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### CONTENTS

Development thinking and policies: the way ahead  Gert Rosenthal	7
Macroeconomic policies for growth Ricardo Ffrench-Davis	21
Capital flows: lessons from the Chilean experience  Eduardo Aninat, Christian Larraín	39
Changes in the industrial development of Latin America José Miguel Benavente, Gustavo Crespi, Jorge Katz, Giovanni Stumpo	49
Pension system reforms in Latin America: the position of the International organizations  Carmelo Mesa-Lago	73
The contributions of applied anthropology to peasant development  John Durston	99
Biodiversity prospecting: a new panacea for development?  Julie M. Feinsilver	115
Foreign investment and competitive development in Latin America and the Caribbean  Alejandro C. Vera-Vassallo	133
The Mexican peso crisis Stephany Griffith-Jones	155
Recent ECLAC publications	177

## Foreign investment and

# competitive development in Latin America

## and the Caribbean

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This article analyses the treatment accorded to foreign investment under the present development strategy. To this end, it looks at the recent dynamics of both direct and indirect foreign investment, including portfolio investment and quasi-equity operations, the latter with reference to contracts for the transfer of production know-how. For this purpose, the main resource flows and their directions are analysed, together with the changes which have taken place in corporate strategies. It is concluded that it is necessary to put together an explicit development strategy in which the main objective of policy on the treatment of foreign investments should be that of enriching the store of technological knowledge of the host economies. This policy should be complemented with others concerning the capacity for the absorption of technology, so as to strengthen industrial and technological learning capacity, as the foundation of a phase of endogenous innovation and dynamic expansion of international competitiveness.

### I

#### Introduction

The central focus of the analysis presented here is the importance of foreign investment for the countries of Latin America and the Caribbean in the first half of the 1990s, against the background of the new regional and world circumstances.

Not only have there been changes in the forms of foreign investment1 and the composition of the corresponding flows, but both new investment and the cumulative stock of investments have been conditioned by a new Latin American economic setting in which the market and private enterprise have assumed a leading role, in line with the economic liberalization and deregulation measures adopted and the desire to increase the competitiveness of the production apparatus. The aim is to achieve a bigger and better place in the world economy and keep up a growing level of economic activity in the medium and long term. This change in the strategy of the Latin American and Caribbean countries cannot be separated from the process of globalization<sup>2</sup> of the world economy, which is putting its indelible mark not only on the macrostrategic and political policy design of the Latin American countries but is also having a decisive impact on the rationale behind the microeconomic behaviour of the domestic and foreign agents operating in Latin America and the Caribbean.

The analytical framework operates with reference to the matrix of possibilities defined by two complex dynamic vectors -"reality" and "strategy"which interact with each other. On the one hand, the economic reality of Latin America at the beginning of the present decade was moulded by the prolonged application of a development strategy based on import substitution industrialization. Reshaping that reality is the current challenge in the context of the new world economy. On the other hand, that same reality calls for a strategy and policy design which gives priority to improving the international competitiveness of the Latin American economies by increasing the complexity and technological sophistication of the production apparatus and thereby raising productivity.

Import substitution industrialization gave rise to a typical form of industrial enterprise in the region and, as far as foreign direct investment was concerned, led to the establishment of "isolated" local subsidiaries which operated with scales of production and technologies consonant with the existence of heavily protected local markets, strictly regulated international transactions and, in general, economic policies with a strong anti-export bias that it was frequently sought to correct through measures that did not basically alter the rationale of the model. The policy applied generally gave rise to a passive relationship between these local subsidiaries and their suppliers of capital goods, inputs and technology, mostly on an intra-firm basis.

Foreign subsidiaries in Latin America displayed insufficient levels of linkages both with the domestic industrial and business sector, which itself had a low level of development, and with the respective institutional bodies responsible for promoting endogenous technological development, which were also underdeveloped. The smaller the economic size of the host country, the more pronounced these effects were.

There were no clearly formulated strategies and policies in the Latin American countries which deliberately sought to secure the social absorption of production know-how, with the consequent industrial and technological learning process and the sub-

<sup>&</sup>lt;sup>1</sup> Various forms of foreign investment are taken into account in this article. In addition to foreign direct investment (FDI), which normally means the expansion or creation of production capacity (gross capital formation), there is the so-called indirect foreign investment: that is to say, investment which does not necessarily involve greater production capacity. Examples are foreign portfolio investment (i.e., shares, bonds or deposits) and quasi-equity foreign investment, which consists of inter-firm contracts for the transfer of production know-how (technology, technical assistance, assistance in the fields of management or marketing, etc.). Foreign direct investment gives rise to return payments of profits, portfolio investment attracts interest payments or dividends, and quasi-equity (also known as non-equity) investment generates payments of royalties, fees, commissions,

<sup>&</sup>lt;sup>2</sup> For the purposes of this article, globalization may be understood as an increasingly intensive process of "international production": a concept which covers all types of value-adding activities, organized on a transnational basis by a firm which owns or controls them (Dunning, 1993).

sequent stage of competitive innovation. All this militated against the achievement of more dynamic and qualitatively superior international linkages by these countries. It may be noted that the most important legacy left by this period 3 is the inherited industrial platform, which, in terms of accumulated foreign direct investment, is made up of companies which are concentrated in the areas of activity with the greatest technological complexity or the greatest international linkages and are therefore suitable for industrial restructuring and competitive development.

The Latin American scene in the first half of the 1990s is marked by a generalized attempt to work out a new competitive development strategy based on a renovated institutional scheme reflected in a new regulatory framework favouring the production of tradeable goods. At the same time, the regional macroeconomic situation has been marked by some slackening of the traditional external financial constraints and the beginning of a process of recovery of the coefficients of saving and investment, which were very hard hit by the crisis of the 1980s.

In order to represent the current situation correctly, however, we must place on the other side of the equation not only the constraints introduced by import substitution industrialization at the microeconomic level, but also the institutional deterioration of the limited technological and innovative capacity of the countries of the region (Vera-Vassallo, 1995a) and the distortions in the fundamental prices of the economy caused by the massive inflow of foreign capital. So far in the present decade, this system of prices does not seem to be evolving in a manner fully in keeping with the aim of securing bigger and better international linkages.

Within this context, there are two institutional variables which take on special significance in the matrix of possibilities mentioned earlier. One concerns the forms and features of the international transfer of technology. The other is the Latin American countries' social capacity to absorb technical progress. Some forms of transfer are more effective than others, but the incorporation of technology into the store of knowledge of a given economy and its enterprises depends on certain institutional and organizational conditions of the recipient country itself.

The way the argument of the present article is developed is based on two assumptions which are of a conceptual nature but can be verified as facts. The first concerns the importance of maintaining an awareness of the systemic nature of competitive development when seeking to promote it 4 (ECLAC, 1995a). The second recognizes the importance of the contribution that foreign investment can make both to real investment processes and to the competitive restructuring and international linkages of the recipient economies. This recognition extends also to its main vehicle -the transnational corporations-, which have undergone important changes in their international strategies and structures in line with the emergence of the new international economic order (ECLAC, 1995c).

The historical starting point for this was the return of Latin America to the international financial markets, which reopened a period in which external saving could supplement domestic saving in order to finance the investment requirements imposed with more or less urgency by the reactivation of Latin American and Caribbean development and the emergence of a new regional and world economic setting. On the one hand, it was necessary to meet the social demands in terms of income and productive employment which had been postponed during the 1980s. On the other hand, greater emphasis needed to be given to the task -already begun in the previous decade- of restructuring the domestic production apparatus to achieve higher levels of productivity and international competitiveness.

The main aim of this article is to highlight the new features of the way foreign investment is treated in the Latin American countries under their new production development strategy. The idea is to emphasize the need to link together an explicit development strategy, the maintenance of a systemic concept in

<sup>&</sup>lt;sup>3</sup> Although in fact Latin America's per capita GDP grew at an average rate of 2.7% per year over the period 1945-1980, which was more than the rate of 2.5% proposed by the Alliance for Progress in 1960 (Ramos, 1993).

