

FDI IN COLOMBIA
POLICY AND ECONOMIC EFFECTS

by

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Abstract

During the past few decades, the competition for foreign direct investments (FDI) has increased around the world. FDI can contribute to economic development not only by being a source of foreign capital, but also by providing employment opportunities, increasing competition, and most importantly transferring skills and knowledge i.e. spillover effects. However, these positive effects are not automatic for host countries and depend largely on the policies in place. Taking a closer look at Colombia, this paper examines policies used to attract FDI and some of the effects FDI has had on the Colombian economy. It is found that FDI has contributed positively to Colombia's economic development but that more needs to be done in order for Colombia to effectively compete for FDI and benefit to a larger extent from it.

Keywords: Colombia, Foreign direct investments, FDI policies, Host country effects, Spillover effects

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List of abbreviations

FDI	Foreign Direct Investment
FTZ	Free Trade Zone
ISI	Import Substitution Industrialization
LSC	Legal Stability Contract
MNC	Multinational Corporation
PFTZ	Permanent Free Trade Zone
R&D	Research and Development
SEFTZ	Single Enterprise Free Trade Zone
SMEs	Small and Medium-Sized Enterprises
TFP	Total Factor Productivity
UNCTAD	United Nations Conference on Trade and Development
VAT	Value Added Tax
WTO	World Trade Organization

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1 Introduction

One of the most notable features of economic globalization is the increased flows of foreign direct investments (FDI) around the world. Over the last decade, FDI flows have grown twice as fast as trade.

FDI is often seen as an engine for economic growth and development. Many countries, including Colombia, have therefore lowered FDI entry barriers and adopted specific strategies to attract investments from multinational corporations (MNCs). The favorable treatment towards foreign companies is motivated by the belief that the presence of MNCs will not only attract foreign capital to the host country, but also increase employment, exports and competition. Furthermore, it is believed that foreign firms with superior knowledge and technology will “spill over” some of these characteristics to host country firms, leading to increased productivity and output.

The objective of this study is twofold. Policies used by the Colombian government to attract FDI will be surveyed and evaluated. Studying such policies is highly motivated since they can optimize the volume and positive impact of FDI in the host country. The second objective of this study is to examine the impact of the presence of foreign companies on the Colombian economy. The effect on employment, production, productivity and exports will be looked at more closely.

The remainder of the study is organized as follows: Chapter two provides theoretical aspects of FDI and its effect on host economies. In chapter three, the history of the Colombian FDI policy framework and the FDI policy today is presented. In chapter four, a discussion of how the volume and

impact of FDI in Colombia can be optimized is carried out. Chapter five gives a closer look at patterns of FDI inflows to Colombia. Chapter six analyzes direct and indirect effects of FDI on the Colombian economy. Chapter seven summarizes and concludes the study.

2 Determinants and Effects of FDI

In this chapter, definitions of the different types of FDI and theoretical explanations of why firms choose to invest abroad are given. The transmission channels through which spillover effects occur are also discussed, together with a presentation of what previous studies can tell us about the impact of FDI on the recipient economy.

2.1 Definition of FDI

FDI is generally defined as an investment by a firm from one (home) country in another (host) country, where the foreign investor owns at least 10% of the company in which the investment is made (OECD 1996). Further, the investment involves a long-term relationship between the investing firm and the affiliate where more than only money capital is involved; for instance managerial control or technical guidance.

FDI can enter a foreign market in a number of ways. *Greenfield investment* involves establishing a new plant with its own production abroad. *Brownfield investment* is when a firm purchases an existing firm or plant in a foreign market. (Lahiri 2009 p. 1) The investment can also take the form of a *Joint venture*, which implies a partnership between the foreign firm and a firm from the host country.

2.2 Incentives behind FDI- why firms invest abroad

In order to explain the patterns of FDI, and to formulate appropriate policies to capture inward investment, it is necessary to understand how MNCs choose investment locations. The aim of this section is therefore to clarify the incentives for MNCs to invest abroad and in what way host governments can influence the investment flows.

Theory (see e.g. Markusen *et al.* 1995) suggests that the reason for a foreign firm to invest abroad is that it possesses some kind of specific advantage over local firms. If the foreign firm was identical to domestic firms, it would not take on FDI, which is logical if we take into account the disadvantages of establishing in a foreign environment. These disadvantages consist of costs associated with breaking into a new market with an unknown business community, risk of expropriation and higher wages paid to managers and technicians relocated abroad. Linguistic, cultural and institutional differences from the home market are also associated with additional expenditures.

The domestic firms do not face these costs, hence the foreign firm must enjoy some kind of compensating advantage vis-à-vis the domestic firms in order to benefit from entering the new market. This advantage is usually superior know-how or technology. From the host country's point of view, it is hoped that some of these advantages will spill over to the receiving economy, and hence increase productivity there.

An early attempt to explain the patterns and strategic behavior of MNCs is the so-called eclectic paradigm or OLI theory developed by John Dunning (see Dunning 1977, 1981). The OLI theory was first presented in the end of the 1970s, but since then Dunning himself, and numerous other scholars have extended it to better suit the new forms of international business and

increased globalization of today. The OLI theory can be used to identify the advantages that MNCs must possess in order to make an investment decision and it has been frequently used among researchers to better understand how multinationals make investment decisions.

According to the OLI theory, a firm must own three advantages over local firms in order to take on FDI, each represented by one of the letters O, L and I. The O stands for *ownership*, and refers to competitive advantages. This often involves firm-specific assets such as superior technology or management skills, but could equally be a brand name or a patent. The *location* advantage (the “L” in OLI), regards any characteristics of the host country that makes it more profitable for the MNC to produce there rather than to produce at home and then export to the foreign market. Economic, institutional and political characteristics of the country are included, as well as market size and costs of resources (Markusen *et. al* 1995 p. 396). The I stands for *internalization*, which regards the fact that the MNC will make a direct investment in a foreign market only if the gains are larger in doing so than reaching the foreign market through licensing or selling technology to local entrepreneurs (Filippov and Costa 2007, p. 6). Through the direct investment, the firm can avoid the costs associated with operating from a distance to the market it serves and furthermore keep its ownership and control over the company.

Economic theory also provides an extension of the OLI paradigm, where different types of FDI are identified depending on the reasons for the firm to invest abroad (see e.g. Lahiri 2009). The objective of *resource-seeking* FDI is to secure access to low-cost labor or natural resources for the investing firm. In some cases the aim of the multinational is to acquire these factors of production at a lower cost than in its country of origin and sometimes they are not available at all in the home country. This is often the case with inward FDI to developing countries, where the foreign firm is frequently seeking national resources or low-cost labor. *Market-seeking*

FDI takes place when the investment aims at penetrating new markets or maintaining already existing ones. *Efficiency-seeking* FDI seeks to reconstruct existing production through taking advantage of a lower cost structure in the host economy or economies of scale in the production. Finally, *strategic-asset seeking* FDI refers to investment that enables the MNC to protect or develop its ownership specific advantage. The economic attractiveness of a country for FDI depends to a large extent on these objectives of the investing firm.

