A revised version of this paper was published in: United Nations, *Interregional Cooperation in Trade and Investment: Asia-Latin America*, United Nations Economic and Social Commission for Asia and the Pacific, Studies in Trade and Investment No. 43, New York, 2000, 161-191.

# FOREIGN DIRECT INVESTMENT IN LATIN AMERICA: CURRENT TRENDS AND FUTURE PROSPECTS

By

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February 2000

This paper was presented at the Seminar on Interregional Cooperation in Trade and Investment: Asia-Latin America, Economic and Social Commission for Asia and the Pacific, The United Nations, Bangkok, February 15-16, 2000. The author is grateful to conference participants for useful comments.

## **Executive Summary**

- 1.A rising tide of Foreign Direct Investment (FDI) has swept the developing countries over the last ten years. Between 1990 and 1998, the net annual inflow of FDI in developing countries rose from 30.5 billion to 163 billion in constant (1998) U.S. dollars.
- 2. The increased FDI has not been equally absorbed in the developing world. In fact, the Latin America and Caribbean (LAC), East Asia and Pacific (EAP), and Europe and Central Asia regions (ECA) have captured most of the increased investment. For example, the LAC and EAP regions each received over \$60 billion in 1998, compared to \$3.7 billion in South Asia, \$4.1 billion in Sub-Saharan Africa, and \$4.8 billion in the Middle East and North Africa.
- 3. The explosion of FDI in Latin America during the nineties constitutes a clear break with the situation in the last 50 years. In fact, one must go back to the golden age of FDI in Latin America, during the decades before the Great Depression, to obtain comparable FDI inflows to the region.
- 4. The increased FDI in Latin America has not flowed in equal magnitude to the various countries in the region. Two countries dominate Foreign Direct Investment in Latin America: Brazil, which in 1998 received on a net basis over \$25 billion in FDI, and Mexico, which in 1998 received close to \$10 billion. These were followed by Argentina (\$5.7 billion), Chile (\$4.8 billion), Venezuela (\$3.8 billion) and Colombia (\$3.0 billion). These six countries were the recipients to more than 80 percent of all the FDI flows to Latin America in 1998. At the other extreme, there are some countries that have not shared as much in the growth of FDI. These include Guyana, Honduras, Nicaragua, and Uruguay. In addition, both Guatemala and El Salvador were minor recipients of FDI until 1998, when they received \$673 million and \$872 million, respectively.
- 5. The great majority of FDI in Latin America originates in the United States, Europe, and Latin America itself. Only a small fraction is contributed by the Asia and Pacific region.
- 6. Despite the relatively small proportion of Asian and Pacific FDI in Latin America, compared to other regions, the share is rising. Between 1992 and 1998, Japan's net FDI flows to Latin America were approximately \$32 billion, increasing from \$2.7 billion in 1992 to \$6.5 billion in 1998. Net flows of FDI by the Republic of Korea to Latin America in the period of 1992 to 1998 amounted to approximately \$2 billion, rising from \$70 million in 1992 to \$627 million in 1997. The flows declined in 1998, in response to the East Asian financial crisis, to \$378 million.
- 7. There is no overall sectoral concentration of FDI investments in Latin America, but there are substantial variations by country. In Ecuador, Bolivia and Chile, FDI in minerals and agriculture predominates. In Brazil, Paraguay and Venezuela, manufacturing FDI dominates; and in Mexico and Peru, the largest share of FDI in channeled to the service sector. For some countries, such as Colombia, the sector distribution of FDI is balanced among the various sectors of the economy.
- 8. The main reason for the recent expansion of FDI flows to Latin America is the dismantling of governmental barriers to foreign investment in the region during the 1980s and 1990s. From Mexico to Argentina, virtually every Latin American country has undergone a major liberalization of its regulations governing foreign investment. Often, reform efforts have

involved both trade and investment liberalization. Indeed, most experts now see trade and investment as complementary to each other.

- 9. Privatization has been another leading force behind FDI in Latin America since the early 1990s. In 1997, for example, out of \$62 billion flowing into the region as direct foreign investment, \$11.4 billion were related to privatization. Hence, close to 20 percent of all FDI in the region was directly connected to privatization. But the impact of privatization on FDI is not limited to the sale of state assets to foreign enterprises. It is estimated that each dollar of privatization in the 1990s attracts 88 cents of additional FDI.
- 10. Among all Latin American countries, three shared most of the revenues from privatization: Brazil, Mexico and Argentina. These countries received close to 80 percent of all privatization revenues in the period between 1990 and 1997
- 11. Another major explanation for the recent expansion of FDI in Latin America is the more favorable and stable policy environment towards private sector development. As a result of the major trade and investment liberalization efforts in the region, most business surveys of foreign investment barriers now give relatively good marks to Latin America. Nonetheless, a number of governments continue to be plagued by corruption, political patronage, and an array of "invisible" barriers to investment. In data collected by the World Bank on the perceptions that business officers have of the major barriers to doing business in Latin American countries, the most significant barrier is still corruption. Over 50 percent of businesses interviewed indicate that corruption is a severe barrier to their operations. Other factors listed by businesses include: regulatory uncertainty, unpredictability of the judiciary, tax regulations and/or high taxes, financing problems, inadequate infrastructure, crime and theft, policy instability, inflation, and foreign currency regulations, and labor, environmental, and foreign trade regulations, and regulatory uncertainty.
- 12. Historically, two of the key barriers to FDI in Latin America have been exchange rate and macroeconomic instability, reflected in high and variable inflation rates, exchange rate volatility and misalignment, and financial system distress. However, over the last decade, a number of countries have instituted macroeconomic and financial reforms intended to stabilize their economies. This has contributed to attracting FDI flows to the region. Still, the 1994-95 peso crisis in Mexico and the Brazilian crisis of 1998-99, and their transmission to other countries, have made clear that macroeconomic policy disturbances remain an area of concern for both local and foreign investors. Furthermore, political risk, in the form of actual or attempted military coups, the fraudulent manipulation of elections, guerrilla movements and/or popular unrest, as seen recently in Colombia, Ecuador, Paraguay and Peru, also adds to the economic uncertainty.
- 13. Studies of the location decisions of multinational firms suggest that a skilled labor force is one of the major factors stimulating firms to locate in a particular country. The educational attainment level in Latin America has been rising quickly over the last 30 years and it now substantially exceeds the average for developing countries. In 1990, the average person aged 25 years of age or older in Latin American and the Caribbean had 5.2 years of schooling, compared to 5.0 years in the East Asia and Pacific region, 2.4 years in South Asia, 3.4 years in North Africa and the Middle East, and 1.6 years in Sub-Saharan Africa. The greater educational attainment in Latin America acts as an incentive for FDI and helps explain the rise of FDI

inflows into the region in recent years.

- 14. The greatest benefit of FDI for host countries lies in the generation of employment. Employment creation through FDI can even be counter-cyclical, thus reducing the impact of business cycles on the economy.
- 15. A second major benefit of FDI emerges when the foreign capital acts to improve the productivity of the rest of the national economy. In recent years, FDI linked to the privatization of public sector enterprises has resulted in a substantial quality upgrading of service-sector activities in many countries of the region. The privatization of public utilities, transportation, telecommunications and other services has the potential to sharply enhance productivity, for both households and businesses.
- 16. Foreign Direct Investment often brings new inputs and production processes when it flows into a country. One of the positive externalities of FDI to the national economy is through the transmission or transfer of new technology to domestic firms in the same industry. However, the empirical evidence on whether FDI benefits national firms through transfers of technology is mixed.
- 17. The greatest concern among both policymakers and the public in Latin America is the potentially negative impact of FDI on domestic producers. In the absence of the externalities and spillovers mentioned earlier, a substantial inflow of foreign investment in a specific industry is very likely to reduce the rate of return to domestic capital, particularly in the short-run.
- 18. Related to this last issue is the possibility that foreign multinationals may engage in predatory practices, formal or informal collusion, and political lobbying to reduce domestic competition, allowing them to capture monopoly or oligopoly rents.
- 19. Foreign investment can have a sharply negative impact on consumers if it flows into imperfectly-competitive markets. FDI in sheltered, monopolistic industries is bound to benefit from high economic rents at the expense of domestic consumers. In this case, FDI acts to magnify the distortions and misallocation of resources in the economy. The same type of argument can be made of FDI flows into financial sectors that are not adequately regulated.
- 20. Yet another major concern regarding FDI is its environmental impact. Lax local enforcement of environmental protection legislation in regard to foreign firms has led to disastrous consequences in many parts of the world. However, in the global competition among developing country governments to attract FDI, there is often a "race to the bottom," which leads countries to offer more and more relaxed regulations in order to attract foreign investment.
- 21. The working conditions of workers in firms sponsored by FDI have also been a matter of concern. Many cases have been documented of sweatshops that subject their employees, sometimes child laborers, to dangerous, sub-human working conditions. Lack of enforcement of existing workplace regulations in host countries often compounds the problem.
- 22. The long-term prospects for increased FDI in Latin America are positive. In the short-run, the macroeconomic distress, sluggish growth and political uncertainly displayed by many countries in the region may slowdown FDI flows. But the key, underlying forces stimulating FDI, as

discussed earlier in this paper, are moving in a direction that will serve to attract FDI.