<sup>&</sup>lt;sup>4</sup> Systemic competitiveness is understood as meaning that form of competitiveness which is intimately linked not only with the internal capacities of the firms themselves but also with their whole network of trade and institutional relations, which affect the companies' effective degree of international competitiveness. In this sense, a whole range of factors are important, extending from the science and technology infrastructure and the national educational system, through the transport, communications and energy services (including the respective physical infrastructure), up to inter-industry and inter-firm relations (governed by the rules of competition), financial services, the legal system and, in general, the country's whole institutional order, both public and private.

designing the relevant actions and policies, and the crucial objective of enhancing the store of technological know-how<sup>5</sup> of the host economies. In other words, there is no question of promoting the indiscriminate procurement of financial assets. The real aim is —without prejudice to the functioning of the market— to formulate an integrated regulatory framework compatible with the objective of maximizing the international transfer of production know-how, which is the most important external contribution

to Latin American development. The foregoing measures should be such as to ensure that this transfer encounters a degree of local capacity for the absorption of technology which makes it possible not only to incorporate technical progress and spread it throughout the production apparatus, but also —and above all— to strengthen national industrial and technological learning capacity as an essential prelude to the subsequent phase of endogenous innovation and rapid growth of international competitiveness.

### II

## Foreign investment and competitive development in Latin America and the Caribbean

#### The inrush of foreign capital over the last five years

The first half of the 1990s has witnessed a massive inflow of various forms of foreign investment. The external financial constraints, aggravated by the international debt crisis which hit this part of the developing world particularly hard, have now disappeared. The net inflow of foreign capital 6 over the period 1990-1994 averaged US\$ 50 billion per year, 7 which is much more than the average net annual inflow over the period 1987-1989 of less than US\$ 21 billion. The net inflow of foreign capital into Latin America and the Caribbean almost doubled during the first four years of the present decade, exceeding US\$ 63 billion in 1994 (table 1).

At the same time, substantial changes took place in the composition of these flows (table 2), especially in terms of the predominance of private foreign capital, which represented over 68% of total inflows in 1990, rising to 99.7% in 1994. Foreign portfolio investment, which accounted for less than 4% of the total net inflow in 1990, represented 62% of the total in 1993 (42% in 1994): the most significant change during the period in question, both because of the amounts involved and the appearance of new mechanisms and instruments for such investment. Foreign portfolio investment, mainly in the form of stocks and bonds, grew by a factor of over 20 in net terms between 1990 and 1994 (by a factor of 38 up to 1993). Foreign direct investment also increased significantly, growing by a factor of over 2.5 between 1990 and 1994, which represents a cumulative annual growth rate of over 27%. Private external finance (from new and diversified sources) reappeared, and net transfers of financial resources abroad ceased as from 19918 (ECLAC, 1995d).

Net finance from official sources ceased to be significant during the period in question, while private bank loans have fluctuated around an annual average of US\$ 13.7 billion so far in this decade (table 1).

<sup>&</sup>lt;sup>5</sup> This includes both "hard" technology (hardware) and "soft" know-how (software).

<sup>&</sup>lt;sup>6</sup> The net inflow consists of the inflow of short- and long-term public and private capital less remittances of capital abroad due to disinvestment or amortization payments on foreign loans. This concept is different from that of the net balance (used in the balance of payments), which is equal to the difference between net inflows and outflows in respect of an identical item (e.g., inflows of foreign direct investment less foreign direct investment by the host country abroad). It is this latter concept which is used in annual ECLAC publications such as the Preliminary Overview and the Economic Survey.

<sup>&</sup>lt;sup>7</sup> This includes the net inflows of foreign direct investment, foreign portfolio investment, official finance and foreign bank loans.

<sup>8</sup> Although such transfers began again in 1995, after the Mexican financial crisis.

TABLE (

Latin America and (Millions of US dolla	the Caribbean: '	Total net capital inf	lows, 1990-1994
1990	1991	1992	1993

	1990	1991	1992	1993	1994
A. Foreign direct investment (FDI) B. Foreign portfolio investment	8 061	12 830	14 487	15 580	21 252
(1+2+3) 1. Bonds a 2. Stocks and shares 3. Commercial paper and	1 200 101 1 099	12 243 4 133 6 228	14 307 4 138 8 229	45 373 19 844 25 149	26 279 12 719 13 160
certificates of deposit C. Official finance b D. Private debt 1. Bank loans a) Long-term b) Short-term 2. Other loans E. Total	10 492 12 289 11 893 2 870 9 113 306 32 042	1 880 6 663 8 019 9 874 1 532 8 342 -1 855 39 755	1 940 2 476 17 067 18 946 4 774 14 172 -1 879 48 337	380 4 569 7 854 9 723 -69 9 792 -1 869 73 376	400 182 15 416 17 920 5 485 12 435 -2 504 63 129

Source: World Bank and International Monetary Fund.

b Excluding technical cooperation.

TABLE 2

Latin America and the Caribbean: Changes in the composition of net foreign capital inflows, 1990-1994 (Percentages)

	1990	1991	1992	1993	1994
<ol> <li>Private foreign capital <sup>ab</sup></li> <li>Long-term foreign capital <sup>ac</sup></li> <li>Foreign portfolio investment <sup>ad</sup></li> </ol>	67.2	83.2	94.8	93.8	99.7
	68.1	58.6	49.6	51.9	58.8
	3.7	30.8	29.6	61.8	41.6

<sup>&</sup>lt;sup>a</sup> As a percentage of total net inflows (table 1).

d Includes B (1+2+3) (table 1).

A very important detail for policy formulation is that the share of net long-term capital inflows, which accounted for over 70% of total net inflows before 1990, went down from 68% in 1990 to 58.8% in 1994, after having sunk to around 50% in 1992 and 1993 (ECLAC, 1995c). In other words, the share accounted for by the type of capital with the biggest impact on real investment went down, while the share of the most speculative and volatile types of capital went up.

It is very important, for the purposes of this article, to identify the factors behind this inflow of foreign capital which has new characteristics and opens up new prospects for Latin American development.

A number of factors, both domestic and from outside the region, explain the reactivation of international capital flows to Latin America and the Caribbean. Some of them are of a structural or permanent nature, such as the growing globalization of production and internationalization of financial aspects, together with the ongoing consolidation of the economic and institutional reforms undertaken in the region. Others are of a more conjunctural or transitory nature, such as those connected with the downswing

For these same years, the IMF gives gross inflows of 2 760 (1990), 7 242 (1991), 12 577 (1992), 28 794 (1993) and 18 241 million dollars (1994).

b Includes A+B+D (table 1).

<sup>&</sup>lt;sup>c</sup> Includes A+B.1+C+D.1.a+D.2 (table 1).

<sup>&</sup>lt;sup>9</sup> Long-term net inflows include foreign direct investment, official finance, sales of bonds with a maturity of over one year, and net long-term loans.

in the economic cycle of the industrialized countries and the privatization and external debt conversion programmes applied in various countries of the region (ECLAC, 1995b).

It should be noted, however, that according to the figures for this five-year period this abundant inflow of external capital has not been reflected in a proportional rise in real investment levels (ECLAC, 1995a). Among the reasons for this is the fact that much of the capital that entered Latin America was connected with the purchase of existing assets, 10 quite apart from the drop in the share of long-term capital in the total capital inflows already mentioned. Furthermore, domestic saving did not perform well in the first half of the 1990s. On the one hand, these foreign capital inflows helped to finance the growth of consumption, while on the other hand they displayed great volatility, especially in the case of capital attracted through non-traditional external financing mechanisms. 11 In addition, in some countries this inrush of foreign capital has exerted undesirable pressures on the exchange rate and money supply, giving rise to a new version of the region's external vulnerability.

#### 2. The new flows of foreign direct investment

With regard to the renewed dynamism of inflows of foreign direct investment during the early years of the 1990s, it may be noted that in 1994 net income under this heading came to some US\$ 21 billion: much higher than the levels of the late 1980s, which were around US\$ 8 billion.