At this point, it is appropriate to mention the possibilities for host governments to influence the flows of FDI. Inward flows of foreign investment are often seen as a top priority, especially in developing countries. However, within the conditions for the presence of FDI discussed above (ownership, location and internalization), the only one that lies within the power of the host country to change is the location condition; the other ones depend on the criteria of the investing firm (UNCTAD, 1998 p. 90).

2.3 Spillover effects of FDI –theory and empirics

This section aims to clarify the channels through which spillover effects occur and also explain what we can learn from earlier research. It seems that depending on the host country's characteristics and whether links with the MNC are established within or between sectors, the effect of spillovers on the economy varies and some effects can even be negative for the host country.

2.3.1 Different types of spillover channels

Spillovers occur when the MNC transfers firm-specific assets such as technological know-how, marketing skills and international experience to

the host-country firms. The host country can benefit from spillover effects since they tend to improve domestic productivity. There are various different channels from which spillovers come about. Görg and Greenaway (2003) divide these channels into four different groups: spillovers from imitation, spillovers from increased human capital, spillovers from increased competition and export spillovers.

Spillovers from imitation

Since the MNC often possess superior technology, know-how and marketing skills, host country firms have a lot to gain from watching and copying the MNC affiliate's technology or production techniques. Throughout history, imitation has been frequently used by developing countries in the process of improving their technology skills. However, it is not very likely that the MNC is willing to let go of its firm-specific assets since this results in increased competition between the MNC and the local firms. The MNC might therefore try to protect its assets and prevent the spillover effects by using intellectual property rights or by raising the wages above the local market level to make sure that the human capital stays within the company.

Spillovers from improvements in human capital

Even though the MNC tends to place its investments in sectors where the wages are relatively low, it usually demands relatively high-skilled labor from the host country (Görg and Greenaway 2003, p. 3). The multinationals tend to invest in training of the local labor force, which increases the level of human capital in the country, an effect that can spill over to other sectors in the economy and last for a relatively long time. Additionally, when skilled workers leave their jobs at the MNC, they take their skills with them and if they choose to work at a local firm, it will benefit from the higher skills obtained.

Competition spillovers

When a foreign firm enters the local market, the number of firms in the market will increase, hence competition also increases. This is positive for the host country since the local firms are given incentives to increase their productivity, invest in more human capital and use their resources more efficiently in order to compete with the MNC (Görg and Greenaway 2003, p. 4). If there initially was a monopoly situation in the local market, the entrance of the multinational can break such an inefficient market structure.

Spillovers from exports

Domestic firms in developing countries normally have limited knowledge about how to penetrate export markets since this is generally associated with high fixed costs (creating transport infrastructure, learning about consumer tastes in foreign markets, establishing distribution networks and so forth) (Görg and Greenaway 2003, p. 4). However, the domestic firms can learn how to export from the multinationals investing in their country. The MNCs already possess this knowledge hence the domestic firms can imitate and learn from them.

2.3.2 Negative spillover effects

The fact that an MNC affiliate has been installed in a developing country does not necessarily imply the presence of welfare enhancing spillovers. Empirically there has been little actual evidence of positive spillover effects on host economies. For example, Aitken and Harrison (1999) did not find evidence of any technology spillover effects on Venezuelan productivity when they used plant-level data for Venezuelan manufacturing. They found that the over-all impact of the presence of foreign firms on Venezuela was small, and that the effect on productivity could even be negative. However, the effect seemed to vary between industries.

There can be various reasons for negative or non-existing spillover effects on the host country economy. First, the increased competition effect discussed above can have negative consequences for domestic firms. Due to loss of market shares and insufficient productivity when competition is intensified, domestic firms might not be able to compete with the multinational and they might eventually be forced out of business.

Additionally, as Smarzynska (2002, p.3) points out, there are competition incentives for multinationals to prevent their firm-specific advantages and information from leaking out. This can be done through formal protection of intellectual property rights, paying higher wages than local firms can afford to compete with, or choosing to invest in a country where domestic firms have little capacity to imitate technology. All this decreases the probability of positive spillover effects on the host economy.

2.3.3 Host country characteristics

The amount of inward FDI depends heavily on host country characteristics like market size, infrastructure, and political and economical stability. Other characteristics seem to play a role in the amount of spillover effects obtained, and can explain some of the variations in the empirical results. It seems that weak domestic capabilities can be an obstacle to positive spillover effects.

Blomström and Kokko (2003) argue that the absorption capacity of the local firms matters for spillover effects. They suggest that in order to benefit from spillover effects, the host country needs to have a minimum level of human capital and technologic development.

Furthermore, as Kokko (1992 p. 81) points out, if the size of the technology gap between the MNC affiliate and the local firms is too large, there will not be spillover effects to a large extent. If the technology used by the MNC

is too advanced, the local firms will not be able to absorb it which lowers the potential for spillovers.

2.3.4 Intraindustry versus interindustry spillovers

Spillover effects can be divided into *intraindustry* and *interindustry* spillovers (see e.g. Smarzynska 2002; Sourafel *et al* 2008). Intraindustry spillovers (sometimes referred to as horizontal spillovers) occur when local firms within the same industry as the MNC benefit from the presence of the affiliate. Interindustry spillovers (or vertical spillovers) refer to effects on the host economy when the MNC operates in other industries but its own. Interindustry spillovers occur through so-called backward and forward linkages. Backward linkages exist when local firms provide the affiliate with inputs, and forward linkages occur when local firms purchase goods from the multinational.

Earlier studies of spillover effects have generally focused on intraindustry rather than interindustry spillovers. However, in more recent research, it is frequently argued that the probabilities of spillover effects are larger across than within industries (Smarzynska 2002; UNTCAD 2001). This might seem surprising at first, but the reasons are quite straight-forward. Since the MNC has incentives to protect firm-specific assets (such as marketing skills and technology) it gains from preventing such leakages and hence prevents intraindustry spillovers (Smarzynska 2002 p. 1). On the other hand, the MNC has quite a lot to win from contracting local firms as suppliers of intermediate inputs if the labor and production costs in the host country are relatively low. If this occurs, backward linkages between the MNC and local firms are established. Furthermore, if backward linkages are established, the MNC has incentives to transfer knowledge to their local suppliers, making their production more efficient, and hence their goods cheaper and better.

As suggested by UNCTAD (2001 p. 132), the host country gains from backward linkages since they provide opportunities to increase domestic production and employment. They also produce a direct channel through which knowledge diffusion can increase productivity, which also can spill over to the rest of the economy. Additionally, if there is a technology gap between the MNC affiliate and the local firm, the latter is forced to upgrade its technology in order to meet the demand for advanced products from the affiliate.

2.3.5 Previous studies and evidence

As mentioned earlier, there exists a limited amount of studies that show result of positive spillover effects. Negative or statistically insignificant results are equally frequent among the studies. There are different explanations for the mixed outcome. First, it can depend on the method used. Görg and Greenaway (2003) argue that it is more appropriate to use panel-data than cross-sectional data when examining spillovers. Furthermore, almost all statistical studies have been focused on measuring spillovers on the intra-industry level. However, as stated above, it is probable that the greatest impact from MNCs is across rather than within industries. Blomström and Kokko (2003) argue that since most studies until now have been focusing on intra- rather than interindustry spillover, there is a risk that the effects – negative as well as positive – are underestimated.