- 23. The role of the Asia and Pacific region on FDI in Latin America is likely to increase over time. This will include not only Japan, but also the middle-income, newly-industrializing countries, such as the Republic of Korea, Malaysia, and Taiwan. Evidence of the ability of middle-income countries to generate significant outflows of FDI is very clear within Latin America itself, where multinational companies based in Mexico, Chile, Brazil and other countries operate in a variety of other economies. The economic and technological developments that have made these third world multinationals possible are applicable to the East Asia and Pacific region. However, the low current Asian and Pacific FDI in Latin America suggests that, despite profitable prospects, the high sunk costs of new individual ventures, the risks involved to single investors, and the lack of information facing any entrepreneur act as formidable barriers.
- 24. Foreign direct investment flows are stimulated by regional integration efforts. The implication for Asian and Pacific FDI in Latin America is that cooperation and coordination initiatives involving governments, business organizations and multilateral institutions in the two regions should be taken seriously. FDI levels may not significantly increase in the short-run. But activities at regional integration in the Pacific Basin may lead to substantial increased trade and FDI in the long-run.

#### Introduction

The 1990s saw the emergence of a major, historical change in Latin America. After many decades of sluggish inflows of Foreign Direct Investment (FDI), many countries in the region suddenly became host to massive flows of FDI. By the end of the decade, FDI was the major source of foreign capital in Latin America, greatly exceeding the value of financing obtained through emerging stock markets, bank borrowing, and other forms of external finance. What accounts for this shift in the role of FDI in Latin American economies? What explains the surge of FDI. What are its consequences? This paper examines these issues and studies the prospects for FDI in Latin America in the near future and in the long-run.

The first part of the paper focuses on examining the overall, country and sector-specific trends in the net flows of foreign direct investment in Latin America, including those originating in the Asia and Pacific region. The second part of the paper analyzes the determinants of investment flows to Latin America, including both microeconomic and macroeconomic forces. A discussion of the policies that hinder or foster foreign investment flows is provided. Part three examines the socioeconomic impact of investment flows, looking at the various benefits and costs of FDI. The last part of the paper discusses the prospects for investment opportunities in Latin America, especially from the Asia-Pacific region, supplying a framework for the role of the government and the private sector in promoting interregional economic cooperation in the form of increased investment flows in Latin America. An annex presents a brief methodological note discussing some of the major issues regarding the measurement of FDI.

## I. Current Trends of Foreign Direct Investment in Latin America

An inflow of Foreign Direct Investment (FDI) represents investments made by foreign residents (usually foreign firms) in a particular country over a certain period of time with the purpose of acquiring a lasting management interest over the affairs of the enterprise in which the funds are invested. FDI thus involves some long-term foreign ownership or control over the decisions made by domestic firms receiving the foreign capital. Overall, flows of FDI traditionally constituted a small fraction of the financial resources flowing to developing countries, including Latin America. This all changed in the nineties.

#### The Explosion of FDI in Developing Countries

A rising tide of Foreign Direct Investment has swept the developing countries over the last ten years. Table 1 shows the net flows of FDI to developing countries, from 1970 to 1998, measured in real terms (in 1998 U.S. dollars). As can be seen, FDI flows fluctuated up and down in the seventies and eighties, with no marked tendency to rise. However, in the nineties, FDI has exploded. Between 1990 and 1998, the net annual inflow of FDI in developing countries rose from 30.5 billion to 163 billion in US constant (1998) dollars. The magnitude of this flood of capital is at record levels historically and although there are well-defined reasons for this trend (which will be discussed later), it has caught many by surprise.

As a proportion of the net long-term foreign capital obtained by developing countries, FDI has more than doubled in the nineties, from less than 25 percent to over 50 percent (see Table 2). In Latin America and the Caribbean, the fraction of long-term net resource inflows accounted for by FDI rose from 38 percent in 1990 to 70 percent in 1998.

Despite the increased FDI in developing countries over the last decade, industrialized countries are still the major recipients of this type of capital. In 1997, high-income countries (as defined by the World Bank) received \$233 billion in FDI while developing countries were host

to \$165 billion. Nevertheless, as Table 3 displays, the proportion of total FDI flows received by developing countries, as opposed to high-income countries, rose from 12.7 percent to 41.5 percent between 1990 and 1997.

The increased FDI has not been equally absorbed in the developing world. In fact, the Latin America and Caribbean (LAC), East Asia and Pacific (EAP), and Europe and Central Asia regions (ECA) have captured most of the increased investment, leaving the Sub-Saharan Africa (SSA), the Middle East and North Africa (MENA), and South Asia (SA) regions with comparatively minimal increments of FDI. Overall, LAC, EAP and ECA accounted for 90 percent of FDI in developing countries in 1998. As Table 4 presents: the Latin America and Caribbean and the East Asia and Pacific regions each received over \$60 billion in 1998, compared to \$3.7 billion in South Asia, \$4.1 billion in Sub-Saharan Africa, and \$4.8 billion in the Middle East and North Africa.

These inequities in the distribution of FDI flows are partly due to the fact that both the Latin America and Caribbean and the East Asia and Pacific regions have larger economies than other developing regions. But even when expressed as a fraction of GNP, FDI is significantly greater among LAC, EAP and ECA. For instance, Table 5 shows that, in the LAC region, FDI is about 3 percent of GNP, but in Sub-Saharan Africa, it is equal to only 1.3 percent of GNP, while in the South Asia region and in the Middle East and North Africa, the corresponding figure is less than one percent.

#### **Patterns of FDI in Latin America**

The increased FDI in Latin America has not flowed in equal magnitude to the various economies in the region. Table 6 shows that two countries dominate Foreign Direct Investment in Latin America: Brazil, which in 1998 received on a net basis over \$25 billion in FDI, and Mexico, which in 1998 received close to \$10 billion. They were followed by Argentina (\$5.7 billion), Chile (\$4.8 billion), Venezuela (\$3.8 billion) and Colombia (\$3.0 billion). These six

countries were the recipients to more than 80 percent of all the FDI flows to Latin America in 1998. At the other extreme, there are some countries that have not shared as much in the growth of FDI. These include Guyana, Honduras, Nicaragua, and Uruguay. In addition, both Guatemala and El Salvador were minor recipients of FDI until 1998, when they received \$673 million and \$872 million respectively.

Globally, six of the top twelve countries receiving FDI in the world in 1998 were from Latin America. As Table 7 displays, the country receiving the most FDI in the world in 1998 was China, which received \$45.6 billion. It was followed by Brazil, Mexico, Thailand and Argentina. In addition, Chile, Venezuela and Colombia are among the top twelve countries recipients of FDI. But these numbers partly reflect size. When measured as a fraction of GNP, the country in Table 7 with the greatest proportion of net flows of FDI relative to GNP is Chile (6.8 percent), not China (4.3 percent).

The absolute value of Foreign Direct Investment in Latin America is the greatest in the largest economies, such as Brazil, Mexico and Argentina. Table 8 shows that, between 1990 and 1998, Brazil and Mexico received a net amount of \$73 billion in FDI, and Argentina had close to \$40 billion. On the other hand, holding constant the size of the economy, the country that was most open to FDI flows in the period of 1990 to 1998 was Panama. As Table 8 presents, when one calculates the average annual net flow of FDI in the period of 1990-98 as a percentage of GNP in 1998, the highest figure for Latin America is 4.8 percent, for Panama, followed by Ecuador, with 4.2 percent. It appears to be the case, then, that the economies that are the most open to FDI in Latin America, relative to their size, are not necessarily the biggest recipients of such capital in absolute terms.

The explosion of FDI in Latin America during the nineties constitutes a clear break with the situation in the last 50 years. In fact, one must go back to the golden age of FDI in that region, during the decades before the Great Depression, to obtain comparable inflows. Table 9 shows FDI flows in a selected group of Latin American countries during the period of 1913 to 1929 compared to the period of 1970 to 1986, just before the recent acceleration of FDI started.

Consider the case of Argentina. In the period of 1913 to 1929, the annual net injection of FDI in that country was equal to \$544 million, measured in 1998 U.S. dollars. The influx was substantially smaller in the period of 1970 to 1986, when the annual net inflow of FDI in Argentina was equal to \$373 million, measured in 1998 dollars. The same holds for Chile and Venezuela: FDI flows were greater in the early part of the twentieth century.

On the other hand, in Brazil and Colombia, the absolute value of the annual FDI flows in the 1970s and 1980s exceeded the value in the 1910s and 1920s. However, what one must realize is that the Latin American economies were substantially smaller in the early twentieth century and, therefore, any given FDI flow in that period was bound to be immensely more influential on the economy than an equal amount in the 1970s or 1980s. To examine this issue, Table 9 presents data on the average annual FDI flow in the period of 1913 to 1929 divided by GNP in 1929 and compares it to the equivalent calculation for the period 1970 to 1987. As can be seen, for all countries examined, annual FDI flows in the 1913 to 1929 period were much higher as a fraction of GNP than FDI flows in the 1970s and 1980s. Even for Brazil, the annual net gain in FDI during the 1910s and 1920s amounted to 1.9 percent of GNP, while during the 1970s and 1980s, the average annual net flow of FDI was just 0.5 percent of GNP. The economy with the greatest openness at the beginning of the twentieth century was Chile, where the annual net gain in FDI was equal to 4.7 percent of GNP.