It should be noted, however, that some countries aroused much more interest among foreign investors than others (table 3). In absolute terms, the biggest flows have been directed, as always, to Argentina, Brazil and Mexico, highlighting the importance of the size of domestic markets or of markets expanded by integration agreements (NAFTA, MERCOSUR). This

is indeed a structural factor that weighs particularly heavily in the decisions of transnational corporations: even more than macroeconomic considerations, as may be seen in the case of Brazil (ECLAC, 1995c). A rapid comparison between these inflows and the size of the economies, however, reveals that recent inflows of foreign direct investment into Brazil are only 20% or 30% of those that traditionally corresponded to this country in the light of its size within the continent. Furthermore, the inflows into Argentina during the 1990s have been decisively influenced by the debt conversion programmes and, above all, that country's privatization process (ECLAC, 1995c). Only Mexico and Chile displayed, up to 1993, a capacity to attract such investments which exceeded their respective economic size. Another important recipient is Colombia, which, like Chile, displays a more consolidated stabilization and adjustment process than other Latin American or Caribbean countries. At the other extreme of the regional spectrum are the Central American and Caribbean countries, which -although they have the advantage of being geographically close to the United States and have been favoured by United States initiatives designed to increase cooperation and promote trade and investment- have not aroused corresponding interest among foreign investors. Exceptions to this are Costa Rica and the Dominican Republic, because of the investments made in their export processing zones (mainly for assembly operations) which have become fairly important since the late 1980s because of the substantial tax and tariff incentives offered.

Analysis of foreign direct investment in Latin America by geographic origin shows that it is still consistently dominated by the developed countries, but there is growing participation by developing countries, especially from the region itself, while new foreign partners are also appearing, such as New Zealand, Australia, Spain and Canada. Japan and the newly industrialized Asian countries are as yet little represented in this respect in Latin America and the Caribbean.

Some leading Latin American corporations are making investments in other Latin American and Caribbean countries (foreign direct investment abroad), especially as a result of the opportunities opened up for Latin American investors by the privatization programmes (ECLAC, 1995a). A new actor would thus seem to be emerging on the regional scene: Latin

<sup>&</sup>lt;sup>10</sup> In a sample which includes the seven biggest countries, more than 40% of the foreign direct investment which entered the region between 1988 and 1993 was accounted for by external debt conversion programmes (23%) and privatization operations (17.8%) (ECLAC, 1995c, table 11).

<sup>&</sup>lt;sup>11</sup> These correspond in general terms to the growing tendency to transfer external finance operations to the stock markets, to the various forms of foreign portfolio investment, and to such mechanisms as American Depositary Receipts (ADRs) and Global Depositary Receipts (GDRs), etc.

TABLE 3

Regional breakdown of foreign direct investment, 1990-1994 (Percentages)

	1990	1991	1992	1993	1994
ALADI Chile Mexico MERCOSUR Andean Group Central America Caribbean Total	90.0	89.3	91.4	96.2	92.0
	7.3	4.1	4.8	5.4	8.4
	32.7	37.1	30.3	28.2	37.5
	36.0	28.2	44.0	50.1	21.7
	14.0	19.9	12.3	12.5	24.3
	1.4	3.8	3.9	-1.1	4.4
	8.6	6.9	4.6	4.9	3.6

Source: International Monetary Fund and national sources.

American transnational corporations, which, although their antecedents go quite far back in time, have now been establishing a stronger and more promising presence during the 1990s. It would seem that the leading Latin American firms have decided to adopt patterns of behaviour befitting the era of globalization. These intra-regional or intra-continental investments, and their derived effects in terms of trade in goods and services, 12 are giving rise to a process of regional economic integration for market reasons which is coinciding to an increasing extent with the political will of the governments of the region. This is reflected in the rapid increase in the number of continental-scale economic integration and cooperation agreements (ECLAC, 1994).

Inflows of foreign direct investment and the activities of transnational corporations play an important role in linking up the host countries with integrated international production networks and developing such systems, which are undoubtedly the backbone of the process of globalization of the world economy. Through their foreign direct investment operations, transnational corporations mobilize their tangible and intangible assets (capital, technology patents, organizational and management practices, trade links, etc.) in order to increase their international competitiveness and global profitability, with direct effects on the ability of the host country to produce goods and services of better quality and in greater quantity. For

### The sectoral breakdown of the total store of foreign direct investment: bases for competitive restructuring

In most Latin American and Caribbean countries, the total amount of foreign direct investment in the primary sector is not very significant, despite the abundance of natural resources. This is directly related to the wave of nationalization processes that took place in the region in the 1960s and 1970s, which extended

these same reasons, these asset flows are one of the forms of foreign investment with the greatest potential for stimulating the processes of gross capital formation and accumulation of production know-how in the host economy, as well as for making possible the linking-up of domestic firms with the production and supply networks of the transnational corporations and gaining access to the same tangible and intangible assets available in the transnational corporate system.13 Similarly -with regard to the Latin American companies which make investments abroad- the mobilization of such assets strengthens their home economies by permitting the companies in question to gain access both to the technology and research and development capacity available abroad and to foreign markets, through the local sales of their subsidiaries, intra-firm transactions, and other derived trading activities.

<sup>12</sup> Intra-regional trade has expanded considerably in the first five years of this decade, almost doubling its share of total Latin American and Caribbean trade.

<sup>13</sup> A growing number of firms from various countries are subject to international-scale integrated corporate strategies involving not only the parent corporations but also their domestic and foreign subsidiaries, thus making up a "transnational corporate system".

not only to mining-type activities but also to banking and public services (Sigmund, 1980). However, since the late 1980s in Chile and during the present decade in the other countries of the region, economic reforms have opened up big opportunities for foreign investment in the extraction and development of natural resources (mining, petroleum, fisheries, agriculture and forestry) and in secondary and tertiary activities associated with these through various kinds of production linkages.

Most of the accumulated stock of foreign direct investment in Latin America and the Caribbean is in the manufacturing sector, which is understandable both because of the prolonged duration of the import substitution model and because of the process of nationalization of natural resource-linked activities referred to earlier. Up to the last decade, the prevailing policy in most of the countries of the region included explicit restrictions on foreign direct investment not only in the primary sector but also in the financial sector and other services. In most of these countries, foreign direct investment is concentrated in industries producing mass consumption goods for domestic markets, especially in the foodstuffs, beverages and tobacco branches but also in higher-technology activities such as basic chemicals, metal products and machinery, electrical and electronic products, etc. This industrial development has reached different levels of technological sophistication which are naturally higher in the economically largest countries of the region or -what amounts to the same thing- in the relatively most developed countries.

In the 1970s and the early 1980s, the region's industrial activities began to be restructured to give greater preference to branches of manufacturing making intensive use of natural resources, such as pulp and paper, petrochemicals, aluminium, vegetable oils, fish meal, etc.: i.e., branches producing highly standardized, widely used basic commodities ("industrial commodities") by processes which are capital-intensive, use modern but readily accessible technology, and involve continuous-flow production processes and big economies of scale. These branches include both locally-owned firms (national consortia), especially in the larger countries of the region, and subsidiaries of foreign companies (Katz, 1995). This restructuring in the period in question was due to different reasons in the different countries of the region. In Chile, it was due to an early shift in the country's development strategy. In Argentina and Brazil, these investments were still made in line with the import substitution model, but these countries were then forced to export because of the drastic contraction in domestic demand in the 1980s. In Peru, a deliberate industrialization process was set afoot, inspired by the idea of import substitution, which gave priority to basic industry owned by domestic private or State capital.

During the crisis of the 1980s, the Latin American manufacturing sector lost much of its attraction for foreign investors. After various efforts at rationalization, some timid attempts at the industrial restructuring of manufacturing subsidiaries were made at the end of the decade, with the aim of adapting to the new economic scene. The exhaustion of import substitution industrialization in most of the countries of the region,14 the periods of crisis and subsequent stabilization, and the initiation of economic reforms have had a different time sequence in the different countries of the region.<sup>15</sup> During this decade, export processing zones assumed growing importance and specific measures were adopted in favour of subcontracting, especially in Mexico and the Central American and Caribbean countries (assembly plants).

The 1990s are witnessing a new phase of selective expansion of industry in the region and increasing efforts to restructure the industrial platform inherited from the import substitution model. During the present decade, the efforts at economic stabilization and structural reform have been gradually and sequentially coming to fruition against the background of a new development strategy in the region which favours new forms of integration of transnational corporations into the regional economy. All this is strengthening competition at both the domestic and external levels, which is assuming major importance as a determining factor in microeconomic behaviour.

