country. The host country’s government has an important policy role in providing an environment prone to quality upgrading.

Some studies also suggest that tax incentives to MNEs that upgrade their production, for instance, by introducing new products and direct R&D support, might have positive impacts (Brown 1998), but the issue needs to be addressed in more general cost–benefit frameworks.

Again, the choice of activity taking place in a country by MNEs will rest on simple comparisons of costs and benefits. Hence, technology upgrading will take place if it is profitable. MNEs will avoid bringing in new technology if it is less suitable for the local conditions, or if they run the risk of losing it to domestic competitors. This highlights the importance of domestic institutional factors for how MNEs behave. Protection of intellectual property rights and good juridical systems increase the likelihood for MNEs to upgrade production over time.

Finally, the above discussion focuses on linkages between MNEs and local backstream suppliers. It can also be beneficial for countries to attract MNEs in support industries. Such MNEs will make downstream firms, local as well as foreign, more competitive. It will also contribute to the network of firms and create dynamic clusters. Clusters are important for attracting other MNEs to the country.

## 6. CONCLUDING REMARKS

FDI has the potential to spur growth and development in the host country. MNEs are larger and more productive than local firms, pay higher wages, and are integrated into global value chains. Policymakers should, therefore, think carefully about how they can attract MNEs to the country. Our discussion offers some suggestions.

The first conclusion from the literature review on FDI determinants is that any improvements in the general business climate will have a positive effect on inflows of FDI. Hence, good economic policies will benefit both domestic firms and attract inflows of FDI. Such policies include improvements in education, taxes that are not substantially higher than in other neighboring countries, good infrastructure, stable macroeconomic policies, and an open trade regime. There are also other factors that affect MNEs more than domestic firms. For instance, good FDI policies would focus on abolishing various regulations and red tape that can be cumbersome and make MNEs choose to invest in other countries. Finally, it can be difficult for MNEs to gather good information which means that government agencies (IPAs) have a role to play.

Attracting FDI can be seen as a first step, which should ideally be followed by policies aimed at maximizing the benefits of having foreign MNEs located in the country. Such policies should aim to make the MNE develop linkages with the local economy and to continuously upgrade their activities in the country. The first requirement is the right conditions for such linkages to develop. This means FDI in industries where the country has good conditions for production and growth. It is unlikely that more substantial linkages will develop if a good supply base does not already exist. The government can play an important role in implementing policies that foster competitive suppliers. These are similar to the general good business climate discussed above. Finally, there might also be a matchmaking role to play for the government; the likelihood for linkages will increase if foreign MNEs and local suppliers are aware of each other's existence.

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