Nevertheless, some recent studies have focused on interindustry spillovers. One of them is Smarzynska (2002) who found positive interindustry spillovers through backward linkages between MNCs and firms in Lithuania. Another is Kugler (2006) who found that Colombian manufacturing firms benefit from the presence of an MNC in other rather than their own sectors.

There are also other possible explanations for insignificant or negative results. As discussed above, it is possible that the foreign firms have a negative competition effect on domestic firms, leading to reduced productivity in the latter. Görg and Greenaway (2003) also argue for other possible explanations. For example, MNCs can be efficient in guarding their firm-specific advantages, which results in spillover absence. Secondly, there can be lags in the learning process of the domestic firm, which short run analyses fail to pick up. (Görg and Greenaway 2003, p. 8)

2.3.6 Does the sector matter?

One possible reason for the wide range of results in earlier empirical studies is that the spillover effect differs between sectors. Due to data limitations, most research does not control for the sector in which FDI is observed and therefore it is possible that the results of the total effect of FDI on an economy become ambiguous.

Prakash Pradhan (2006) gives an overview of the literature and argues that FDI in the manufacturing sector and especially technology-intensive industries offer a higher scope for technology spillovers than FDI in the natural-resources based (primary) sector. UNCTAD (2001) also argues that the potential for linkages between foreign and domestic companies in the primary sector is limited, since the production process is normally continuous and capital intensive (p. 138). It is also stated that in the manufacturing sector the activities are of a more linkage-intensive character even though there are differences between sub-sectors. In the tertiary (service) sector the scope for linkages is limited, even though there are exceptions like service components that can be purchased in host developing countries due to their comparative advantage in labor. (UNCTAD, 2001)

Alfaro (2003) uses cross-country data to examine how the growth effect of FDI varies between the primary, manufacturing, and service sectors. She finds that FDI in the primary sector tends to have a negative effect on growth, FDI in the manufacturing sector a positive one and in the service sector the result is ambiguous. This outcome could according to Alfaro be explained by the fact that it is more relevant for foreign affiliates to generate externalities such as technology transfers, know-how, and access to markets in the manufacturing sector and partly the service sector than in the primary sector. (Alfaro 2003, p. 9) Alfaro draws the conclusion that “not all forms of foreign investment seem to be beneficial to host economies” (p. 14). She suggests that FDI policies should target sectors that tend to generate positive effects on the economy and that even negative incentives towards FDI in natural resources should be considered.

Even though the scope for linkages in the primary sector is limited, a developing country could still gain from FDI in that sector. These gains are of more direct character and consist mainly of increased employment and governmental tax and royalty revenue from foreign affiliates. In the primary sector, direct employment creation is often limited for developing countries since they lack the skilled labor that is required in the sector. On the other hand, an expanding tax base is of great interest for a developing country, since it allows the government to invest in welfare-enhancing activities like health and education.

3 FDI Policy in Colombia

In recent years, increased competition for FDI has resulted in various responses in potential host economies. First, there has been a trend towards market liberalization where the conditions for entry and establishment of foreign enterprises have been relaxed (UNCTAD 2003, p. 86). Second, competition among governments to attract FDI has resulted in substantial public subventions to multinationals.

Recently it has been argued that in order to gain from FDI, policy should be selective, aiming at the quality of FDI rather than the quantity (e.g. see Philippov and Costa 2007; Enderwick 2005; UNCTAD 2001; Te Velde 2001).¹ Indeed, among host economies there is a growing awareness that all types of FDI are not positive from a welfare point of view and that more is not necessarily better (Fillipov and Costa 2007). Moreover, providing incentives is expensive, especially for developing countries that have limited budgets.

In Colombia, the FDI regime has gone through various phases, from being associated with restrictions and protectionism in the seventies to being open and FDI-friendly from the beginning of the nineties. Today the FDI framework is beginning a third phase, with tendencies towards creating the conditions for attracting high-quality FDI.

This chapter is devoted to a description of policies implemented by Colombia in order to attract FDI. For a better understanding, the chapter starts with an historic overview of the different phases of the Colombian investment framework.

¹ “Quality” in this context refers to “high-value added FDI and/or to FDI with spillover effects and positive linkages to the host economy” (Te Velde 2001, p. 4)

3.1 The development of Colombia's investment framework

During the first phase of FDI regime in Colombia (between the 1960s to the beginning of the 1990s), the country was, as many other Latin American countries, following an import substitution industrialization strategy (ISI). In accordance with this strategy, where the development is meant to come from local production of industrialized products, foreign investment was only allowed in limited sectors. (Fedesarrollo 2007)

By the end of the 1980s and in the beginning of the 1990s, the Andean region went through a trade and economic liberalization process, known as Apertura or Opening. This can be called the second phase of FDI regime in Colombia. The new development strategy was based on the implementation of structural reform programs and was characterized by liberalization of investment regimes as well as foreign exchange markets. (De Lombaerde and Pedraza Guevara 2004, p. 15) The majority of the restrictions on FDI were eliminated, and a general principle of equal treatment of foreign and national investors was implemented in the whole Andean region. Each country was additionally left with the possibility of further deepening the liberalization of the national FDI regime. In Colombia, the Constitution of 1991 reformed the FDI legislation and foreign capital was now permitted in sectors that historically were reserved for national investors. Furthermore, the liberalization of the FDI regime was combined with an extensive privatization process. (De Lombaerde and Pedraza Guevara 2004, p. 15; Fedesarrollo 2007, p. 36) However, this phase was characterized by rather passive politics, based on comparative advantages and without incentives for attracting FDI to strategic sectors.

Recently, a third phase of FDI regime has begun, and it is characterized by more active policies for attracting FDI. Since 2005 the export- and investment promotion agency, Proexport, aims at attracting high quality

foreign investment to non-traditional sectors. Additionally, Colombia's FDI legislation has gone through various reforms to facilitate the entrance of foreign capital and simplify administrative procedures. Today, foreign investment is welcome in practically all economic sectors.

3.2 Colombia's FDI policy today

The investment framework of Colombia is mainly determined by law 9 of 1991, which was established together with the Constitution of the same year. The law is primarily interpreted and administered through decree 2080 of 2000, which has been subject to various modifications throughout the years.

The main principles governing the FDI regime are:

- Equality: Foreign investment is not given preferential or discriminatory treatment over domestic investment.
- Universality: All sectors are open to foreign investment, with the exception of defense, national security activities and toxic waste. In the television sector only 40 per cent of foreign ownership is permitted.
- Automatic approval for investment: Foreign investors may invest without prior authorization in all sectors where FDI is permitted. However, some sectors that are considered strategic need approval prior to investment. These sectors are financial services, hydrocarbons and mining; oil exploration was removed from this list in 2004.