<sup>14</sup> The symptoms of this exhaustion were less obvious in the larger countries of the region, especially Brazil.

<sup>&</sup>lt;sup>15</sup> In Chile, the crisis and recession began in the second half of 1973, in Argentina from 1978 onwards, in Brazil from 1981, and in Mexico in 1982, with strong repercussions on the other countries of the region.

Generally speaking, this new regional context is showing up the weaknesses in terms of competitiveness resulting from the import substitution model. This is particularly so in the case of the small and medium-sized economies of the region, where industrialization, sheltering behind the measures taken to protect the small domestic markets, was reflected, comparatively speaking, in smaller scales, lower degrees of technological sophistication, lower levels of industrial learning, and hence also a lower level of institutional development in the area of technological innovation. The process deriving from the struggle for survival has been particularly noteworthy in the foreign subsidiaries operating in the sectors of greatest technological sophistication or the most dynamic segments of domestic demand for manufactures. In the face of the opening-up of the economies to the exterior, the subsidiaries of foreign firms, as well as the existing domestic firms (especially in the motor vehicle and metal products and machinery branches), have found it impossible to keep up the degree of vertical integration and the industrial organization model applied in past periods and have reacted by seeking specialization and de-verticalization and hence raising their import coefficients and reducing the local production of intermediate goods (Bielschowsky and Stumpo, 1995, and Katz, 1995).

During the present decade, these events have had differing sectoral impacts in the Latin American economies. As a result of changes in the regulatory framework and the system of incentives, in some countries such as Argentina, Brazil, Mexico and Colombia the new regional macroeconomic situation has displayed falls in real interest rates and in the relative prices of consumer durables and automobiles, which, in combination with some supplementary measures, explains the reactivation of domestic demand for these goods (especially automobiles) (Katz, 1995). This fits in with the corporate strategies of the globalized transnational corporations of the motor industry in the larger countries of the region.<sup>16</sup> In the case of medium-sized countries such as Chile, and especially Peru, among others. the degree of disinvestment in this sector was much greater, and in some cases nothing is left but memories of these activities, whose technological know-how was not absorbed by the countries in question.

At the same time, there has been a decline in other branches of Latin American industry that make intensive use of know-how and technology. Thus, in addition to the decline in the metal products and machinery branch there has been a similar deterioration in the electrical and electronic products industry: both branches where the transnational corporations have a dominant presence, especially in the smaller economies of the region. Faced with the option of restructuring or disappearing, in many cases the transnationals have opted for disinvestment (Bielschowsky and Stumpo, 1995, table 2).

The expansion of foreign direct investment in services and its decline in manufacturing during the 1980s has led to an increase in the relative share of foreign capital in the tertiary sector. Foreign direct investment in services such as commerce, transport and communications originally started as support for the transnational corporations' activities in the manufacturing sector. The economic reforms carried out in the region, however, meant the elimination of restrictions on foreign direct investment in some service activities, especially real estate, finance and insurance, and this, together with the process of maturity of the capital markets in the context of greater economic openness, has favoured the entry of foreign capital into these activities (banks, leasing activities, brokerage of securities and insurance, franchises, etc.). Another important factor in the growth of foreign direct investment in this sector during the 1990s has been the privatization programmes (in the areas of electricity, telecommunications, etc.), so that together these factors have led to a trend in foreign direct investment during the present decade which has had obvious effects on the total stock of such investment in the region.

<sup>&</sup>lt;sup>16</sup> During the last years of the 1980s, the corporate strategies of the transnational corporations in the motor industry have sought to increase their competitiveness in the United States market through strategies aimed at lowering costs by using their subsidiaries in Mexico (Mortimore, 1995b). In the case of Argentina and Brazil, whose motor industries experienced serious difficulties in the 1980s, solutions have been sought through sectoral agreements within MERCOSUR and other actions forming part of corporate strategies, such as the creation of the binational enterprise AUTOLATINA (Ford and Volkswagen).

### III

## Transnational corporations in the world economic setting

## The international distribution of foreign direct investment

The map of the distribution of foreign direct investment in the world is undergoing significant changes, and at the same time its main vehicle –the transnational corporations— also display important changes in their international strategies and structures, in line with the emergence of a new international economic order.

The renewed inflow of foreign direct investment into Latin America and the Caribbean is in line with worldwide trends. The developing countries are displaying a growing capacity to attract foreign capital in the 1990s, with such inflows rising from 18% of total world flows of foreign direct investment in the period 1987-1991 to 37% in 1994. In contrast, the developed countries' share went down from 82% in 1987-1991 to 60% in 1994 (UNCTAD, 1995).

In respect of these growing receipts of foreign direct investment by the developing world, two points should be noted. The first of these is that the recovery in the developing countries' share, especially during the last three years, coincides with the reactivation of such investment flows to Latin America and the Caribbean. After having lost ground to the developing Asian countries subsequently to the crisis of the 1980s, the region has shown a clear recovery during the 1990s, although it has still not recovered its pre-crisis shares of foreign direct investment (Mortimore, 1995a). The second point is that, within the total for developing Asia, China is displaying an outstanding power of attraction, due no doubt to

grow and now averages nearly 15%.

the colossal size of its domestic market and economic reforms which have promoted foreign investment even though the economy continues to be directed by the State.

### 2. Changes in corporate strategies

Because of their size and the nature of their activities, the transnational corporations stand out at the end of the twentieth century as leading actors in a technology-led and selectively globalized world economy.

These corporations have increasingly assumed the leading role in the process of globalization of the world economy, because of their outstanding presence in key sectors and markets.<sup>18</sup> The transnational corporations are the main economic agent in the majority of the most dynamic international transactions (international trade, international finance, international transfer of technology and other production know-how, etc.). One-third of world production belongs to the sphere of activity of the transnational corporations, with their parent firms and foreign subsidiaries. In 1993, the total sales of the transnational corporations' foreign subsidiaries (US\$ 5.2 million million) exceeded the value of world trade in goods and non-financial services (US\$ 4.7 million million). Furthermore, over half of world trade consists of trading activities of transnational corporations and a significant part of that world trade is of an intra-firm nature (UNCTAD, 1994a and 1995).

Some of the main indicators in this respect are that there are some 40,000 transnational parent firms and 250,000 foreign subsidiaries, tens of thousands of strategic alliances and hundreds of thousands of subcontracting agreements, not to mention other

<sup>&</sup>lt;sup>17</sup> During the period 1975-1979, the region received an average of 13% of total annual flows of foreign direct investment, while developing Asia received around 5%. In the second half of the 1980s the Latin American and Caribbean share of such investment fell to an average of 6%, while that of developing Asia rose to nearly 9%. In the first four years of the 1990s, the region's share of total world foreign direct investment has recovered to 9%, but developing Asia's share has continued to

<sup>&</sup>lt;sup>18</sup> Between 1983 and 1990, total world foreign direct investment grew four times faster than world production and three times faster than world trade (Morán, 1991). Between 1991 and 1993, the world stock of foreign direct investment grew at the same rate as world exports of goods and services and 1.5 times faster than the total gross world GDP (UNCTAD, 1995).

inter-firm contracts for the transfer of production know-how (United Nations, 1992; Finkman and Montenegro, 1995). Within this context, the decision-making processes on production, trade in goods and services, technology and capital flows, international movements of highly-qualified professionals and inter-firm agreements are all interconnected in a complex and growing international network which is the concrete expression of the emergence of an integrated international production system.

This process of globalization of the world economy, which may be understood as the ever-increasing internationalization of business activities, was undoubtedly sparked off by the big speedup in technological development —especially of information technology—which gave rise to fundamental changes in industrial organization, in the behaviour and structure of firms, and hence in the corresponding corporate strategies.

Rethinking the Latin American economic scene with a view to formulating development strategies and policies naturally calls for understanding and knowledge of the ways in which the transnational corporations have reconfigured their strategies and organizational structures in order to link up integrated production systems at the international level. It is important to note that the same strategies applied in the past now have different impacts on the economies of Latin America and the Caribbean, which are now more complex and open to the exterior and are following a new style of development.