The FDI/GNP figures displayed in Table 9 for the period of 1913 to 1929 are in the same range as those presented in Table 8 for the 1990s. In Chile, for example, the average annual FDI flow in the 1990s constituted 4.0 percent of GNP while in the 1910s-1920s it was 4.7 percent. To summarize: in order to find a historical period of rising FDI in Latin America equivalent to what has been seen in the last 15 years, one must go back to the "golden age" period of massive FDI in that region early in the twentieth century.

The major role that FDI has taken in some Latin American economies recently is reflected by the high fraction of domestic private investment accounted for by FDI. In Venezuela, 79.7 percent of private domestic investment in 1997 was due to FDI while for Chile

it was 30%, Colombia 56%, Mexico 18.7%, and Brazil 14.3%

The great majority of FDI in Latin America originates in the United States, Europe, and Latin America itself. Yet, Table 10 shows that the regional origin of FDI varies substantially by country. Peru and Brazil are large recipients of FDI from Europe while Mexico, Chile and Venezuela receive a greater share of FDI from the United States. In Paraguay, on the other hand, the greatest share of FDI comes from other Latin American economies, mainly Argentina, Brazil, Uruguay and Chile.

Only a small fraction of FDI in Latin America is contributed by the Asia and Pacific region. But the share is rising. Between 1992 and 1998, Japan's net FDI flows to Latin America were approximately \$32 billion, increasing from \$2.7 billion in 1992 to \$6.5 billion in 1998 [see Hosono (2000) and Urata (1993)]. Net flows of FDI by the Republic of Korea to Latin America in the period of 1992 to 1998 amounted to approximately \$2 billion, rising from \$70 million in 1992 to \$627 million in 1997; the flows declined to \$378 million in 1998, a result of the East Asian crisis [see Economic Commission for Latin America and the Caribbean (2000) and Hosono (2000)].

There is no overall sectoral concentration of FDI investments in Latin America., but there is great diversity among the various countries in the region. Table 11 presents data on the sectoral distribution of FDI in a selected group of countries. In Ecuador, Bolivia and Chile, FDI in minerals and agriculture predominates. In Brazil, Paraguay and Venezuela, manufacturing FDI dominates; and in Mexico and Peru, the largest share of FDI flows to the service sector. For some countries, such as Colombia, the distribution of FDI is balanced among the various sectors of the economy.

The diversity of recent FDI flows in Latin America is also reflected by the sectoral distribution of the largest multinational firms located in Latin America. Table 12 lists the top 14 foreign multinationals in Latin America according to the value of their production activities in 1998; we also show their country of origin and their sector of production. Reflecting a long, historical presence in Latin America, five of the top ten foreign multinationals operating in Latin

America are automobile companies. The largest is General Motors Corporation, whose total value of production in 1998 was equal to \$18.5 billion. The other automobile companies include Volkswagen (with \$13 billion in revenues in 1998), Ford Motor Company (with \$10.3 billion in revenues), Fiat (\$8.9 billion), and Damier-Chrisler (\$8.8 billion). But besides these manufacturing firms, Table 12 shows that there are also large multinationals in Latin America operating in the areas of telecommunications (Telefónicas de España), electricity (AES Corporation, Endesa España), retail trade (WalMart Stores, Carrefour Supermaché), mining/petroleum (Royal Dutch Shell, Exxon Corporation, Repsol), and food processing (Nestle).

## II. The Determinants of Increased Foreign Direct Investment in the 1990s

What explains the massive growth of FDI in Latin America during the 1990s, and its distribution among the various countries in the region? Traditional explanations for FDI have been mostly microeconomic in nature. This literature suggests that foreign firms will invest in an economy in order to be able to supply products, inputs, or technology in a way that can not be achieved through exports to that country. This may be because of transportation costs, which encourage the firm to locate close to the consumer, as in the case of retail trade, tourism, transportation, electricity, and many other industries. There may also be tariffs or other barriers to trade, current or prospective, which discourage the export of products to a country and provide incentives for location there [see Bhagwati, Dinopoulos and Wong (1992), and Blonigen and Feenstra (1996)]. In many cases, the foreign firm can compete effectively with local firms in the host country, and often dominate, because it is able to offer new or improved products not available locally. Multinationals may also have improved managerial systems or superior production technology [see Hymer (1976), Dunning (1993)].

The importance of these factors in promoting FDI is reflected in the responses of Japanese Multinationals to a 1997 survey, which asked them what were the main motives for

their FDI in Latin America. Close to 66 percent of all firms responded that market protection and expansion was one of their key motives for FDI, and 37.1 percent also noted that their FDI was oriented to the development of new markets [Inter-American development Bank (1998), p. 95].

The second major incentive for FDI in developing countries has been the growing use of assembly technology in production. Multinational firms often locate plants in developing countries as part of a global production strategy that assigns labor-intensive parts of the production process to low-wage economies. In the 1997 survey of Japanese multinational companies noted earlier, close to 40 percent said that obtaining cheap labor and an international division of production were main motives for their FDI in Latin American countries [see Inter-American Development Bank (1998), p. 95)]. This is the strategy represented by assembly plants (maquiladoras) producing in Mexico's border region or in Costa Rica.

A related phenomenon is present in vertically-integrated multinationals processing raw materials. These firms seek to avoid the costs associated with local monopsony over natural resources and/or the uncertainty of local supply disruptions by acquiring an interest in "downstream" operations [see Caves (1971), and Krugman (1983)].

The forces that we have just noted represent incentives for capital to locate in developing countries. But these incentives have existed for a long time. The question is really why more capital did not flow to developing countries before the 1990s. Indeed, reflecting the sluggish path of FDI flows to developing countries in the seventies and eighties, Nobel Prize winner economist Robert E. Lucas wrote a paper in 1990 entitled: "Why Doesn't Capital Flow from Rich to Poor Countries?" In this paper, he suggested that a variety of factors explained the absence of great flows of capital to developing countries, despite massive differences in wages, including (1) the presence of government barriers, restrictions, and taxes on FDI in many developing countries, and (2) higher labor productivity in industrialized countries due to, among other factors, the greater human capital of the labor force in rich countries. We start our discussion by focusing on the first of these two issues, returning later to the second.

#### **Liberalization of Restrictions on FDI**

The most important reason for the recent expansion of FDI flows to Latin America is the dismantling of governmental barriers to foreign investment in the region during the late 1980s and 1990s. From Mexico to Argentina, virtually every Latin American country has undergone a major liberalization of its regulations governing foreign investment.

Most of the recent reform efforts have been associated with trade liberalization initiatives. In fact, most experts and policymakers now see trade and foreign direct investment as complementary to each other [see World Bank (1999a), pp. 49, 64]. It should be noted, though, that, historically, FDI in Latin America was stimulated by the presence of trade restrictions, which were an integral part of trade and investment regimes seeking import substitution. Although import substitution policies of some type or another had been adopted for centuries, a formal strategy of import substitution in economic development gathered momentum in the forties and fifties. This doctrine, which was widely supported by the United Nations Economic Commission for Latin America and the Caribbean, sought the rapid expansion of domestic production of import substitutes, with the goal of reducing dependency on imports. High-tariff regimes were combined with restrictions to FDI in a wide array of sectors, with the goal of reducing dependence on foreign capital. However, limited amounts of FDI were allowed to flow into industries that contributed to import substitution. In fact, the high barriers to international trade present under the regimes stimulated manufacturing FDI inflows, with the foreign capital enjoying substantial economic rents due to the protection. In this context, trade and FDI were considered to be substitutes for each other.

This pattern of FDI dominated Latin American investments in the sixties and seventies. However, widespread disillusionment with import-substituting strategies in the region generated a drastic turn-around in policies towards both trade and foreign investment. In response, a process of liberalization took hold in the 1980s and 1990s. The relaxation of restrictions on trade and foreign investment in the region have stimulated FDI on a massive scale.

Consider the case of Mexico. This country's restrictions on FDI go back to the earlier parts of the twentieth century. In the 1930s, for example, after the Mexican revolution, nationalizations were undertaken in the railroad industry, telegraphic services and the oil industry, and severe restrictions were imposed on FDI in the banking, insurance, communications, transportation, and other sectors of the economy. Although FDI flows increased significantly after World War II, barriers to FDI continued to be present in much of the economy. In the 1950s and 1960s, the country's telephone and the electric companies were nationalized and foreign majority ownership was restricted in steel, cement, glass, automobiles, mining, etc. Typical of other Latin American strategies at the time, the 1973 Law to Promote Mexican Investment and Regulate Foreign Investment established the strongest restrictions on FDI since World War II. It was, paradoxically, the last such policy attempt.

The process of trade and foreign investment liberalization in Mexico was first undertaken on a regional basis. The Border Industrialization Plan first liberalized trade and direct foreign investment restrictions along the U.S.-Mexico border in the sixties and seventies, spurring the growth of maquiladoras in that region. The border free trade zone created a hospitable environment for FDI, and foreign-owned assembly plants swarmed to the border region. The success of this initiative led to its extension to other parts of the country. By 1980, maquiladora employment had risen to 120,000 workers. Since 1980, employment in the sector has increased at a rate of 13.2 percent a year, yielding close to a million jobs at the present time. Maquiladora exports have accounted for over 30 percent of total Mexican exports in recent years. And even though started as a border phenomenon, stimulated by the proximity to the U.S., more than 50 percent of new maquiladoras established since 1994 have located outside the border region, including areas that are quite distant from the border, such as Yucatan and Oaxaca. The major role played by maquiladoras in the FDI flows of Mexico is reflected in the fact that, between 1994 and 1998, close to 28 percent of the net inflows of manufacturing FDI into Mexico were into this sector.