Apart from the principles of equality, universality and automatic approval, the investment incentive framework in Colombia includes legal stability contracts (LSCs), free trade zones (FTZs), and fiscal incentives in service export activities and some strategic sectors. One can conclude that some concerns have been made about the quality of FDI, even though the

emphasis of the FDI framework lies in maximizing quantities of foreign investment.

Legal Stability Contracts

In order to protect investors from adverse changes in national legislation, Colombia has provided LSCs since 2005. In the contracts, that have a term of between 3 and 20 years (subject to negotiation), the Colombian government commits itself not to change the legislation concerning the investor. (Clara Patricia Martin 2009-03-16) The requisites for the LSC are that the investment exceeds US \$ 1.490.000 and that 1 per cent of the investment is paid to the government as a premium. In accordance with the principle of equality, this service is provided to domestic as well as foreign investors. In the Andean region, LSCs are also found in Chile and Peru, although there they have a somewhat different design (UNCTAD 2006 p. 23).

According to Fedesarrollo² (2007), the LSCs are a useful tool for ensuring investment stability, since the legal framework in Colombia is normally subject to frequent changes. However, it is also pointed out that because of difficulties in the practice and limitations in the juridical formation of the LSCs, they are not as effective as they could have been. Lack of legibility in the approbation criteria and complexity in the identification of the contract standards are other weaknesses that have limited the amount of applications and approbations of contracts (Fedesarrollo 2007 p. 7).

Free Trade Zones

In Colombia, FTZs have been functioning since 1958. Today there are 45 FTZs where firms operate under special tax, customs and foreign trade regime. As in the case with the LSCs, domestic firms meet the same conditions and advantages as foreign firms when operating in a FTZ.

² Fedesarrollo is a Colombian independent, non-profit foundation dedicated to non-partisan research in the fields of economics, political science, and public administration

Historically, the FTZs have been quite inefficient (Maria Fernanda Sanchez 2009-04-17; UNCTAD 2006). UNCTAD (2006, p. 15) points out that the incentives offered in the FTZs were earlier crowded out by the tax advantages from Plan Vallejo and CERT (discussed below) that were available to all exporting firms, regardless of where they were located. Additionally, poor tax administration, frequent regulatory changes and service shortcomings were other problems in the FTZs. In 2007, these issues led to profound modifications of the regulatory framework in order to simplify the rules of the game in the FTZs. Before, different rules applied to different sectors, which was a cause of confusion for the investors. Now the rules are unified for all sectors. Furthermore, a preferential income tax has been implemented, keeping the income tax down to 15% in the FTZs (compared to 33% in the rest of the country). The new framework also implies conditionality rules of job creation and preferential treatment in the selection process are given to companies that bring new technology and establish in sectors with high value-added production. (Maria Fernanda Sanchez 2009-04-17). These changes are positive, and enhance the eligibility of Colombia for quality-FDI.

Today, a project must serve the following purposes in order to be authorized as a FTZ:

- Be an instrument for job creation and attraction of new investments.
- Be a development centre that promotes competitiveness in the regions where they are located.
- Develop highly productive and competitive industrial processes, within the parameters of security, transparency, technology, clean production and sound corporate practices.
- Promote better exploitation of economies of scale.
- Simplify procedures for the commercialization of goods and services to facilitate sales.

When a company wishes to set up in a FTZ, it needs to fulfill requirements of job creation and investment. Depending on the total assets of the firm, different levels of job creation and investment are required. For instance, if the company's assets are between USD \$ 100. 000 and USD \$ 993. 800, there are no requirements of the size of the investment, but 20 direct jobs must be created. If the company's assets are more than USD \$ 5.9 millions, it is required to invest minimum USD \$ 2.28 million and create 50 direct jobs. (Proexport 2009a)

Once authorized as a FTZ, the firms established in the area enjoy several benefits, of which the following are the most relevant:

- Single 15 per cent income tax rate.
- Free Trade status for maximum 30 years, with the possibility of renewing the contract for an additional equal period of time.
- No VAT (Value Added Tax) or customs duties on goods imported from the rest of the world into the FTZ.
- Goods exported from an FTZ benefit from the Trade Agreements signed by Colombia (exception Peru).
- Exports (sales) may be made from the FTZ to the rest of the national customs territory.
- Possibility of partial processing outside the FTZ for a period of up to six months.
- Rapid and simplified customs procedures.

There are two types of free trade zones, Permanent Free Trade Zones (PFTZs) and Single Enterprise Free Trade Zones (SEFTZs), where the latter enables a single company, operating outside the territory of a permanent free trade zone, to enjoy the same benefits as the companies inside the zone.

Plan Vallejo and CERT

Plan Vallejo is an incentives program for promotion of export activities that has been functioning in Colombia since 1958. Its original version allowed temporary, total or partial duty-free imports of raw materials, machinery and intermediate goods when used for export production of goods and services. However, WTO has identified Plan Vallejo as an export subsidy and since Colombia is a member of the WTO, the country had until 2006 to phase out plan Vallejo and other export-related incentives.³

Today, a version of Plan Vallejo is functioning, but not to break the WTO rules, it is only available for exports on services.

Another export promotion program that has been historically important for Colombia is the CERT certificate, which gave tax rebates to exporters. However, the CERT certificate was also recognized as an export subsidy and hence prohibited by the WTO and abolished in 2003.

Targeting quality-FDI

Even though Colombia's FDI framework is mainly characterized by overall openness to foreign investment, some concerns about the quality of FDI have been expressed. One example of this is the new rules for the FTZs. Another is that the investment promotion agency, Proexport, aims to attract investments in non-traditional sectors and in sectors with high value-added production.

Additionally, income tax exceptions are granted in some sectors of special interest. These tax holidays run for 10 to 30 years, depending on the sector. Once the term is over the companies will be subject to the general tariff which is 33%. (Proexport 2009b) Some of the sectors included in this incentive are tourism, eco-tourism, late-yield crops, forestry and publishing.

³ In the GATT/WTO framework, export subsidies that depend on export performance or on the use of domestic inputs are prohibited

Another concern of the investment policy, which is about the quality of FDI, is that there are restrictions of the amount of foreign employees allowed in companies. The limits are 10 % foreign employees when it comes to regular staff, and 20 % when it comes to specialized, technical or management personnel. These rules help ensure employment opportunities for Colombians when foreign companies establish in the market.

In recent years, several governmental programs with the aim to enhance productivity and increase competition have been carried out. These programs are not directly part of the FDI legislation, but they show a will from the government to connect FDI policy with other development goals, which is positive. Two of these programs, *Colombia Compite* and *Transformación Productiva*, will be discussed in more detail in chapter 6.3.

4 Optimizing the volume and impact of FDI in Colombia

The role of policies for attracting FDI and benefiting from it has been reviewed extensively (see e.g. Blomström and Kokko 2003; Te Velde 2001; UNCTAD 2003). However, research shows that not only FDI policies matters, it is also important to create the right local conditions for the absorption of spillover effects. Research also points out that some host country aspects are more important than others. Among these, openness to trade, quality of infrastructure and labor, level of technological capacity, business climate and the promotion of linkages are mentioned. These aspects will now be evaluated for Colombia.