During the prevalence of the import substitution industrialization model in the region, the parent transnational firms were linked with a set of foreign subsidiaries which applied a stand-alone operating strategy designed to supply the parent firm with natural resources or to supply the local markets with manufactures or services which imitated the corresponding products of the parent company, which was usually the source of capital, management practices and technological know-how. This was the dominant form of organization of the transnational corporations which came to the region in the shape of mining enclaves or agricultural plantations; i.e., they were devoid of any links with the rest of the national production apparatus, for two main reasons: the low level of technical and production sophistication of the host economies, and the excessive protection of the domestic market associated with the import substitution model. The same thing applied to the import

substitution industries, which tried to reproduce the parent firm on a smaller scale.

The same pressures deriving from the globalization process -especially technical progress and economic liberalization- gradually altered the way international production was undertaken in the region and in the world. Competition to reduce the cost of standardized products, the convergence of consumption patterns worldwide and the reduction in transport costs finally led to the expansion of the geographic scope of corporate strategies. The great worldwide oligopolistic firms (in the motor industry and electronics) were able to combine economies of scale with the organization of low-cost suppliers all over the world. This led to the adoption of simple integration strategies under which the foreign subsidiaries, using technology provided by the parent firm, engaged in a limited range of activities designed to provide the parent firm with specific inputs. This latter firm thus became the coordinator of the various ways resources were used in the closed network of subsidiaries. This strengthened the subcontracting relationships which made their appearance in the region, especially during the 1980s, when export processing zones and assembly industries were promoted, as we saw earlier. In some countries of the region, the transnational corporations tried simple integration strategies in the motor vehicle and electronics industries, which later evolved somewhat timidly towards complex integration strategies.

A common feature of both the above types of strategies was that production within the transnational corporations continued to be fragmented and there was only limited internationalization of production activity across national borders. Finally, however, the growing liberalization of international economic transactions and the increase in international competition, together with the spread of information technologies, led to complex integration strategies in which the transnational corporations act as organizers of production and transactions in a transnational network of internal and external relations which may or may not involve participation in the equity of the firms concerned but nevertheless always serve the global interests of the transnational corporations. The parent firm is the centre of a web of activities which are interdependent but less formally managed (UNCTAD, 1994a).

Under these forms of strategy and organization, international production led by the transnational cor-

porations not only transfers goods and services across national borders, but also factors of production, organizational methods and technological know-how. in accordance with a unified administrative structure which gives rise to an intra-firm international division of labour. From this point of view, the transnational corporations, with their increasingly complex strategies, foster a qualitative change in the world economy, affect the international division of labour. promote the complementary relations between foreign trade and foreign investment, and are the main motive forces for growth and development in the new international economic order. Previously, foreign investment and foreign trade were alternative means for supplying external markets, but now there is a growing correlation between these two variables. especially in the developed countries, though it is acknowledged that networks of subsidiaries integrated at the regional level are an important determinant in the growth of intra-regional trade.

It would appear, however, that too much emphasis is being placed on the foregoing remarks about the trend of the transnational corporations towards complex strategies and global structures, especially in the case of Latin America and the Caribbean and the developing countries in general. Globalization is a worldwide phenomenon which is normally associated with corporate strategies involving complex integration. However, these strategies have been observed only in certain sectors which make highly intensive use of know-how and technology, while the other sectors continue to function in line with the former schemes of stand-alone operation and simple integration. In our region, the transnational corporations would appear to be trying out strategies of complex integration only in the larger countries where there is foreign direct investment in such industries as motor vehicles and electrical and electronic goods.

## 3. Patterns of behaviour of the transnational corporations

If we compare the behaviour of the transnational corporations operating in developing Asia with that of the similar companies in Latin America, we see that there are different patterns depending on the geographical origin of the capital involved, which have different impacts on the ability of the two regions to achieve competitive development and better linkages with the world economy (Mortimore, 1995a). The

transnational corporations which operate in developing Asia are mostly of Japanese origin, whereas those established in Latin America are primarily from the United States, with European companies in second place. There are substantial differences of behaviour between the United States transnationals and those of Japan, not only in terms of geographical preferences but also forms of ownership. The United States transnationals have majority shares in the capital of their subsidiaries operating in Latin America and the Caribbean, whereas the Japanese transnationals operating in developing Asia prefer minority shares in the equity of their subsidiaries and other forms of association through subcontracting relations or the granting of licences. 19 The experience of developing Asia, especially South Korea and Taiwan, among the four "tigers".20 seems to show that the strategy of association with the transnationals, or -which amounts to the same thing- the use of foreign direct investment, has had the advantage of facilitating a national process of industrial learning and absorption of technological know-how which has made it possible to progress from the adaptation and assimilation phase to a subsequent stage of innovation and competition with their own mentors, thus gaining entry into the new international economy and its competitive dynamics.

The transnational corporations' interest in using their tangible and intangible assets is aimed at promoting their international presence through various forms of foreign investment, provided that these are in keeping with their objectives of maximizing their rates of return. If these corporations externalize and trade their production know-how, a transfer of technology takes place which benefits both the corporations and the host countries, depending on the degree of institutional development of the latter. If the transnational corporations engage in foreign direct invest-

<sup>19</sup> In the case of the United States and European transnational motor vehicle manufacturers operating in developing countries, 85% of their offshore production capacity was concentrated in Latin America, while the corresponding figure for the Japanese motor manufacturing transnationals in developing Asia was 89%. Likewise, most of the production capacity of the former (88%) was accounted for by subsidiaries with majority participation of foreign capital, whereas the Japanese transnationals had almost entirely minority shares in their subsidiaries, or Japanese foreign direct investment without control of the firms in question.

<sup>&</sup>lt;sup>20</sup> I.e., leaving out the city-States of Hong Kong and Singapore.

ment activities through majority-owned subsidiaries, however, this leads in essence to an intra-firm transfer of technology, and the absorption and dissemination of that technology within the host country is much more limited, as we shall see below.

It may be concluded, from an examination of these patterns of transnational corporations' behaviour, that the effective transfer of technology through their various activities is not an automatic process, and much less is it the result of objectives inherent in their corporate strategies. In contrast, however, it should be a deliberate and explicit objec-

tive of government strategies that seek both domestic technological development, with a view to obtaining multiplier effects through a kind of "virtuous circle", 21 and the formulation of active policies aimed at maximizing technology transfer through the various ways that the activities of transnational corporations fit into the Latin American countries' economies and through local initiatives for association and linkages with the transnationals. This should be done in such a way as to ensure that the latter's interconnected regional networks do not leave out the domestic activities of the host countries.

### IV

## Bases for the design of strategies and economic policy

## Theoretical aspects regarding foreign investment and technology

As one of the many consequences of the process of globalization and/or transnationalization of the world economy, renewed interest has been aroused in theories on transnational corporations and international production. An equally important reason has probably been the appearance of internalization analysis,<sup>22</sup> which has quickly come to occupy a prominent place in economic theory and especially in industrial organization theory.

Today, a major concern of the governments of the region is to establish suitable conditions for attracting increasing flows of foreign capital and thus preparing the ground for incorporating their countries into the globalization process and avoiding being left on the sidelines of the new world economic order. The present article does not propose to review the various theories claiming to provide a solution for this concern, but it does consider it in order to warn policy formulators of the implications of the types of theories they may deliberately or implicitly espouse. Cantwell (1991) reviews the various theories on international production developed over the last 30 years. He classifies them in five groups. Two of them refer to different theoretical alternatives of the firm. The third is based on an analysis of internationally competitive industries. The fourth includes macroeconomic analyses which seek to explain transnational activity. The fifth integrates various partial theories (including the recent reformulations of Dunning (1993)) in a coherent and comprehensive framework—the so-called "eclectic paradigm"—which can be applied at the micro-, meso- or macroeconomic level and can serve as a conceptual reference base, without prejudice to broader theoretical studies.

In other words, if someone adopts the conventional "structure-performance" approach to the analysis of industrial organization, according to which the big corporations are to blame for market flaws, then policies are likely to lean towards State intervention, but if it is considered that transnational corporations are the solution to market flaws, then governments should do away with policies that are hostile to such corporations (Pitelis and Sugden, 1991).