The North American Free Trade Agreement (NAFTA) further acted to liberalize foreign

direct investment flows to and from Mexico, Canada and the United States after 1994. The Agreement included a number of provisions that facilitated FDI, including a national treatment concept, which includes market access; a minimum standard of treatment, which binds the countries involved to sustain minimum internationally-accepted standards for the treatment of investors; prohibition of content and other requirements on investors; the provision for payments and transfers to be freely-made in a convertible currency; and a dispute settlement mechanism. Additional FDI liberalization has occurred since NAFTA. At the present time, sectors accounting for close to 80 percent of Mexican GDP are completely open to FDI (see de Mateo Venturini, 1998).

#### **Privatization and Foreign Direct Investment**

Liberalization of restrictions on foreign direct investment has not been the only force behind the recent expansion of FDI in Latin America FDI can be decomposed into two types: private-private transactions (which includes mergers and acquisitions as well as investment in new facilities) and private-public transactions, such as those that privatization gives rise to. In fact, privatization has been a leading force behind FDI in Latin America and the Caribbean since the early1990s. In 1997, out of \$62 billion of foreign direct investment flows into the region, \$11.4 billion were related to privatization. Close to 20 percent of all FDI in the region was connected to privatization. This is still smaller than for Europe and Central Asia, where 32 percent of FDI is related to privatization, or in Sub-Saharan Africa, where 38 percent of FDI flows were accounted for by privatization in 1997.

Privatization initiatives have been booming in Latin American and the Caribbean. Table 13 shows the accumulated revenues obtained from privatization in developing countries between 1990 and 1997. Latin American countries obtained the greatest volume of revenues, summing up to \$116 billion in the 1990-1997 period. This compares to \$37.5 billion in the East Asia and Pacific region, and \$47 billion in Europe and Central Asia. Privatization has been much less

significant in the Middle East and North Africa, where \$5.1 billion were raised in the period, in Sub-Saharan Africa, where \$6.2 billion in revenues were obtained, and in South Asia, which had \$9.8 billion in privatization revenues. It is no coincidence that, in these regions, FDI flows have also been the lowest compared to the rest of the developing world.

Within Latin America, three countries shared most of the revenues from privatization:

Brazil, Mexico and Argentina. As Table 13 presents, these three countries had close to 80

percent of all privatization revenues in the period between 1990 and 1997. Table 14 shows the largest privatization-related FDI ventures in Latin America during 1998 and 1999. All but one of these privatizations were in Brazil and Argentina. The largest involved the privatization of Aeropuertos Argentina, with U.S. and Italian companies joining with Argentinean companies in a transaction worth \$5.1 billion. The second largest transaction was worth close to \$5 billion also and it involved the privatization of Telecomunicacoes de Sao Paolo, purchased by Spanish and Portuguese investors.

Despite the concentration of privatization-related FDI in Brazil, Mexico and Argentina, other countries have also been major recipients. In 1998, both El Salvador and Guatemala received FDI flows unparalleled in their recent history. In both cases, these FDI flows were associated with privatization transactions. In El Salvador, the two public electric distribution enterprises were divested, acquired by Venezuelan and Chilean electric companies. In addition, an electricity generating power plant was sold to Duke Energy, a U.S. company, the cellular phone system was transferred to Telefónicas de España and the basic phone system was acquired by France Telecom. In Guatemala, 51 percent of the basic phone system was privatized and the cellular phone system was transferred to Telefónicas de España. In addition, Guatemala privatized three of its electric energy companies in 1998.

The impact of privatization on FDI is not limited to the sale of state assets to foreign enterprises. It is estimated that each dollar of privatization in the 1990s attracts 88 cents of additional FDI [see Sader, 1995, pp. 26-32)]. In many instance, privatization acts to improve the basic infrastructure and essential services supplied to businesses in the country, attracting more

foreign firms to locate there. In addition, "a strong privatization program sends an important signal to the investor community, that the government is willing to support private sector development and remove impediments and restrictions on foreign investment" [International Finance Corporation, 1997, p. 43]. The next section elaborates on this issue.

## The Public Policy Environment towards Private Sector Development

One of the key explanations for the expansion of FDI in Latin America in the nineties is the more favorable and stable policy environment towards private sector development. The recognition that one of the major roles of the government is to foster an efficient, dynamic and competitive business environment took hold in a number of governments in the region, as reforms eliminating government restrictions on the economy –from price controls to foreign exchange restrictions—were implemented in the late 1980s and in the 1990s.

As a consequence of the FDI liberalization efforts of the last 10-15 years, most business surveys of foreign investment barriers now give relatively high marks to Latin America. In Table 15, the results of one such survey are presented. The table displays the value of an index reflecting the barriers to foreign investment in various regions and countries --computed by Dow Jones/Wall Street Journal. The index ranges from 1 to 5, where 1 is given to countries with very low barriers to foreign investment and 5 to nations with very high barriers. The exact assignment of values is: (1), very low barriers to foreign investment: means that there is open treatment of foreign investment and an accessible foreign investment code; (2) low barriers: means that there exist certain restrictions on sectors such as utilities and natural resources, but that there is a limited, efficient approval process of new projects; (3) moderate barriers: means that there are restrictions on many investments, and a bureaucratic approval process, but that there is at least an official policy that conforms to an established foreign investment code; (4) high barriers: means that foreign investment is permitted on a case-by-case basis, with the presence of a bureaucratic approval process that may be marked by some corruption; (5) very high barriers: means that the

government actively seeks to prevent foreign investment, and that there is rampant corruption in the process.

As Table 15 shows, Latin American countries rank in the 1 to 3 category in this index of foreign investment barriers. Overall, the lowest score is obtained by high-income economies, which have an average of 2.0. However, among developing countries, Latin America has the lowest average score, equal to 2.1. This is significantly lower than the score for other developing countries: the Europe and Central Asia region has an average score of 2.9, the South Asia region has 3.0, East Asia and Pacific region has 3.1, Sub-Saharan Africa, 3.2 and North Africa and the Middle East, 3.5.

Despite the major FDI liberalization policy initiatives which, on paper, produce a more transparent, hospitable environment for foreign investors, many governments worldwide continue to be plagued by corruption, political patronage, and an array of "invisible" barriers to investment. The situation has improved, but it continues to be an issue in a number of Latin American countries. Table 16 presents the results of the latest worldwide Corruption Perceptions Index, which is based on local business and public surveys of corruption in the countries involved, with a ranking of 10 indicating the lowest level of perceived corruption and 1 the highest. The Latin American countries ranking with the lowest local perception of corruption are Chile and Costa Rica (with scores of 6.9 and 5.1, respectively), and those with the highest are Paraguay, Ecuador and Bolivia (with scores of 2.0, 2.4, and 2.5, respectively).

The presence of these "invisible" barriers sharply distort FDI flows since the investment projects are chosen "not on the basis of their intrinsic economic worth, but on the opportunity for bribes and kickbacks these projects present" (Tanzi and Davoodi, 1998, p.1). Indeed, statistical analysis carried out by various economists suggests that higher corruption is negatively associated with investment and economic growth (see Mauro, 1997).

The extent to which both domestic and foreign businesses continue to see corruption and other problems with governance as a problem is reflected in data collected by the World Bank on the perceptions that business officers have of the major barriers to doing business in their

countries. Table 17 shows that for Latin America the most significant barrier listed is corruption, with over 50 percent of those businesses interviewed indicating that corruption is a severe barrier to their operations. Other factors listed by businesses include: regulatory uncertainty, unpredictability of the judiciary, tax regulations and/or high taxes, financing problems, inadequate infrastructure, crime and theft, policy instability, inflation, and foreign currency regulations, and labor, environmental, and foreign trade regulations, regulatory uncertainty, and regulations to establish a new business.

The list just presented includes a number of microeconomic variables that influence the business environment in a country. There are, however, also macroeconomic variables. The next section examines their impact.

# The Impact of Exchange Rate and Macroeconomic Policies on FDI

Historically, two of the major deterrents of FDI in Latin America have been exchange rate and macroeconomic instability, reflected in high and variable inflation rates, exchange rate volatility and misalignment, and periodic financial crises. This was especially the case in the seventies and eighties. However, over the last decade, a number of countries have instituted substantial macroeconomic and financial reforms intended to stabilize their economies.

Table 18 shows the behavior of inflation in the world from 1966 to 1998. Among developing countries, the average annual inflation rate in the period of 1974 to 1990 was 11.1 percent. This declined in the 1990s and by 1998 inflation was 7.6 percent. In Latin America and the Caribbean, the average annual inflation rate in the period of 1974-1990 was 10 percent, and this declined to 7.9 percent in 1998. In the three largest Latin American economies --Brazil, Mexico and Argentina-- the impact of macroeconomic reform in the nineties was impressive. For Brazil, average annual inflation during the 1974 to 1990 period was 145 percent, but it dropped to 3.8 percent by 1998. In Mexico, inflation in the 1974 to 1990 period was at an annual average of 48 percent, but by 1998 it had dropped to 15.9 percent. And in Argentina, annual inflation in

the period from 1974 to 1990 was 203 percent, but in 1998 it was -2.0 percent, reflecting price deflation.