4.1 Trade policy

In the FDI literature, openness to trade is often seen as something positive. For instance, Kawai (1994) finds that FDI's contribution to growth is greater in open than in closed economies. A closed economy attracts FDI oriented to the local market, and often in monopoly or oligopoly activities, while an open economy can attract export-intensive FDI. The former kind of FDI does not tend to affect local productivity as much as the latter does, since the latter competes on the international market where the productivity level is higher than on the local market. Furthermore, as discussed in chapter two, foreign firms can work through export spillovers as catalysts for domestic exporters, helping them to penetrate new markets.

Colombia has actively tried to attract export-oriented FDI by providing a mixture of incentives. Plan Vallejo, the free trade zones and the CERT

scheme are the most important ones. These incentives have helped transform the foreign investment in Colombia from mainly being oriented to the local market, to being export-oriented (Fedesarrollo 2007 p. 28).

In order to attract export-oriented FDI it is also important to remove trade barriers and sign regional and bilateral trade agreements. Belonging to a preferential trade area or having access to larger markets can be an advantage when attracting FDI, since the host country then can attract FDI that aims at penetrating neighboring markets. In the case of Colombia, the country has opened its economy considerably since the early 1990s. Customs duties have been cut and many non-tariff barriers have been eliminated. The regional integration with the Andean Community, CAN has increased exports within the Andean region and today Colombia works as a regional export platform (UNCTAD 2006, p. 3).⁴

Additionally, Colombia has been implementing an aggressive policy for signing bilateral trade agreements since 2006 (Maria Fernanda Sanchez, 2009-04-17). In 2002 Colombia had two free trade agreements (with Mexico and CAN) and the goal is to have 9 signed by 2010. With its strategic geographical position, Colombia could certainly gain a lot from further integrating the regional and world economy.

4.2 Quality of infrastructure

The importance of infrastructure, in particular transportation facilities, for attracting FDI has been underlined in various studies (see e.g. Te Velde 2001; Görg and Greenaway 2003; Blomström and Kokko 2003).

⁴ The member countries of CAN are Bolivia, Peru, Ecuador, Colombia and Venezuela

In Colombia, as in many other developing countries, the poor quality of transport infrastructure is an obstacle to inward investment. Transportation costs are high and roads are inadequate and since most of the industry is concentrated in the interior of the country, transportation to the coast for exportation is costly and time-consuming (Camilo Martínez, 2009-03-16). However, in 2009 a public-private partnership is planning to invest US \$25 billion in improving the transport infrastructure. For example, a tunnel through the mountain range is being built to facilitate the transportation to the Pacific coast. Furthermore, several new airports are being constructed and roads are being improved. (Camilo Martínez, 2009-03-16; Egil Svensson 2009-03-19) These measures are certainly needed and if all projects are fulfilled, the situation could improve considerably.

4.3 Availability of skilled labor

The availability of a relatively skilled workforce is important both for attracting high-quality FDI and for maximizing the social benefits that can be derived from foreign investment. Countries with an uneducated labor force tend to attract multinationals that simply look for the exploitation of cheap labor, and the investment is often made in mature industries where the chance of spillovers is limited. Knowledge spillovers tend to be larger in more advanced industries, and since education is often an important consideration for investors in those industries, host countries with a well educated labor force are more likely to gain from FDI.

Additionally, the ability to absorb the potential spillovers increases with an educated workforce. In order to benefit from the advanced technology introduced by foreign firms, the host country must have the capacity to absorb it.

Colombia is known for having a relatively well skilled workforce at a low cost, especially at the management level (UNCTAD 2006, p. 47). This is of course positive, and as Fedesarrollo (2007) points out, the educated workforce is often seen as one of the country's main strengths for attracting FDI.

Nevertheless, UNCTAD (2006, p. 47) raises concerns about the quality of graduates in science, engineering and technology. Due to an expansion of the secondary education some years ago, demand increased regarding access to universities. But at the same time as more universities and education institutes were created by private institutions, the quality of education was reduced. More university graduates are of course positive for the development of human capital, but it is likewise important to sustain a high quality of the graduates. If this is not done, there is a risk that Colombia's ability to attract high-quality FDI and to absorb knowledge spillover will decrease.

4.4 Level of technological capacity

Local science and technology capacity in the host country is essential for absorbing spillovers of know-how. As Blomström and Kokko (2003) argue, if the local firms do not have the ability or the will to absorb foreign technology and skills, spillovers are not likely to take place (p. 19). Additionally, multinationals with high quality FDI are looking for markets where the technological base and general skills are well developed. Consequently, policies that aim at improving the technological capacity of local firms are essential for countries that wish to maximize the benefits from FDI.

In Colombia, although there are a number of science and technology institutions, the expenditure on R&D (public and private) is only 0.18 % of

GDP, which is below both the Latin American average and international standards (Norman Maldonado, 2009-04-24). The low expenditures on R&D can be explained partly by the high spending of the military on combating guerilla forces and illegal drug trade during the last few years. The situation is quite alarming, and needs to be improved since the technological base in Colombia is rather weak as it is.

However, in recent years, the government has formed a strategy to improve science, technology, and innovation that will be fostered by the national science and technology agency, COLCIENCIAS. The aim of this strategy is to create new companies based on science, technical development and innovation, and to encourage investigation centers, especially in superior education. (Norman Maldonado, 2009-04-24) This initiative is welcome but more reforms are needed and the spending on R&D must increase to bring Colombia to a sufficient technological level to fully benefit from FDI.

4.5 Business climate

Improving the over-all business climate as part of an investment promotion policy is often recommended in FDI literature (e.g. Blomström and Kokko 2003). Having the right “fundamentals” is important both in attracting FDI and benefiting from it. Political and macroeconomic stability, quality of the institutional environment and taxation are examples of aspects that influence the business climate. Availability of skilled labor and the quality of infrastructure are others, but since they have already been discussed above, they will not be further mentioned here.

As Blomström and Kokko (2003) point out, regardless of how much FDI is attracted by improving the business climate, it will bring about benefits for society as a whole through the development of local industry.

There have historically been quite a few obstacles facing investors in Colombia, such as complex rules for establishing a new business, a complicated legal framework facing business and a high corporate tax rate (various interviews). Many of these obstacles remain, even though in recent years a number of initiatives to create a more investor friendly environment have been taken. Indeed, the World Bank has ranked Colombia among the world's most successful business climate reformers in its *Doing Business Report 2009*.⁵ This implies that there is a strong willingness from the Colombian government to improve the historically modest business climate.

The greatest obstacle facing the business climate has however been the severe internal conflict that has been going on in Colombia since the 1960s, which has reduced the attraction of Colombia for many investors. However, the recent government has been rather successful in improving the security situation, which has opened the eyes of many investors who earlier found the risks and security costs too high in Colombia.

4.6 Promotion of linkages

Once the foreign investment is obtained, linking it to local economic activity is the next step. As was pointed out in chapter two, spillover effects often occur through backward and forward linkages between the affiliate and local industry. Promoting these linkages is therefore an important way of encouraging spillovers.