<sup>&</sup>lt;sup>21</sup> In other words, improvement of domestic technological development indicators, including the level of skills of the labour force, strengthens the capacity to attract foreign direct investment in areas of higher technological content, which in turn promotes higher domestic technological levels.

<sup>&</sup>lt;sup>22</sup> Market internalization analysis holds that transnational corporations derive benefits from the high costs naturally associated with market transactions (natural market flaws). This obliges the transnationals to internalize these operations as an institutional resource for saving on those costs.

The eclectic paradigm provides a general framework for determining the degree and pattern of behaviour both of domestic production by firms belonging to foreign corporations and of production abroad by firms of the country in question. It is not strictly speaking a theory of transnational corporations proper, but rather a theory of the activities of firms forming part of internationally organized value-added chains. For this purpose, it is necessary first of all to understand and explain why a foreign direct investment operation is carried out.

In simple terms, this paradigm distinguishes between advantages of ownership (referring to those tangible or intangible assets of the transnational corporation which allow it to occupy a better position than a domestic firm in a given potential market); advantages of location (referring to natural, human or institutional resources which justify local production), and advantages of internalization (which explain why it is better to expand the corporate structure, by setting up a subsidiary in a given market, than to supply that market through exports).

Within the context of the eclectic paradigm and the new theory of the enterprise, if a transnational corporation possesses an asset (such as an industrial patent), then in order to increase its global sales and win a percentage of a given foreign market it can opt for one of three alternatives: to export, to grant a licence (to a local firm in a foreign country, through non-equity foreign investment), or to invest (by setting up a subsidiary in the country in question, through foreign direct investment). The dilemma between exporting or licencing is settled in the light of the contractual nature of the operation: the first option is for the short or medium term, while the second is of a long-term nature but involves the loss of ownership or control of the asset (in this case, technological know-how). The decision to invest -especially if the transnational corporation does not want to lose control of the asset- will depend on the balance between the market transaction costs (exporting) and the cost of internalizing the supply of the foreign market by setting up a subsidiary within the global structure of the transnational (investing).<sup>23</sup>

#### The importance of an explicit development strategy and micro-macro relations.

Any analysis of development options in a given economic situation must start by acknowledging the decisive role normally played by an explicit development strategy and the corresponding regulatory frameworks. These are reflected in a system of signals or incentives which conditions both the microeconomic decision-making process and the resulting sectoral and macroeconomic performance, including the degrees of linkage with the international economy and the form of such linkages. This economic situation, which is in a constant process of change, and the explicit strategy, as society's response to that situation at a given moment, give rise to a set of reciprocal influences and different reactions between the micro and macro levels. This dynamic fits within the matrix of possibilities referred to earlier, which is affected by a set of external variables of different kinds, including ideology, politics, culture, the international setting, etc.

Foreign investment in the region has been strongly conditioned by the history and economic policy vicissitudes of the Latin American countries: that is to say, by the evolution of the system of incentives, of the regulatory framework and of the macroeconomic performance itself, which, as they act on national settings and production units with different structural characteristics, give rise to forms of microeconomic behaviour and sectoral results which are also different (Katz, 1995).24 The sectoral behaviour of foreign subsidiaries in the regional economy has undoubtedly been strongly affected by the prolonged sway of the import substitution industrialization model, by the stage of nationalization of natural resource-based activities through which many Latin American and Caribbean countries passed between the 1960s and 1970s, and by the external debt crisis

<sup>&</sup>lt;sup>23</sup> With regard to the new theory of the enterprise and the concept of transaction costs, see Caves (1982), Williamson and Winter (1991), and Graham and Krugman (1993).

<sup>&</sup>lt;sup>24</sup> Katz (1995) considers the relations between macroeconomic and microeconomic aspects and observes that conventional microeconomic theory (theory of prices) is not designed to admit the possibility that there can be two economic agents, with different characteristics, which may react differently to the same given macroeconomic situation. This view stems from the conviction that the assumptions forming the basis for that conventional theory are at variance with a real situation where there is direct interdependence between individual economic agents, market flaws, and institutions supplementary to the price system that condition the conduct of such individual economic agents.

of the 1980s, which caused serious imbalances in the economies of the region and gave rise to the various stabilization and adjustment processes which preceded the major strategic turnaround in the development policies applied by the countries of the region as they entered the 1990s.

In this overall historical sequence, there were stages and countries with different degrees of economic openness, regulation and control of foreign capital. Up to the early 1980s, there was a model which placed the emphasis on regulatory and control aspects, contrasting with another which stood out because of its receptiveness and encouragement of foreign capital. Now, however, all national systems of treatment of foreign capital have been redefined to give them a promotional nature, and with very few exceptions they are openly in favour of non-discriminatory treatment of foreign investors and the elimination of mandatory prior authorization, reserved sectors, and restrictions on the repatriation of capital and remittances of profits. In line with the objective of competitive development, most Latin American countries do not generally take account, in their development strategies or the corresponding regulatory frameworks, of forms of foreign investment other than foreign direct investment, portfolio foreign investment or non-equity investment, as we shall see below.

The successive changes which have taken place in the systems of incentives, the regulatory framework and the macroeconomic variables during the different economic stages in question have conditioned the performance and microeconomic decision-making process of each of the different classes of firms operating in given national situations in Latin America and the Caribbean. These classes are sub-sets of firms differentiated by certain microstructural characteristics such as nationality of capital, size, degree of internationalization of their production, degree of complexity of their structures, and the technical nature of their respective production functions.

The other set of structural factors that must be taken into account refers to the characteristics of the national economic situations. These macrostructural factors have often had a decisive influence on microeconomic decision-making to deal with changes in the macroeconomic variables and the prevailing regulatory framework. Among these macrostructural factors, special mention may be made of the size of the domestic market and of markets expanded as a

result of integration agreements (see section II.2), the availability (frontier) of usable natural resources, geographic proximity to the most dynamic centres of external demand (especially the United States), and the production capacity and technology built up in previous periods (linked in this case with foreign capital) and hence capable of being restructured to make fuller use of this installed capacity, which is treated in economic calculations as "submerged costs".

Without pretending to make a structural characterization of the Latin American and developing Asian countries, it may be noted with respect to the strategic concepts of the two different situations that in developing Asia a harmonious relation has been established between the style of industrialization and trade liberalization, between financial deregulation and the treatment given to foreign direct investment, and between the absorption of foreign technology and export promotion. The result has been an increase in the international competitiveness not only of the foreign corporations operating in those countries but also of the local firms associated with them or acting as subcontractors, suppliers or licensees of the transnationals (which are the owners of intangible assets). The respective governments formulated clear strategic development options and active policies deliberately seeking the effective transfer of technology as the essential basis for competitive development, taking as their cardinal criterion the need to seek convergence between corporate interests and national objectives. In Latin America, in contrast, the economic reform process has faced the subsidiaries of transnational corporations with a dilemma worthy of Hamlet himself: to disinvest up to the point of ceasing operations entirely, or to embark on a process of microeconomic changes, linked with de-verticalization and specialization, in order to keep on operating competitively. This second option could be approached defensively (through rationalization), by minimizing investments and cutting staff costs in order to survive the keener competition, or offensively (through restructuring), by making investments and reorganizing in order to fulfill a specific function within the international production scheme of the parent company. It should be noted, however, that this microeconomic dilemma is being posed in a regional setting marked mainly by passive governments applying neutral policies (Mortimore, 1995a). This attitude contrasts with the practices of the developed countries, whose governments have maintained an attitude which is firmly in favour of the competitive development of their companies but is intelligent enough to avoid the danger of providing indiscriminate ongoing assistance without securing any sense of commitment on the part of the entrepreneurs (Vera-Vassallo, 1995b).<sup>25</sup>

## 3. The lessons of the macroeconomic experience of the region

The experience of the region would appear to show that when the capital account is opened very abruptly and there is a massive inflow of external capital, the current account deficit can swell to an extent that affects the macroeconomic balances and, moreover, is difficult to sustain in the medium term. The mere ability to obtain big volumes of external financial resources does not automatically guarantee the strengthening of domestic saving and investment, and still less does it ensure a dynamic transition towards technical progress combined with international competitiveness. Such massive inflows of foreign capital can adversely affect two variables which are of key importance for efficient resource allocation: the exchange rate, and real interest rates.