Despite the stabilization policies adopted by Latin American countries in the 1990s, there is still much room for reform. The financial crises in Mexico in 1994-95 and in Brazil in 1998-99, and their contagion to other countries in the region, have made it clear that macroeconomic policy disturbances are still a major area of concern for both local and foreign investors. .

Furthermore, political risk, in the form of actual or attempted military coups, the fraudulent manipulation of elections, guerrilla movements, and popular unrest, as seen recently in Colombia, Ecuador, Paraguay and Peru, also adds to the economic uncertainty. In the 1999 World Bank study of barriers to doing business (presented in Table 17), 38 percent of the respondents in Latin America noted that policy instability was a severe problem for their business, 34 percent saw inflation as another severe problem, and 18 percent stated that foreign currency regulations constituted another major problem [see also Singh and Jun (1995)].

One of the problems that has plagued the region for many years is overvaluation of domestic currencies. Monetary authorities often act to delay devaluations or depreciations of local currencies, seeking to sustain improved terms of trade with the rest of the world. This benefits domestic consumers purchasing imports, but it hurts domestic producers, including foreign investors producing goods domestically. Currency overvaluation acts as a tax on exports and it distorts trade and investment patterns, eventually leading to unsustainable current account deficits that explode in currency and financial crises [see Rivera-Batiz and Rivera-Batiz (1994. These act to reduce FDI.

The impact of currency devaluation on FDI is complex, but increased inflows have been observed in many economies after currency realignments. It must be recognized, however, that currency devaluations have significant effects on the economy only when they change relative

prices, as reflected by changes in real exchange rates [see Goldberg and Klein (1997)]. Real exchange rates reflect the level of competitiveness of domestic goods relative to foreign goods and they are defined as the price of foreign goods in local currency (equal to the nominal exchange rate times the price of foreign goods in foreign currency) divided by the price of domestic goods in local currency. When the real exchange rate rises, the relative price of foreign goods increases relative to domestic goods, making domestic products relatively cheaper in world markets, increasing domestic competitiveness, and stimulating exports. On the other hand, when the real exchange rate declines, the prices of domestic goods rise relative to foreign goods, making domestic goods relatively more expensive, which reduces the competitiveness of local products in world markets and, consequently, discourages exports.

There are a number of mechanisms through which currency devaluation acts to increase FDI. When a devaluation of the currency leads to a real currency depreciation, FDI located in the country usually profits from the change. Local producers encounter improved international competitiveness and this allows export-oriented firms to increase sales and profits. In addition, the local inflation generated by devaluation often reduces real wages. This raises the local profitability of FDI [see Barbone and Rivera-Batiz (1986) for an analysis of the impact of devaluation on FDI in Jamaica].

The uncertainty and misallocation of resources associated with the mismanagement of exchange rate, fiscal and monetary policies have acted to dampen trade and FDI in Latin America. Although the policy environment has improved substantially in many countries of the region in the nineties, this remains a major area of concern.

#### **Increased Educational Attainment**

Studies of the location decisions of multinational firms suggest that although they seek cheap sources of labor, they prefer workers who have a minimum of skills or education. Firm productivity is decreased sharply by a workforce that is illiterate or with extremely low levels of schooling. Using cross-country data, Juan Alcacer of the University of Michigan has shown that, holding other things constant, increased human capital endowments attract FDI flows.

The educational attainment level in Latin America has been rising quickly over the last 30 years. Table 19 shows that Latin America and the Caribbean has an average level of schooling that substantially exceeds the average for developing countries. In 1990, the average person aged 25 years of age or older had 5.2 years of schooling in Latin America and the Caribbean, compared to 5.0 years in the East Asia and Pacific region, 2.4 years in South Asia, 3.4 years in North Africa and the Middle East, and 1.6 years in Sub-Saharan Africa. The expansion of schooling in Latin America is reflected in the fact that the proportion of persons 25 years of age or older who attained some level of higher education rose from 5.4 percent in 1980 to 7.1 percent in 1990 and 9.2 percent in 1995 [see Bloom and Rivera-Batiz, 1999].

The greater educational attainment in Latin America acts as an incentive for FDI and helps explain the rise of FDI inflows into the region in recent years. For instance, when Intel sought to establish operations in Costa Rica, this country was competing with other, neighboring economies that have lower wages. However, the educational attainment of the workforce in Costa Rica is significantly higher than in most other countries in Central America. In the case of Intel, the trade-off of lower wages versus higher education worked in favor of Costa Rica: Intel decided to invest \$300 million in a new semiconductor and testing facility in that country.

Some experts have noted the possibility that FDI will raise the demand for relatively skilled labor in host countries, instead of absorbing lower-paid workers with low levels of schooling. This may contribute to growing wage inequality [see Baldwin (1995) for a discussion of the impact of FDI on wage structures], which leads us to the next Section.

# III. The Consequences of Foreign Direct Investment

Foreign Direct Investment can generate both benefits and costs for the recipient economy. We focus first on the benefits from FDI, discussing the costs later on.

# **Employment Generation**

The most important benefit of FDI for host countries lies in the generation of employment. Despite the serious reform efforts of the last 15 years and the improved growth performance in the nineties, most Latin American economies have grown rather sluggishly during the last 20 years. In the period of 1974 to 1990, growth of real GDP per capita in Latin America and the Caribbean was 0.4 percent per year, compared to 1.8 percent in the 1991 to 1998 period. This comparatively slow growth sustains a pool of unemployed and underemployed workers accounting for a significant segment of the labor force. As a result, the generation of gainful employment remains a top priority of every government. By supplying increased employment opportunities, FDI can provide substantial direct and indirect benefits to the host economy.

Employment generation through FDI can be counter-cyclical, reducing the impact of business cycles on the labor market. The maquiladora industry in Mexico is a case in point. The following case study based on Ciudad Juarez, a city of about one million people located along the U.S.-Mexico border region, shows the employment benefits of FDI to the host country. In 1996, close to 60 percent of employment in Ciudad Juarez was generated by the maquiladora industry. The 1994-1995 peso devaluation and the ensuing financial crisis generated a deep recession and sharp employment losses in the Mexican economy (Mexico's GDP declined by about 7 percent in 1995). Yet, Ciudad Juarez gained in employment during this time period, due largely to the direct and indirect effects of the expansion of maquiladoras in the city. During the period of December 1994 to November 1995, maquiladora employment increased by 16,000 (in

a city where employment was 280,000 at the time). The maquiladora expansion was connected to the lower real wages associated with the peso devaluation, combined with the fact that the export prices of many maquiladoras are denominated in dollars. As the profits of maquiladoras rose sharply after the crisis, an increased influx of FDI followed. In a city where unemployment (which includes persons laid off and those seeking employment) was between 8 and 9 percent of the labor force in 1995, and underemployment (including the unemployed plus persons working less than 35 hours a week) was close to 30 percent of the workforce, this expansion of employment had a substantial, positive socioeconomic impact [see Vargas (1996)].

# Positive Linkages with the Rest of the Economy

A second major benefit of FDI occurs when the foreign investments act to improve the productivity of the rest of the economy [see Rivera-Batiz and Rivera-Batiz (1990, 1992)]. Some types of FDI are criticized precisely because of the absence of these linkages. Acting as enclave economies, importing most of their inputs and assembling them for export, certain types of manufacturing FDI have been especially sensitive to this criticism. In recent years, however, FDI linked to the privatization of public sector enterprises has resulted in substantial improvements in the quality of service-sector activities that have strong linkages to the rest of the economy. The privatization of public utilities, transportation, telecommunications and other services can provide substantial increases in productivity to the rest of the economy, for both households and businesses. Increased capacity, improved management, and transfers of new technology allow the FDI to provide a greater supply of services, with enhanced quality, at a lower price.

The following case study, involving water supply and sewage treatment in Argentina illustrates the potential gains from FDI in this context. Until 1993, water supply and sanitation in Buenos Aires were under the control of the public sector enterprise Obras Sanitarias de la Nacion (OSN). This company suffered from gross mismanagement, overpricing its clientele while

providing limited, sub-quality service. Only 30 percent of the households residing in the area were connected to the water network. The rest, particularly the poor, had dug wells in order to get access to water. For those connected to the public water system, the service received was unreliable (during periods of peak demand water pressure was inadequate to maintain service throughout the day), and poorly-maintained (water loss in Buenos Aires was close to 45 percent, while in effective systems in other cities water loss was less than 10 percent). Furthermore, the company focused on its water supply function, neglecting its sanitation tasks. As a consequence, a growing number of households and businesses (including many industrial plants) in Buenos Aires were not connected to the sewage system. For those connected, the sewage was collected but it was not treated. There was only one wastewater treatment plant in Buenos Aires and it processed only 5 percent of the city's sewage before dumping the rest into the Rio de la Plata. The result was that groundwater pollution in the greater Buenos Aires area became a major problem. The company also had serious financial and operational problems.

Obras Sanitarias de la Nacion was privatized, with an international consortium acquiring a 30-year concession to operate the enterprise. In May 1993, Aguas Argentinas, a private company, started its operations. The result has been a sharp turnaround in the quantity and quality of services offered, plus lower average costs: by 1997 there was a drop in the average water tariff of 17 percent relative to what OSN charged. As the International Finance Corporation of the World Bank concludes: "Aguas Argentinas has engineered an extraordinary turnaround of a state enterprise in decay into an efficient, viable company. The residents of Buenos Aires have been the main beneficiaries. For the first time, chronic water shortages have been eliminated. Both the quality and quantity of potable water have been increased. Water tariffs paid by consumers have been cut. An ambitious capital expenditure program is being carried out, making it possible for the first time to extend water and sewerage services to the poor with accompanying improvements in the environment and public health" [International Finance Corporation (1997b), pp. 15-16.].