A way of tying multinationals to local economic activity that has become quite popular among host countries in recent years is to set up special

⁵ The World Bank's *Doing Business Report* presents every year measures of business regulation and enforcement across 181 economies. The project focuses on 10 indicators measuring government regulation and bureaucracy—from starting a business to registering property to trading across borders.

linkages programs, which aim to promote business linkages between MNC affiliates and local small and medium-sized enterprises (SMEs). These programs are meant to upgrade domestic enterprises, facilitate technology transfer and improve business and management practices. Many multinationals are willing to source production inputs from the host industry, but simply do not have the information needed about suppliers. A linkages program can inform local firms of which products are needed by the multinational and the multinational of the products offered by host country firms. Examples of countries with successful linkages programs are Ireland, Thailand and Singapore.

In Colombia, there is no linkages program and no specific policies that promote linkages. Considering implementing such policies is recommended since they have proved to be successful in several countries.

5 Patterns of FDI in Colombia

This chapter examines the patterns, development and distribution, of FDI inflows to Colombia.

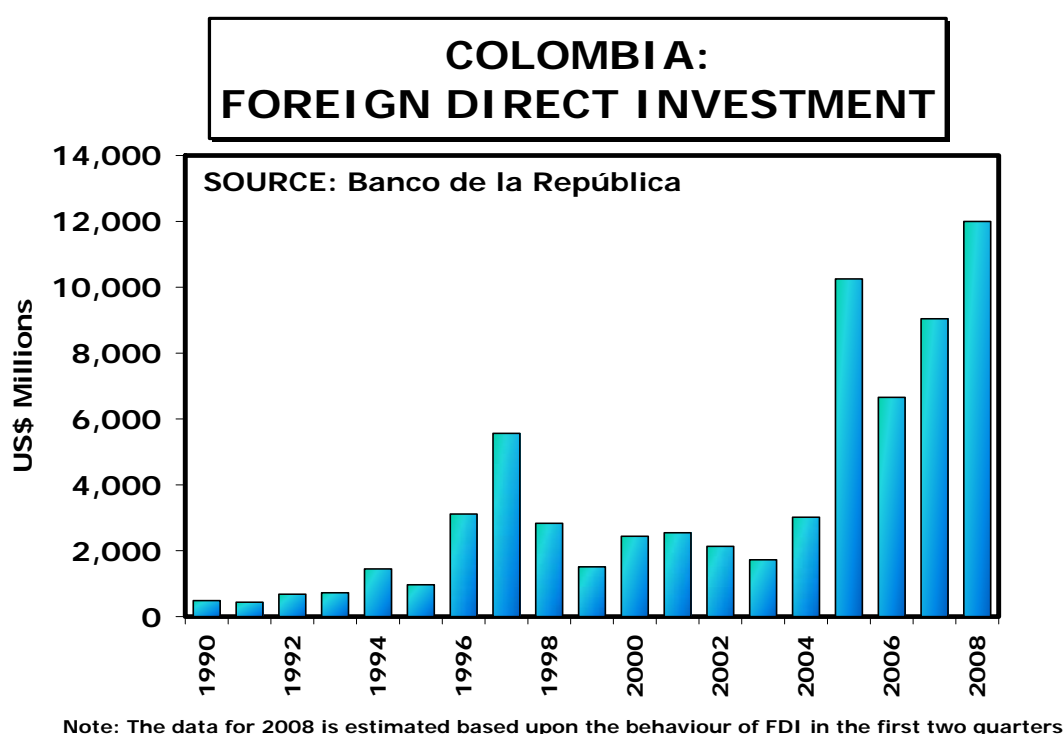
As figure 1 below indicates, FDI inflows have grown significantly in Colombia since the 1990s. This is mainly a result of the liberalization process of the Colombian economy which not only eliminated the barriers to foreign capital, but also opened new opportunities of investments since several state assets were privatized⁶ (UNCTAD 2006, p. 4). These policies made the FDI inflows to Colombia increase rapidly in the 1990s, reaching a peak in 1997. The drop in FDI inflows after 1997 (see figure 1) can be explained by various internal and external factors. The end of the privatization era in the late 1990s is one explanation. Further, the international financial crisis of the 1990s, the escalation of violence in Colombia due to the internal conflict, and the economic recession that Colombia experienced since 1999 also contributed to the drop in FDI after 1997. (Fedesarrollo 2007, p. 8)

However, today Colombia experiences renewed growth and since 2004 the flows of FDI are increasing again. Today, FDI inflows are growing at the highest rates since the peak in 1997. This can be seen as a result of further successful FDI policy reforms and improved country security. Credit should also be given to the government that, through a program called *Democratic Security Policy*, has significantly improved the security situation and in that way increased investor confidence. The exceptional high rates of foreign

⁶ Primarily the power sector was privatized, but manufacturing, banking, and to a lesser extent, sanitation and water sectors were also included. Oil, fixed-line telecommunications, banking, airlines, shipping and insurance were sectors that were not fully privatized. (UNCTAD 2006 p. 4)

investment in 2005 seen in figure 1 are due to a US \$4.7 billion investment by the South African company SABMiller when it purchased the Colombian company Bavaria (UNCTAD 2006, p. 4). It is important to note that the data on FDI flows in 2008 is only an estimation, based on the flows during the first two quarters.

Figure 1. FDI flows to Colombia, 1990-2008 (US \$ millions)



In comparison with other South American countries, Colombia has in recent years been performing rather well when it comes to attracting FDI. Table 1 shows that the stock of FDI in Colombia (32.7 % of GDP in 2007) is just above the South American stock (27.7 % of GDP) but far below the stock of FDI in the regional top performer Chile (64.4 % of GDP). Table 1 also indicates that Colombia has experienced steadily increasing FDI inflows as a percentage of GDP since the 1990s.

Table 1. FDI stock as a percentage of GDP

Country	Year			
	1990	2000	2006	2007
Colombia	7.3%	13.3%	33.2%	32.7%
Chile	48.1%	60.8%	55.0%	64.4%
South America	9.6%	23.6%	26.4%	27.7%

Source: UNCTAD World Investment Report 2008

FDI has in Colombia been concentrated to a few sectors. Table 2 shows that in the period 1994-2000, 60% of inward FDI flows went to the service sector. A good proportion of these inflows were related to the privatization program in the 1990s and the inflows have principally gone to telecommunications and airport services. 30% of FDI inflows went to the manufacturing sector, where the focus has been on chemicals, metal and food products. 9% of FDI inflows went to oil, mining and quarrying and 1% to agriculture.