The foregoing would appear to be confirmed by some relevant indicators for the region as a whole. Thus, the merchandise trade balance for Latin America and the Caribbean has gone down from a surplus of + US\$ 27.4 billion in 1990 to a deficit of - US\$ 15.2 billion in 1994, while the current account balance has deteriorated throughout this five-year period, sinking from - US\$ 6.2 billion in 1990 to - US\$ 50 billion in 1994.<sup>26</sup> These deficits on the region's trade in goods and on its current account went down (to + US\$ 2.3 billion and - US\$ 35.5 billion respectively) in 1995,

The recent experiences of the region have given rise to much debate over the proper degree of graduality and the right sequence that should be followed in the pursuit of greater financial openness. Events are showing that in a process of economic liberalization the financial markets adjust much faster than the real markets. This means that the trends towards exchange rate appreciation, stimulated by financial liberalization, are faster than the trend towards exchange rate devaluation promoted by trade openness, with consequent effects on relative prices and the macroeconomic balances. In this respect, the region's experience seems to indicate that the openingup of the capital account to the exterior should have been carried out after trade liberalization and domestic financial deregulation and reform. During trade reform, strict control should be maintained over external financial flows -especially of types of capital which are inherently speculative and highly volatilein order to prevent their influence on revaluation of

after the Mexican crisis and the corresponding corrective measures, plus the favourable evolution of the international prices of both basic and industrial commodities. In 1994, the real effective exchange rate index for exports was below the 1990 level in the case of 14 countries of the region (out of a sample of 18 countries), in most cases by more than 10%. Although the monetary policy of the Latin American countries over the period 1990-1994 has been facilitated by the clear improvements in their fiscal management, maintaining a rate of expansion of the money supply in keeping with the goals in terms of economic growth and inflation has continued to be a challenge connected with the flow of foreign capital. Domestic interest rates have had to struggle with the conflict that exists between the evolution of competitiveness, monetary goals, and the need to finance the balance of payments current account deficit. In most cases, the objective of stabilizing prices has prevailed in the first half of the 1990s, and this has aggravated the unfavourable trends in the exchange rate and real interest rates. Opening the capital account has not led to equalization of domestic and external interest rates, as a static model without market flaws might have appeared to promise. In other words, the changes in relative prices have continued to favour non-tradeable goods, which makes no sense in the light of the prime objectives of the new competitive development strategy being adopted by the countries of the region.

<sup>&</sup>lt;sup>25</sup> In section 4 of his article, referring to the promotion of competitiveness in the OECD countries, Vera-Vassallo (1995b) identifies 879 industrial support programmes applied in those countries in the period 1986-1989 which had a net average annual cost of US\$ 66 billion for the governments in question, equivalent to some 2.5% of the annual value added in the manufacturing sector of those countries.

<sup>&</sup>lt;sup>26</sup> Mexico's trade balance went down from - US\$ 11 billion in 1990 to - US\$ 18.5 billion in 1994, while its current account deficit worsened from - US\$ 8.4 billion to - US\$ 28.9 billion over the same period (i.e., before the crisis).

the exchange rate and its adverse effects on external trade and investment, especially in tradeable goods (ECLAC, 1995a).

#### International transfer of technology: its forms and characteristics

Process and product technology, management knowhow, design and standards, production methods and organization of work, quality control and management, and marketing -along with other elements of the overall technological package- are capable of being transferred across national frontiers in various ways that depend on the activities of the transnational corporations and their leading role in the generation, application and trading of these intangible assets.27 For a better understanding of this transfer process, it is necessary to take account, on the one hand, of the implications of the various forms of transfer just mentioned and, on the other, of the features of the international transfer of technology to the Latin American and Caribbean countries, whether this involves an intra-firm operation (between the parent company and a subsidiary) or an operation in which the recipient is a local domestic firm.

Among the different forms of transfer associated with the activities of the transnational corporations, special mention may be made of the following:

- i) equity-related technology, which is transferred through various levels of foreign direct investment in the equity of subsidiaries whose form of ownership may range from total foreign ownership to joint ventures with various proportions of domestic and foreign capital.
- ii) contractual technology transfer arrangements, which involve various forms of inter-firm contracts such as licences, franchises, management contracts, consultancy or technical assistance arrangements, turnkey contracts, international subcontracting, quality control and standards services, etc.<sup>28</sup> These forms of transfer are also known as non-equity forms of investment.

iii) embodied technology contained in capital goods and intermediate goods.

In the first case, there is captive use of technology in the process of expanding international production: in other words, the transnational corporation does not lose ownership or control of this asset, the returns on which are included in or added to the remittances of profits. The technology is transferred from the parent firm to the subsidiary, but this does not necessarily result in a transfer to third parties or dissemination to the rest of the production system, except through the training of skilled personnel and possible spillover effects on forward and backward linkages. In the second case, there is a true transfer to the purchasing firm and explicit payment in the form of royalties, dues, commissions, etc. Dissemination to the rest of the production system is more feasible in this case, especially when the recipient firm is partly or wholly locally owned: a necessary but not of itself sufficient condition. In the third case, what is involved is a commercial transaction of tangible goods which have a market price that represents payment for the material and technological elements incorporated in those goods. The acquisition of machinery and equipment is the main source for the incorporation of technology, particularly in the case of the more traditional firms, as shown in a recent study by Rozas (1995). When these goods are used for production purposes, they require local engineering services, first of all in order to adapt them to the characteristics and circumstances of the local economy, and subsequently for repair and maintenance, which ultimately makes possible progress towards innovative activities. This development of engineering facilities represents an industrial and technological learning process whose internalization will be in proportion not only to the quantity and quality of real investment (i.e., capital goods), but also to the institutional development of the recipient economy and, hence, to its social absorption capacity. This form of transfer depends more on the macroeconomic management and regulatory framework of the country than on the capacity for bargaining with the transnational corporations.

The above forms of technology transfer may take place simultaneously and in combination. Indeed, there is a clear tendency among transnational corporations to include intra-firm technology transfer

<sup>27</sup> Another way of achieving technical progress is to promote domestic scientific and technological development, but this will not be discussed here as it is outside the scope established for this article.

<sup>&</sup>lt;sup>28</sup> In other words, everything coming within the sphere of what is known as "quasi-equity" indirect foreign investment.

contracts in their foreign direct investment operations: that is to say, contracts between the parent firm and a subsidiary, or between subsidiaries.<sup>29</sup> These types of contracts are an excellent means of maximizing the global objectives of the transnational corporations, especially as regards rates of return (United Nations/CTC, 1987). In other words, as far as technology transfer is concerned, the preferred form in the eyes of the transnational corporations is its captive use through wholly- or majority-owned subsidiaries of the respective parent firm.30 This is explained by reasons of strategy, because intra-firm contracts are particularly appropriate when product differentiation involving trademarks or brands is important, even though the technological process may not be very complex or sophisticated, or when the cost of losing control of the technological know-how is very high (United Nations/CTC, 1987). It is also explained by reasons of financial interest, because usually it is impossible for the transnational corporation to obtain the same return on this intangible asset -technology- except through the establishment of a subsidiary (United Nations/CTC, 1989).

### Social capacity for the absorption of technical progress

The other determinant of competitive regional development is the "social capacity for the absorption of technical progress" of the recipient country. This is very closely linked with the introduction of highly significant institutional changes and advances in companies, in public and private organizations, and in the relevant government policies (Vera-Vassallo, 1995b).

A new cultural climate is developing in world society which reflects the firm conviction that the technological capacity of a country's enterprises is the crucial variable determining its competitive performance, and that this capacity is essentially national and can be developed through national actions (Nelson and Rosemberg, 1993). Within this climate, particular importance has been assumed –in terms of the economy as a whole– by the need to develop national innovation systems designed to strengthen individual and national capacity for negotiating, assimilating and learning technology and making innovations in this field.

A national innovation system may be defined as the network of economic agents and the set of policies and institutions that influence the introduction and dissemination of technical progress in the economy. Since in most developing countries technology is basically imported, a national innovation system, in a broad sense, includes policies on the treatment of foreign direct investment, policies on technology transfer and other forms of non-equity foreign investment, and policies on intellectual property rights and the importation of capital goods. In general terms, the whole range of rules and regulations governing and promoting the process of absorption and dissemination of technical progress form an essential part of national innovation systems.