The greater quantity and quality of services at a lower average cost introduced by Aguas

Argentinas have increased productivity in both the household and business sectors of the economy. Furthermore, the expansion in the operations of the company have had indirect effects on the economy, through increased purchases of complementary goods and services supplied by nationally-owned enterprises, such as Meranol, a local supplier of chemical products, and Quimica del Norte, a local producer of chlorine products, among others. And the re-focus of the company on waste treatment has significantly reduced pollution, an externality of considerable social value. [for more details, see International Finance Corporation (1997b)].

The experience of Aguas Argentinas is one among many others. It shows that FDI inflows associated with well-managed privatizations can result in sharp positive gains in economic welfare for host countries, ranging from lower prices and increased supplies for essential services, to the transfer of new technologies and more intensive linkages with local firms.

The positive effects of FDI on the rest of the economy are not limited to privatization. Using evidence from 2,113 Mexican manufacturing plants over the period between 1986 and 1990, economists Brian Aitken, Gordon H. Hanson and Ann E. Harrison have shown that domestic firms located near foreign multinationals have a greater probability of exporting [Aitken, Hanson and Harrison (1994)]. By providing the export distribution networks and the information needed to enter foreign markets, FDI establishes a niche for domestic firms to export [see Markusen and Venables (1999)]..

## **Technology Spillovers to National Firms**

Foreign Direct Investment often brings new inputs and production processes when it flows into a country. Therefore, one of the possible gains of FDI to the national economy is through the transmission or transfer of the new technology to domestic firms in the same industry.

The empirical evidence on whether FDI benefits national firms through transfers of

Edward W. Wolff found that industries with greater FDI were also the industries with the faster productivity growth [see Blomstrom and Kokko (1997a, 1997b)]. Similarly, Tan (1998) finds that, for Mexico and Malaysia, there exist intricate formal and informal flows of technology. On the other hand, using a panel data set of more than 4,000 Venezuelan plants between 1976 and 1989, Brian Aitken and Ann Harrison conclude: "we find no evidence supporting the existence of technology "spillovers" from foreign firms to domestically-owned firms" [Aitken and Harrison (1999), p. 617].

# **Negative Consequences of FDI**

The last section examined the presence of externalities and spillovers that benefit domestic capital owners as a result of FDI. However, the greatest concern among both policymakers and the public in Latin America is the possibly negative impact of FDI on domestic producers. Related to this issue is the possibility that foreign multinationals may engage in predatory practices, formal or informal collusion, and political lobbying to reduce domestic competition, allowing them to capture monopoly or oligopoly rents. Richard Newfarmer, for example, has argued that this is exactly what he observed in the Brazilian electrical industry in the 1960s and 1970s [see Newfarmer (1980)]. Similarly, Paulo Bastos Tigre concludes: "[this] study of the Brazilian computer industry found that the competitive behavior of local subsidiaries of multinational corporations creates barriers to entry for indigenous firms" [Bastos Tigre (1983), p. 158].

A second area of concern involves foreign investments that flow into highly-distorted, unregulated sectors. In this case, FDI may act to magnify existing distortions and misallocation of resources in the economy. For instance, FDI flows into financial service sectors that are not adequately regulated or supervised may result in serious mismanagement of investment funds.

Yet another major issue regarding FDI is its environmental impact. Lax local

enforcement of environmental protection legislation in regard to foreign firms has led to disastrous consequences in many parts of the world. However, in the global competition to attract FDI, there is often a "race to the bottom," which leads developing country governments to relax the enforcement of costly environmental protection regulations to induce more foreign firms to locate in their jurisdictions.

The working conditions in plants sponsored by FDI have also been a concern. The presence of sweatshops that subject their employees, sometimes child laborers, to dangerous, sub-human working conditions is a serious issue. The "race to the bottom" phenomenon is also present here, as governments minimize the enforcement of workplace regulations in order to attract FDI.

The adverse effects of FDI can more than offset its gains. A recent survey of the consequences of 183 FDI cases in 30 developing countries during a period of 15 years concluded that, in a substantial number of these cases (25 percent or more), FDI actually resulted in a net reduction of economic welfare in the host country [Moran (1998)]. Ultimately, the explanation for many of these cases is the presence of a major domestic policy failure or distortion, which has permitted, wittingly or unwittingly, the negative domestic consequences of FDI to thrive. A failure of policymakers to regulate FDI and to enforce regulations to which foreign-owned firms are subject to is the main culprit behind the negative consequences of FDI.

Even when FDI provides net gains to an economy, the presence of a broad array of adverse effects, especially for particular groups or sectors within the economy, means that countries must seriously consider the extent to which those who lose from FDI are adequately compensated for their losses.

# IV. Prospects for Foreign Direct Investment in Latin America

Based on the analysis in this paper, the long-term prospects for increased FDI in Latin America are positive. Although a sluggish growth of GDP in the near future may prevent a

substantial expansion of direct investment in the region over the short-run, the key long-run forces influencing FDI are likely to produce records levels of FDI in the coming decade. These factors are:

- Continued support for FDI liberalization, whether through bilateral or multilateral means;
- Increased trade liberalization, which is complementary to FDI;
- Continuation of privatization initiatives;
- Improved governance and transparency of public sector institutions, allowing a more hospitable environment for private sector institutions, including foreign investors;
- Continuation of macroeconomic policy reforms, including the elimination of real exchange rate misalignments and economic instability.

The role of the East Asia and Pacific region on FDI in Latin America is likely to increase. Middle-income and newly-industrialized countries are likely to be the new pioneers in this area. The ability of middle-income countries to generate outflows of FDI is very clear in Latin America, where multinational companies in Mexico, Chile, Brazil and other countries operate in a variety of other economies. Intra-industry FDI flows across countries with similar GDP per capita have been at the core of FDI flows in recent years. One would therefore expect countries such as the Republic of Korea, Taiwan, Singapore, etc. to become more active FDI exporters in the future.

The low current levels of Asian FDI in Latin America suggests that, despite profitable prospects, the high sunk costs of new individual ventures, the risks involved to single investors, and the lack of information facing any entrepreneur may act as formidable barriers. The proximity to the United States and the economic and cultural linkages with Europe also provide an advantage to multinational firms based in these regions.

There are, however, policy measures that may stimulate Asian and Pacific FDI in Latin America. Regional integration efforts, such as the European Community, NAFTA and MERCOSUR, have generated increased FDI flows among members of the regional group [see Inter-American Development Bank (1998, chapter 8)]. One suspects that cooperation and

integration initiatives involving governments, business organizations and multilateral institutions in Latin America and the East Asia and Pacific regions are likely to generate significant FDI levels.

The role that active policy interventions may play in in fertilizing budding regional integration initiatives cannot be minimized. As newly-industrialized countries in Asia and Latin America grow, and local firms develop specific technologies and products that can be effectively exported to or produced in the other region, trade and investment links between the two regions are likely to become more and more influenced by a "coordination failure" problem than by the lack of profitable trade and investment opportunities [see Rodrik (1994)]. These coordination failures result from the high fixed, sunk costs that are required to start major trade and investment links between the two regions, the asymmetric availability of information in each region, and the considerable risk-taking that confronts the single investor in one country seeking to invest in another for the first time. Coordinated actions by all the players involved to reduce the private fixed costs of start-up investments, to ameliorate the lack of information flows currently plaguing the two regions, and the sharing of risks, will be highly productive, to both the private and public sectors in the two regions.

#### Annex

#### **Measuring Foreign Direct Investment Flows**

Inflows of Foreign Direct Investment (FDI) are defined as the value of the investments made by foreign residents (usually foreign firms) in a particular country over a certain period of time with the purpose of acquiring a lasting management interest over the affairs of the enterprises in which the funds are invested. In contrast to portfolio investments, FDI must involve some long-term foreign ownership or control over the decisions made by the domestic firms using the foreign capital.

The measurement of FDI is not without its problems. There is, first of all, an open question, about what is a "lasting management interest." Most countries consider FDI to occur when the foreign investor owns 10 percent or more of the equity of the domestic enterprise. This is the definition that the United Nations, the International Monetary Fund (IMF), the World Bank and most international organizations use in their statistical guidelines. However, the 10 percent standard is clearly arbitrary. Some investments included as FDI in this definition (investments close to the 10 percent lower limit, for example), may not be large enough to involve active foreign control over local management. They would thus fail to satisfy the essential criteria for FDI, which requires a long-term interest in managing the local enterprise. On the other hand, there are also cases in which a foreign investor controlling less than 10 percent of domestic equity (and thus not catalogued as FDI) may have a substantial controlling interest on a domestic enterprise. To compound the problems, a number of countries do not utilize the "10 percent rule" in collecting data, adopting instead what they consider better reflects FDI, such as a "20 percent rule." And the systems for recording FDI vary by country, including different time frames and reporting requirements [for more details, see Inter-American Development Bank (1998, pp. 217-237)].