Table 2: FDI inflows by sector, 1994-2000 and 2001-2006, percentage of total inflows

Sector	Period	
	1994-2000	2001-2006
Oil, mining and quarrying	9%	47%
Manufacturing	30%	19%
Services	60%	34%
Agriculture	1%	0%
Total	100%	100%

Source: Fedesarrollo 2007

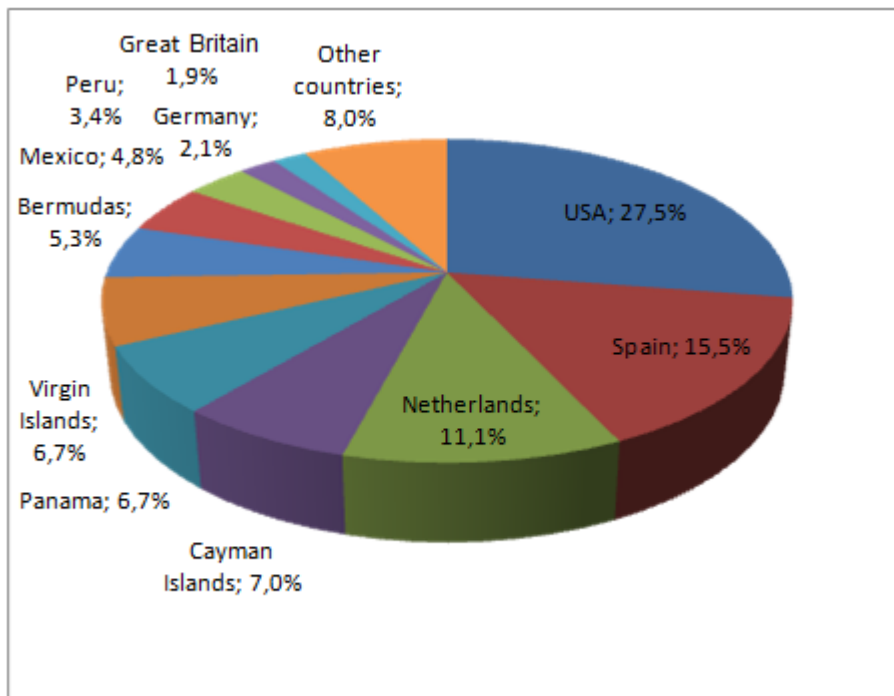
Table 2 shows that between 2001 and 2006, 34% of inflows went to the service sector and 19% went to manufacturing. The primary sector was the sector enjoying the greatest inflows of FDI (47% of total inflows). Indeed, in recent years, the high and rising level of commodity prices and favorable

legislation towards foreign investors have attracted many foreign investors to primary sector activities in Colombia. In the 2008 World Investment Report, UNCTAD raises concerns that this could contribute to a Dutch disease process and negatively affect the competitiveness of the manufacturing sector (UNCTAD 2008 p. 62).⁷ Moreover, as was pointed out in chapter two, FDI's positive contribution to development in the primary sector does not seem to be as high as in e.g. the manufacturing sector. Nevertheless, since the country has attracted significant inflows of FDI to the service and manufacturing sectors, FDI has contributed to the diversification of the Colombian economy, leading production away from the traditional sectors such as coffee production.

Figure 2 shows the FDI distribution in Colombia by country of origin. Most foreign investment in Colombia comes from North America and Europe. The United States is the country where most FDI comes from (27.5 % of the total during the period 1992-2005) followed by Spain (15.5 %) and the Netherlands (11.1 %). Investments from these countries have mainly been directed towards oil and mining, manufacturing, public services and the financial sector. The FDI inflows from other Latin American countries are rather small, even though their importance grew during the 1990s.

⁷ The term Dutch disease refers to the relationship between the exploitation of natural resources and the decline in the manufacturing sector. An increase in revenues from natural resources will raise the real exchange rate which leads to a decrease of competitiveness, and thus exports, of manufactured goods. This could lead to a deindustrialization of the economy.

Figure 2. FDI distribution in Colombia by county of origin. Accumulated 1992-2005



Source: Nieto and Ortíz 2008 p. 82

6 Direct and indirect effects of FDI in Colombia

FDI can contribute to the host economy's development- through both direct and indirect effects. The theoretical aspects of these effects were discussed in chapter two. FDI can contribute to economic development through employment opportunities and increased tax revenue. Increased competition and transfer of superior technology through spillover effects are other possible positive outcomes of FDI. Furthermore, the foreign firms do not only generate direct effects in the sector where they are operating, they influence industries throughout the whole production chain through backward and forward linkages to local suppliers and buyers.

With the help of policy, these positive effects can be increased and the possible negative ones can be avoided. As was discussed in chapters three and four, policy measures are important tools for the host country to get the most out of FDI.

Unfortunately, it has not been possible to examine all the effects mentioned above on Colombia, since the quantitative information available is limited. Official statistics in Colombia do not generally distinguish between foreign and domestic firms, which limits the analysis of the impact of FDI on the Colombian economy.

Econometric studies of spillovers are common when examining the productivity effects of FDI in a specific sector of the host economy. The object of this study is however to give a picture of the over-all impact of FDI on the Colombian economy, hence no econometric study is carried out.

However, earlier studies of spillover effects are cited, and the possibility for such effects are discussed.

Hence, in this chapter, some effects that FDI has on the Colombian economy are presented. Production and exports, employment and wage aspects and productivity and technology transfer are the areas that are covered. Unfortunately, the important aspect of the impact of FDI on tax revenue is not examined due to lack of information.

6.1 Production and exports

UNCTAD (2006) points out that the presence of foreign firms in the Colombian economy has had a positive impact on production and exports. FDI has helped Colombia diversify its economy from production of traditional goods such as coffee and oil, into having several urban and industrial poles. One illustration of this is that the share of high technology exports as a percentage of total exports has risen from 20 to 40 % between 1991 and 2004 (UNCTAD 2006 p. 14).

The 1990's Apertura or Opening phase has helped to increase exports and to attract export-oriented FDI. Incentives have also contributed to this process. Plan Vallejo, the CERT scheme and the FTZs have all been discussed above. Certainly, these improved incentives have contributed to increase the share of FDI involved in export activities, which has resulted in a rising share of industrial goods compared to primary goods in total exports.

Because of the process of increased integration through bilateral and regional trade agreements that Colombia is going through, there are opportunities to further develop the country's role as an export platform. This would increase opportunities of spillovers through exports.

6.2 Employment and wages

Job creation is one of the direct positive contributions that FDI can have on the host economy. Figures on how many Colombians the foreign firms employ are difficult to collect, since the statistics available do not generally distinguish between foreign and domestic firms. Nevertheless, the investment framework allows firms to have only 10 % foreign employees, when it comes to regular staff, and 20 % when it comes to specialized, technical or management personnel. This helps in avoiding a situation where the foreign company imports the majority of its personnel. Furthermore, since the Colombians are relatively well educated, firms have less reason to source staff from abroad, which often means having to pay higher salaries as well. The impression of Egil Svensson at the Colombian Nordic Chamber of Commerce is that foreign companies generally do not see any reason to import personnel and that they hire Colombians whenever possible (Egil Svensson, 2009-03-19).

In order to better understand the impact that FDI has on the Colombian economy, Fedesarrollo (2007) has made a survey that compares firms with foreign capital to firms with only domestic capital.⁸ Some of the main contributions from the survey are that foreign firms pay higher salaries compared to domestic firms, and to a larger extent use qualified labor. Furthermore, among the firms in the survey, more firms with foreign capital than firms without foreign capital have programs to protect the workers' rights.