National innovation systems also include the network of public and private agents and institutions which support or are directly engaged in scientific and technological activities, including research and development, the spreading of technology, and the creation of human capital. The dynamic interaction of these agents and institutions with production or business activity must be actively promoted. Finally, national innovation systems are directly influenced by the general economic policy climate and the system of incentives, since these determine to a large extent how many investments or efforts will be made to reduce costs, improve quality and provide a growing range of domestically and internationally competitive goods and services as a result of the new advances in technology.

Changes in company organization come within the field of industrial restructuring and retooling, and these processes too can be actively promoted.

<sup>&</sup>lt;sup>29</sup> So far during the 1990s, nearly 80% of international payments of royalties, dues or other outlays for the use of technology have been of an intra-firm nature (UNCTAD, 1994a and 1994b).

<sup>&</sup>lt;sup>30</sup> The opposite also appears to be true: i.e., that effective transfer is more feasible in the case of recipient firms wholly or largely owned by local capital.

### V

## Some reflections on current policy criteria and shortcomings

In view of the foregoing, it is obvious that policy regarding foreign investment in the broadest sense and its main vehicle, the transnational corporations, is of vital importance for the development of the region's economies in internationally competitive terms. In the previous paragraphs, a number of suggestions were put forward, and I should now like to emphasize, enlarge on, or supplement some of them.

The main conclusions point to the need for an integral and integrated approach, for two reasons. First, because in order to maximize the contribution that the transnational corporations and the various forms of foreign investment can make to Latin American and Caribbean development, the relevant policies must come within the framework of an explicit national development policy in which a specific role is assigned to the transnational corporations, which can bring not only physical and financial assets but also intangible assets in the field of organizational and technological know-how. These assets are the top priority of Latin American and Caribbean development.

The second reason is that such policies must link up smoothly with the features of the process of liberalization and greater openness, with domestic financial regulations, with macroeconomic policy and the system of incentives for the production of internationally tradeable goods, with the policies for the development and transfer of technology, and especially with the policies designed to promote systemic competitiveness. In other words, unlike what appears to be happening, it is not a question of promoting the indiscriminate inflow of financial assets while ignoring the really important aspect of that potential contribution, which is the international transfer of production know-how to the region. Above all, it must not be forgotten that this transfer must be matched by local capacity for the absorption of technology and the accumulation of production know-how, which not only makes possible the incorporation of technical progress and its spread to the whole of the production apparatus, but also -and

above all—strengthens the capacity for industrial and technological learning which is essential for the following stage of endogenous innovation and dynamic enhancement of international competitiveness.

According to the available information, generally speaking the economic and institutional changes made in the countries of the region have increased their capacity for the indiscriminate attraction of financial assets of the most varied nature. This has not always had positive effects, especially on the exchange rate and interest rates, which are variables of crucial importance for efficient resource allocation through the market. These financial flows have included a growing proportion of short-term capital, generally highly speculative and volatile, which explains why they have had only a limited effect on gross capital formation. According to a widely repeated argument, the exchange rate could be left to the action of the market forces: i.e., allowed to fall until the market itself makes the necessary corrections. These corrections would operate through an increase in the country risk or in the expectations for devaluation, so that the flow of capital would be interrupted. The attitude to be taken to a situation like this, however, will depend on the nature of the foreign capital entering the Latin American economies. If the flow of external resources is due to permanent or structural causes, there would be no point in taking action to seek an exchange rate higher than that determined by the fundamental variables of the economy, but if it is due to transitory causes (such as a privatization programme) or speculative operations (short-term capital seeking to take advantage of the fact that domestic interest rates are higher than the international levels), then letting the exchange rate fall would dangerously increase the balance of payments current account deficit in the medium term and would adversely affect both domestic and foreign investment and the production of internationally tradeable goods: i.e., those most directly connected with the aim of achieving competitive development.

Furthermore, the real technology transfer/absorption effect has also been very modest, because of poorly defined or incomplete strategies and piecemeal policies which give priority to the attraction of financial assets but are rather neutral or passive in terms of sectoral and technological guidance (Rozas, 1995).

The present policy attitudes of most Latin American countries are not based on an analysis of the characteristics and effects of the various forms of foreign investment, including not only foreign direct investment but also foreign investment of an indirect nature: both non-equity investment and portfolio investment.<sup>31</sup> There is no record of any attempts to give preference to transnational corporations from particular countries or to favour certain forms of association with transnational corporations and their regional production and supply networks with the aim of maximizing the transfer of technology and thus integrating into the process of globalization of the world economy.

Most of the countries of the region display a feeble level of institutional development in both the public and private spheres, the State suffers from serious limitations in terms of its operational capacity, and in most of the region there is still only a limited capacity to take advantage of the potential synergies between the public and private sectors, although these are two spheres of activity whose concerted development and dynamic interrelation are of the greatest importance for the design and implementation of national development strategies.

Within this context, it will be readily understood that the most important elements are not the national statutes, systems or codes of treatment of foreign direct investment. Generally speaking, such systems are only one of the elements in an institutional structure which should extend all the way from the screening of resources from abroad in the light of macroeconomic criteria and the promotion of real investment to the establishment of an efficient national innovation system that should integrate companies, institutions and rules and regulations within the framework of an active policy to promote the trans-

fer, learning and absorption of technology, on the basis of the potential contributions of the transnational corporations and foreign investment, with a view to attaining greater capacity for innovation and endogenous technological development.

Few developing countries have paid much attention to policies to promote direct investments of their own abroad, because of the traditionally limited availability of foreign exchange and capital. Some developing Asian economies, however, have begun to attach importance to the advantages their domestic firms could derive in terms of gaining better access to external markets and resources, benefitting from their own processes of competitive restructuring, or seeking associations with emerging systems of international production. In Latin America, a long-standing practice in this respect is being resumed with the renewed recognition of the importance of this strategic option that companies of the region must explore if they do not want to run the risk of adversely affecting their competitive development. Noteworthy in this respect are the recent efforts of Chile, which has begun to follow in the footsteps of Mexico, which has a long tradition of investments in Central America and the United States, and Brazil, which is an important investor both in the region and the rest of the world and seems to be resuming its foreign direct investment under the incentive of MERCOSUR. National policy in this field should be linked up with the general scheme applied as regards liberalization and economic openness and. if accompanied by proper monetary management, can help to cope with tendencies towards exchange rate appreciation (UNCTAD, 1995).

With regard to the treatment accorded to foreign direct investment, most of the economies of the region seem to lack selective policies designed to help shape the production structure in terms of spatial distribution, sectoral composition, technological content, outward orientation and other aims in the field of production development, except for some measures connected with the establishment of export processing zones. From this standpoint, two types of special procedures could be envisaged, both based on the application of the mutual formula "incentivesperformance requirements", with a pre-set time horizon. The first of these elements could be a special system negotiated on the basis of the official granting by competitive bidding of rights in respect of specific technology-intensive internationally competitive acti-

<sup>&</sup>lt;sup>31</sup> No reference is made here to movements of official capital and foreign bank loans originating from the transnational banking system, because although they are forms of financial investment from the exterior they are governed by different economic and political rationales.

vities, with a support base provided by the existence of domestic supply or demand for given intermediate or final goods, such as the production of intermediate and capital goods for the primary exploitation of some natural resource (mining or fisheries). After the award by competitive bidding, individual negotiations could be held on a case-by-case basis (United Nations, 1992; Morán, 1991, and Guisinger, 1992). The second element would be an automatic special procedure based on a set of automatic incentives for given specific levels of performance (Agosín, 1993) which would have the advantage of depersonalizing the granting of such rights and thus avoid the danger

of corruption. Selective policies of this type could bring the region closer to similar efforts being made in the developed countries and some developing nations, especially as regards the effective transfer of technology. Inasmuch as the proposed procedures do not contravene article III (national treatment) or article XI (elimination of quantitative restrictions) of the General Agreement on Tariffs and Trade (GATT), they are not incompatible with international rules and do not call for recourse to the safeguard clauses applicable to developing countries such as those of Latin America and the Caribbean.

(Original: Spanish)

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