The data on FDI presented in this paper are based on balance of payments statistics

reported by the IMF. These are supplemented by data collected by the Organization for Economic Cooperation and Development, and by the United Nations Economic Commission for Latin America and the Caribbean (ECLAC).

Note that a country with inflows of FDI can also have significant outflows of FDI. This paper generally focuses on examining the net flows of Foreign Direct Investment into Latin America, which constitutes the balance of the inflows and outflows of FDI. For most countries in this region, however, there are only minimal, if any, outflows of FDI to countries outside Latin America. The net and gross measures of FDI are therefore very close to each other. Only Chile has had substantial direct investments outflows, representing Chilean investments abroad.

Between 1990 and 1997, Chile's FDI flows to the rest of the world amounted to \$5.7 billion.

Most of these flows, however, remained within the region.

Table 1

Net Inflow of Foreign Direct Investment in Developing Countries, 1970-1998

Year	Foreign Direct Investment in Billions of Constant, 1998 U.S. Dollars
1970	9.0
1971	10.0
1972	5.6
1973	10.7
1974	0.6
1975	14.0
1976	6.6
1977	10.7
1978	11.2
1979	10.1
1980	5.7
1981	13.9
1982	12.9
1983	9.8
1984	10.8
1985	13.7
1986	12.1
1987	16.7
1988	22.9
1989	26.8
1990	30.5
1991	41.2
1992	53.6
1993	75.6
1994	97.3
1995	112.7
1996	131.2
1997	165.4
1998	163.1

Source: data for 1970-1990 from International Finance Corporation, *Foreign Direct Investment: The Lessons from Experience*, Washington, D.C., 1997, Appendix A; data for 1996-1998 from The World Bank, *Global Development Finance*, The World Bank, March 2000, summary tables.

Table 2

Foreign Direct Investment:

Rising as a Fraction of Long-Term Capital Flows to Developing Countries

Billions of constant, 1998 U.S. dollars

	1990	1998
Net long-term resource flows	126.0	308.5
Official Flows	71.1	48.6
Private Flows	54.9	259.9
International Capital Markets (Bonds, loans, portfolio equity flows)	24.4	96.8
Foreign Direct Investment	30.5	163.1
Foreign Direct Investment/Net long-term flows	24.2%	52.9%

Source: The World Bank, *Global Development Finance*, The World Bank, March 2000, summary tables.

Table 3

FDI Net Flows in the World and in Developing Countries, 1990 and 1997

Billions of constant 1998 U.S. dollars

	1990	1997	
World	240,827	398,420	
High Income countries	210,327	233,020	
Developing Countries (Low and Middle Income Countries)	30,500	165,400	
Developing Countries' FDI Divided by High-Income FDI	12.7%	41.5%	

Source: World bank, World Development Indicators 1999.

Table 4

Net Inflow of Foreign Direct Investment in Developing Countries, By Region

In billions of constant 1998 U.S. dollars

1991-1998

Region	1991	1993	1995	1997	1998	
All Developing Countries	41.2	75.6	112.7	165.4	163.1	
Latin America and Caribbean	15.4	16.1	32.7	62.4	62.0	
East Asia and Pacific	16.9	44.0	55.4	65.0	65.5	
Europe and Central Asia	4.3	7.2	18.0	22.5	23.0	
Middle East and North Africa	2.1	4.9	-0.7	5.4	4.8	
South Asia	0.5	1.3	3.1	4.8	3.7	
Sub-Saharan Africa	2.0	2.1	4.2	5.3	4.1	

Source: The World Bank,  $Global\ Development\ Finance$ , The World Bank, March 2000, summary tables.

Table 5

Net Flow of Foreign Direct Investment as a Percentage of Gross National Product

Developing Countries, By Region

## Percentage

Region	1970	1980	1990	1998	
All Developing Countries	0.2%	0.1%	0.6%	2.6%	
Latin America and Caribbean	0.6%	0.8%	0.7%	3.1%	
East Asia and Pacific	0.2%	2.4%	1.6%	3.7%	
Europe and Central Asia	0.1%	0.2%	0.3%	2.2%	
Middle East and North Africa	0.7%	-0.7%	0.3%	0.8%	
South Asia	0.1%	0.1%	0.1%	0.7%	
Sub-Saharan Africa	0.7%	0.0%	0.3%	1.3%	

Source: The World Bank, *Global Development Finance*, and The World Bank, *World Debt Tables*, various issues.

Table 6

Net Inflow of Foreign Direct Investment in Latin America, by Country

Millions of constant 1998 U.S. dollars, 1991-1998

Country	1990	1991	1992	1993	1994	1995	1996	1997	1998
Argentina	2,295	2,927	4,653	3,685	3,418	5,118	5,294	6,711	5,697
Bolivia	33	62	108	164	164	400	493	607	872
Brazil	1,236	1,324	2,391	1,460	3,379	5,199	11,648	19,848	26,347
Chile	737	986	1,087	1,168	2,841	3,186	4,913	5,471	4,793
Colombia	625	548	846	1,084	1,834	2,479	3,407	6,042	2,983
Costa Rica	204	214	262	279	328	424	444	575	559
Ecuador	158	192	206	530	584	503	465	583	830
El Salvador	3	30	17	16	0	41	-5	11	872
Guatemala	60	73	109	162	72	80	80	90	673
Guyana	0	0	170	79	118	79	84	91	95
Honduras	55	62	56	31	39	54	95	123	125
Mexico	3,292	5,714	5,096	4,960	12,069	10,192	9,552	12,602	10,238
Nicaragua	0	0	17	44	44	75	101	174	184
Panama	165	49	161	176	389	191	247	1,040	1,186
Paraguay	95	101	159	122	198	196	229	252	240
Peru	51	-8	158	757	3,392	2,140	3,355	2,050	1,930
Uruguay	0	0	1	115	171	168	142	162	164
Venezuela	564	2,299	729	420	894	1,054	2,270	5,138	3,766

Source: The World Bank, *Global Development Finance*, The World Bank, March 2000, country tables.

Table 7

Top 12 Recipients of Net FDI among Developing Countries, 1998

	Net FDI in Billions of U.S. dollars	
China	45.6	
Brazil	26.3	
Mexico	10.2	
Thailand	6.8	
Argentina	5.7	
Poland	5.5	
Korea, Rep. of	5.1	
Malaysia	5.0	
Chile	4.8	
Venezuela	3.8	
Colombia	3.0	
Czech Republic	2.7	

Source: The World Bank, *Global Development Finance*, The World Bank, March 2000, country tables.

Table 8

Foreign Direct Investment in Relation to Gross National Product

Latin America, 1998

Country	Total Net Flow of FDI in 1990-98	Average annual FDI in 1990-98	Average annual FDI in 1990-98	
Country	(Millions of US\$)	(Millions of \$)	GNP in 1998	
Brazil	72,832	8,092	1.0%	
Mexico	73,685	8,187	2.4	
Argentina	39,798	4,422	1.4	
Chile	25,182	2,798	4.0	
Venezuela	17,134	1,904	2.4	
Colombia	19,848	2,205	2.5	
Peru	13,825	1,536	2.4	
Panama	3,604	400	4.8	
Bolivia	2,903	323	3.9	
Ecuador	4,051	830	4.2	
Guatemala	1,399	155	0.9	
Costa Rica	3,289	365	3.9	
Paraguay	1,592	177	1.7	
El Salvador	985	109	1.0	
Uruguay	923	103	0.5	
Honduras	640	71	1.6	

Source: The World Bank, *Global Development Finance*, The World Bank, March 2000, country tables; The World Bank, *World Development Report*, 1998-99, Oxford University Press, 1999.

Table 9

Flows of Foreign Direct Investment in Selected Latin American Countries:
A Historical Look

	Average A FDI Net 1913-1929 Millions of 19	Flow 1970-1986	Annual FDI Flow Average,1913-29 GNP in 1929	Annual FDI Flow Average,1970-86  GNP in 1986
Argentina	544	373	2.1%	0.3%
Brazil	407	2,179	1.9	0.5
Chile	261	93	4.7	0.4
Colombia	157	342	3.3	0.6
Venezuela	126	-32	1.8	-0.0

Sources: FDI Net Flows between 1913 and 1929 from M. Winkler, *Investments of U.S. Capital in Latin America*, World Peace Foundation, 1929; FDI Net Flows between 1970 and 1986 from World Bank, *World Tables, 1989-1990 Edition*, The World Bank, Washington, D.C., 1990; GNP in 1929 from Angus Maddison, *Monitoring the World Economy, 1820-1992*, Organization for Economic Cooperation and Development, Paris, 1995; GNP for 1987 from World Bank, *World Tables, 1989-90 Edition*, The World Bank, Washington, D.C., 1990.

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Table 10

Region of Origin of FDI in Selected Latin American Countries, 1995

Percentage Distribution by Region

	United States	Europe	Latin Am./ Caribbean	Asia	Other
Bolivia	59.5%	9.0%	22.1%	4.4%	5.0%
Brazil	36.7	44.0	6.2	7.7	5.4
Chile	40.0	24.7	7.4	3.9	24.0
Colombia	55.7	18.4	21.7	1.9	2.3
Ecuador	66.9	21.6	9.2	0.3	2.0
Mexico	59.5	23.4	0.0	5.1	12.0
Paraguay	9.8	38.9	46.3	0.9	4.1
Peru	14.5	69.0	11.2	0.7	4.6
Venezuela	53.2	29.1	10.3	3.8	3.6

Source: ECLAC, *La inversion extranjera directa en America Latina y el Caribe*, Santiago, Chile, 1996.