⁸ 264 companies participated in the survey. 116 of them were totally or partially foreign owned and 148 were domestic

6.3 Productivity and technology transfer

One of the most important possible benefits from inward FDI is the introduction of new technologies, that on the one hand increase productivity of domestic firms, and on the other hand speed up innovation and technological development.

According to Fedesarrollo (2007), the Colombian economy has benefited from the foreign technology that has been brought to the country by MNCs, especially in the financial, manufacturing and energy sectors. Small laboratories for technical assistance and innovation have been established by MNCs. However, it is also pointed out that few multinationals have created R&D centers that link to industrial technology development centers (Fedesarrollo 2007, p. 31).

According to UNCTAD (2006), Colombia has had some success in technology transfer, but this effect is held back by an insufficient skill and technological base. In the light of this, the low funding to R&D in recent years is concerning. In order for technological spillovers to occur, domestic firms must have a sufficient absorptive capacity, hence the skills and technology base should be improved.

As mentioned in chapter 3.2, several governmental programs which aim at enhancing productivity and strengthening the competition of Colombian companies on the international market have lately been carried out. These topics have been high up on the political agenda even before the presidency of Alvaro Uribe, and are still cornerstones of the government's national economic strategy.⁹ If the programs prove to be successful, they could help Colombia to attract high quality FDI, and to increase the spillover absorption capacity of domestic firms.

⁹ Alvaro Uribe has been president of Colombia since 2002.

One of the programs is *Colombia Compite*, that aims at promoting interaction among enterprises, local and national governments, trade unions and civil society in order to build a competitiveness culture. Another program is *Transformación Productiva*, which is a long-term program held by the ministry of Trade, Industry and Tourism. The idea is to strengthen the capacity of local firms to produce high quality products which can compete effectively on the international market. In order to do this, productive sectors where there is an external demand and where Colombia has potential comparative advantages have been identified, and the development of these sectors should now be prioritized. Among the listed sectors there are traditional ones like the coffee industry, and emerging ones, that are expected to have a growing importance on the world market in the future, like software and IT. (Maria Fernanda Sanchez 2009-04-17) Several of the selected sectors coincide with the prioritized sectors for investment promotion of Proexport. This is positive, since it shows that action has been taken to integrate the FDI policy with the general development goals of the nation.

When it comes to empirical evidence of productivity spillovers of FDI in the Colombian economy, there is some evidence for their existence, but it seems like interindustry rather than intraindustry spillover effects have occurred. Kugler (2006) uses data which covers mainly small manufacturing plants between 1974 and 1998. Atallah (2006) studies manufacturing companies of small, medium, and large size for the period 1995-2000. Neither of them could find evidence of intraindustry spillovers in the Colombian manufacturing sector. However, they did find spillovers to other industries (interindustry spillovers). Kugler finds interindustry spillovers in various manufacturing sub-sectors. The strongest evidence of interindustry spillovers is found between the wood and paper sectors, where FDI in either sector leads to considerable total factor productivity (TFP) improvement in the other sector (elasticities are between 20% and 30%,

which means that a 100% increase in FDI leads to a 20-30% increase in TFP). No significant intra-industry effect is found on TFP. These results support recent theory which claims that spillovers occur more frequently between than within industries.¹⁰

One explanation of the absence of spillovers within industries in Colombia could be that the multinational companies are efficiently protecting their firm-specific assets. Another could be that even though they do leak technology to local companies, the technology gap between foreign and domestic firms is too big to absorb the technology. There is some evidence that this could be true in the Colombian case. Kugler (1998) studied the relationship between intraindustral spillovers and the use of physical and human capital within Colombian manufacturing firms, and found that even though the presence of foreign firms generates opportunities for technological transfers, the low use of physical and human capital in the domestic firms compared to the MNCs limits such effects.

Theory could also explain the presence of interindustry spillovers in Colombian manufacturing firms. As Atallah (2006) points out, the multinationals have incentives to transfer technology to the domestic firms that provide them with inputs, in order to ensure better prices and quality (p. 194). The presence of backward linkages could also be a result of the Colombian supplier firms becoming more effective and producing higher-quality goods.

¹⁰ It should be pointed out that wood and paper sectors are sometimes considered to be part of the same industry, and in that case the evidence does not show inter- but intraindustry spillovers. However, Kugler also finds interindustry spillovers between other sectors.

7 Summary and conclusions

There are two main objectives of this study. First, the policies used by Colombia to attract FDI are examined. Policies play an important role not only in attracting FDI, but also in making the host economy benefit the most from it. The FDI regime in Colombia has gone through a modernization process in which entry and protection rules have been improved since the early 1990s. Recent reforms have eased business establishment and improved guarantees to investors through legal stability contracts. Further, the reconstruction of the free trade zones is a positive initiative that improves the attractiveness of Colombia as a FDI host country.

Despite these developments, in order to maximize FDI's contribution to economic development, more efforts need to be made when it comes to attracting quality FDI. Several areas need to be upgraded to internationally competitive levels. First, the local science and technology capacity needs to be improved. The low expenditure on R&D is alarming and should be increased. Further, transport infrastructure is poor and is a hindrance for export-oriented FDI. It is important that the planned public-private partnership investments on road infrastructure actually will take place. Finally, promotion of linkages between local supplier firms and multinationals are recommended.

Colombia has ambitious goals of competitiveness and internationalization. Governmental programs to upgrade competitiveness and plans for deepened world and regional integration are part of the country's development strategy. These initiatives can be helpful in attracting quality FDI and benefitting from it.

The second objective of this study is to examine the impact that FDI has had on the Colombian economy. Since the economic liberalization process in the early 1990s, Colombia has experienced increased inflows of FDI. Nevertheless, inflows remain below several regional competitors, partly since the internal security situation makes the costs of doing business high. Even though considerable improvements have been done in this area in recent years, investors have not yet fully regained their confidence in Colombia.

Taking a look at patterns of FDI, we see that the greatest part of FDI inflows are going to oil extraction and mining. The primary sector generally generates limited spillover effects for the host economy. FDI in that sector could however still contribute positively to development since it generates tax revenue and possibly employment opportunities. Unfortunately, because of the lack of information concerning tax revenue and employment from foreign firms in Colombia, it is not possible to draw conclusions about FDI's total effects on the economy in the primary sector.

The manufacturing and service sectors, where the potential for spillovers is higher than in the primary sector, have however also experienced considerable shares of FDI. It can be argued that FDI has had a positive impact in these sectors. FDI has introduced new technology and skills and research has found evidence of spillovers through backward linkages in the manufacturing sector.

Moreover, FDI has contributed to diversifying the Colombian economy which has led to a rising share of industrial goods compared to primary goods in total exports.

In short, Colombia has had some success in attracting FDI and benefitting from it, but more efforts need to be made to attract quality FDI, and local

capabilities need to be improved, in order for Colombia to fully benefit from FDI.

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