Table 11
Sectoral Composition of FDI in Selected Latin American countries, 1995

Percentage distribution by sector

Country	Agriculture and Mining	Manufacturing Se	rvices and others
Bolivia	67.5%	12.9%	19.6%
Brazil	2.9	59.0	38.1
Chile	59.0	15.3	25.7
Colombia	25.1	38.6	36.3
Ecuador	75.3	15.1	9.6
Mexico	1.5	48.5	50.0
Paraguay	33.0	47.6	19.4
Peru	19.1	12.6	68.3
Venezuela	2.6	57.8	39.6

Source: ECLAC, *La inversion extranjera directa en America Latina y el Caribe*, Santiago, Chile, 1996.

Table 12

The Largest Foreign Multinational Firms Located in Latin America, 1998

Name of Firm	Country of origin	Sector	Total value of production (millions of US\$)
General Motors Corp.	United States	Automobile	18,493
Volkswagen AG	Germany	Automobile	12,927
Telefónica de Espa a	Spain	Telecommu.	10,294
Ford Motor Company	United States	Automobile	10,272
Endesa Espa a	Spain	Electricity	9,699
AES Corporation	United States	Electricity	9,270
Carrefour Supermarché	France	Retail trade	9,174
Fiat Spa	Italy	Automobile	8,887
Daimier-Chrysler	Germany	Automobile	8,848
Royal Dutch Shell	U.K./Nether.	Mining/petroleu	m 7,752
Repsol	Spain	Petroleum	6,808
Wal Mart Stores, Inc.	United States	Retail trade	6,734
Exxon Corporation	United States	Mining/petroleu	m 6,403
Nestle AG	Switzerland	Food	5,625

The value of production refers to plants located in Latin America.

Source: Comisión Económica para América Latina y el Caribe, *La Inversión Extranjera en América Latina*, Santiago, Chile, January 2000, p. 64.

Table 13

Privatization Revenues in Latin America and the Caribbean, 1990-97

Millions of current U.S. dollars

Revenues from privatization			
Latin America and Caribbean			
Total	116,540		
Brazil	34,302		
Mexico	30,459		
Argentina	27,894		
Peru	7,477		
Venezuela	5,915		
Colombia	5,685		
Chile	904		
Bolivia	885		
Other	3,019		
East Asia and Pacific Total	37,509		
Europe and Central Asia	47,129		
Middle East and North Africa	5,123		
South Asia	9,821		
Sub-Saharan Africa	6,214		

Source: World Bank Privatization Database, 1999.

Table 14

Privatization in Latin America with Substantial Foreign Participation, 1998-1999

## Ranked by the value of the privatization transaction

Privatized Firm	Country Selling	Foreign country participating in purchase	Value of transaction (Millions of US\$)
Aeropuertos Argentina	Argentina	United States, Italy	5,134
Telecomunicacoes de Sao Paolo (Telesp)	Brazil	Spain, Portugal	4,970
Telesp Celular	Brazil	Portugal	3,084
Electropaulo Metropolitana de Electricidade S.A.	Brazil	United States, France	3,018
Empresa Brasileira de Telecomunicacoes S.A.	Brazil	United States	2,278
Yacimientos Petroliferos Fiscales (YPF)	Argentina	Spain	2,010
Tele Centro Sul	Brazil	Italy	1,779
Concesion Area 3 (Rio de Janeiro & Espiritu Santo)	Brazil	Korea, Rep. of	1,327
Corporacion Electrica de la Costa Atlantica	Colombia	United States, Venezuela	1,316
Elektro Electricidade e Servicos (Sao Paolo)	Brazil	United States	1,273

Source: Comisión Económica para América Latina y el Caribe, *La Inversión Extranjera en América Latina*, Santiago, Chile, January 2000, pp. 72-75.

Table 15

Index of Foreign Investment Barriers, 2000

Region/Country	Ranking
High-Income countries	2.1
Developing Countries	3.0
Europe and Central Asia	2.9
South Asia	3.0
East Asia and Pacific	3.1
Sub-Saharan Africa	3.2
North Africa and the Middle East	3.5
Latin America	2.2
Argentina Bolivia Brazil Chile Colombia Costa Rica Ecuador El Salvador Guatemala Guyana Honduras Mexico Nicaragua Panama Paraguay Peru Uruguay Venezuela	2 2 3 2 2 2 2 1 3 3 3 3 2 2 2 2 1 1 2 2 2 3

Source: G. O'Driscoll, K. Holmes and M. Kirkpatrick, 2000 Index of Economic Freedom, The Wall Street Journal, 2000.

Table 16. Corruption Perceptions Index (CPI)

Index: 10 = Lowest corruption, 0 = highest corruption

Country	1999 CPI	Country	1999 CPI
Denmark	10.0	Czech Republic	4.6
Finland	9.8	**Peru	4.5
New Zealand	9.4	Jordan	4.4
Sweden	9.4	Mongolia	4.3
Canada	9.2	Poland	4.2
Iceland	9.2	**Brazil	4.1
Singapore	9.1	Malawi	4.1
The Netherlands	9.0	Morocco	4.1
Norway	8.9	Zimbabwe	4.1
Switzerland	8.9	**El Salvador	3.9
Luxembourg	8.8	South Korea	3.8
Australia	8.7	Turkey	3.6
United Kingdom	8.6	Mozambique	3.5
Germany	8.0	Zambia	3.5
Hong Kong	7.7	Belarus	3.4
Ireland	7.7	China	3.4
Austria	7.6	**Mexico	3.4
U.S.A.	7.5	Bulgaria	3.3
**Chile	6.9	Egypt	3.3
Israel	6.8	Ghana	3.3
Portugal	6.7	Romania	3.3
France	6.6	Thailand	3.2
Spain	6.6	**Argentina	3.0
Botswana	6.1	**Colombia	2.9
Japan	6.0	India	2.9
Estonia	5.7	Vietnam	2.6
Taiwan	5.6	**Bolivia	2.5
Belgium	5.3	**Ecuador	2.4
Namibia	5.3	Russia	2.4
**Costa Rica	5.1	Pakistan	2.2
Malaysia	5.1	Uganda	2.2
South Africa	5.0	**Paraguay	2.0
Tunisia	5.0	Tanzania	1.9
Greece	4.9	Indonesia	1.7
Mauritius	4.9	Nigeria	1.6
Italy	4.7	Cameroon	1.5

<sup>\*\*</sup> Latin American countries in sample.

\Source: Transparency International, October 26, 1999.

Table 17
World Bank Study of Barriers to Doing Business

Problem	Percentage wh Latin America		vas a severe problem OECD	
Corruption	53%	22%	17%	
Unpredictability of the judiciary	53%	16%	22%	
Tax regulations and/or high taxes	49%	32%	50%	
Financing problems	48%	17%	26%	
Inadequate infrastructure	48%	27%	23%	
Crime and theft	47%	13%	12%	
Policy instability	38%	18%	11%	
Labor regulations	37%	25%	45%	
Inflation	34%	27%	7%	
Regulations on foreign trade	25%	19%	12%	
Environmental regulations	22%	12%	27%	
Regulatory uncertainty	20%	19%	17%	
Regulations to establish new business	19%	19%	26%	
Foreign currency regulations	18%	21%	10%	

Source: The World Bank, 1999.

Respondents were asked: "Please judge on a six point scale how problematic these different policy areas are for doing business" The percentage above represents the percentage of persons who responded 5 or 6 for each specific question.

 $\label{eq:Table 18} Table~18$  Inflation Trends in the World , 1966-1998

Average of annual rates of change of the GDP deflator

	1966-73	1974-90	1998
World	5.4%	7.8%	2.5%
High-Income economies	5.5	7.0	1.1
Developing countries	4.7	11.1	7.6
East Asia and Pacific	6.7	8.2	8.7
South Asia	6.9	10.6	7.6
Europe and Central Asia	2.0	6.5	12.3
North Africa and the Middle East	3.6	11.0	3.1
Sub-Saharan Africa Africa	4.2	10.6	6.5
Latin American and the Caribbean	6.1	10.0	7.9
Brazil	23.2	145.0	3.8
Mexico Argentina	6.4 24.0	48.0 203.0	15.9 -2.0

Source: World Bank, *Global Economic Prospects and the Developing Countries*, The World Bank, Washington, D.C., 2000, pp. 153-154.

Table 19
Mean Years of Schooling, By Region, 1990

Persons 25 years of age or older

Region	Years of Schooling	
World	5.1	
High-Income Countries	8.3	
Developing Countries	3.7	
East Asia and Pacific	5.0	
Sub-Saharan Africa	1.6	
North Africa and Middle East	3.4	
South Asia	2.4	
Latin America & Caribbean	5.2	
Argentina	8.7	
Bolivia	4.1	
Brazil	3.9	
Chile	7.5	
Colombia	7.1	
Costa Rica	5.7	
Ecuador	5.6	
El Salvador	4.1	
Guatemala	4.1	
Guyana	5.4	
Honduras	3.9	
Mexico	5.9	
Nicaragua	4.3	
Panama	7.6	
Paraguay	4.9	
Peru	6.4	
Uruguay	7.8	
Venezuela	6.3	

Source: United Nations Development Programme, *Human Development Report*, Oxford University Press, New York, 1993.

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