

United Nations Centre on Transnational Corporations

World Investment Report 1991

The Triad in foreign direct investment



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ST/CTC/118

UNITED NATIONS PUBLICATION

Sales No. E.91.II.A.12

ISBN 92-1-104370-0

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Preface

"The Old World was ruled by the logic of the triad: three times, three ages, three persons, three continents".

— Octavio Paz

Is the New World of international economic relations also ruled by the logic of a triad? Certainly, the concept of a triad has been prominent in recent discussions of the evolution of international trade relations and corporate strategies. Does the logic of a triad apply in the world of foreign direct investment as well? As yet, there have been no empirical investigations of this question, which carries important policy implications. The present volume analyses the Triad (Japan, the European Community and the United States) in terms of foreign direct investment, looks at the role transnational corporations play in promoting regional economic integration around the three poles of the Triad, describes the linkages between foreign direct investment and trade, technology and financial flows, and highlights policy implications for developing countries and the international community.

Among the findings of this study, one of the most important is that foreign direct investment has been increasing far more rapidly in the 1980s than both world trade and world output, and promises to continue to do so in the future. This would suggest that foreign direct investment is increasingly becoming an engine of growth in the world economy. Furthermore, the composition of foreign direct investment and the major actors associated with it have seen a significant change over the last decade. Behind those changes are the strategies of transnational corporations which, as this study shows, are furthering the emergence of regional clusters of countries around the three poles of the Triad. It is essential that developing countries that wish to influence the flow of foreign direct investment understand those changes, and the implications that are associated with them.

The present report is the first of a series of annual reports which will present data and trends relating to transnational corporations and foreign direct investment. In addition, each volume will focus on a topic which emerges from the Centre's ongoing research activities. As such, the *World Investment Report* will provide up-to-date, comprehensive information on an annual basis, and will provide in-depth analyses of a variety of themes, selected for their relevance to policy-making in the field of foreign direct investment.

The present volume was prepared by a team comprising Persephone Economou, Michelle Gittelman, David Gold, Azizul Islam, Karl P. Sauvart, Paz Estrella Tolentino and Zbigniew Zimny, with the assistance of Torben Huss, Georg Kell, Padma Mallampally, Valerian Monteiro and Dorothy Woo.



Peter Hansen
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August 1991

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Chapter I

GLOBAL TRENDS IN FOREIGN DIRECT INVESTMENT

A. The increasing importance of foreign direct investment in the 1980s

After having nearly tripled between 1984 and 1987, world-wide outflows of foreign direct investment increased by another 20 per cent in both 1988 and in 1989, to reach an absolute level of \$196 billion. By 1989, the total world-wide stock of this investment stood at approximately \$1.5 trillion. ^{3/}

The dynamism of foreign direct investment can be best illustrated by comparisons with world exports and world output. Since 1983, foreign-direct-investment outflows have increased at the unprecedented rate of growth of 29 per cent a year, three times faster than that of the growth of exports and four times that of the growth of world output (table 1). This represents a dramatic recovery from the slow growth years of the early 1980s. It was not until 1986, however, that outflows surpassed the previous peak level of \$57 bil-

lion, reached in 1979. Since 1985, the gap between the growth rate of exports and that of foreign-direct-investment outflows has widened dramatically (figure I), leading one writer to suggest that "as a means of international economic integration, foreign direct investment is in its take-off phase; perhaps in a position comparable to world trade at the end of the 1940s". ^{4/} Furthermore, the rapid growth of foreign direct investment compared to that of world output suggests that the share of the former in world output is increasing. This has important implications for the competitiveness of countries and regions — both as home and host countries — given the links between foreign direct investment and trade, technology and financial flows, an issue examined in chapter III.

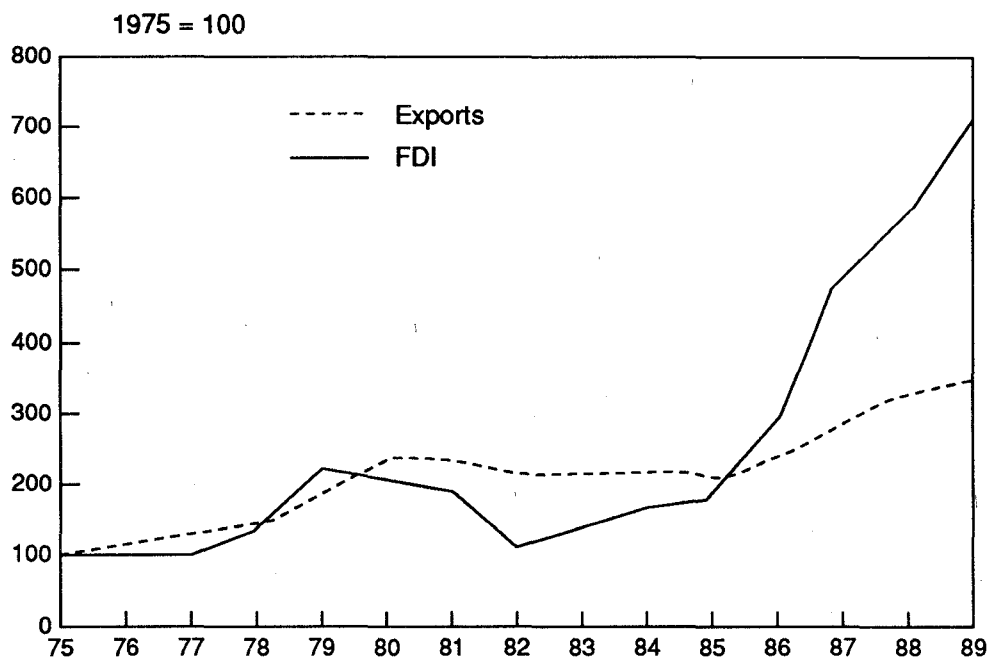
Table 1. Growth in current value of world foreign-direct-investment outflows, exports and gross domestic product, 1983-1989	
Item	1983-1989 compound annual growth rate (Percentage)
World foreign-direct-investment outflows	28.9
World exports	9.4
World gross domestic product	7.8

Sources: UNCTC estimates, based on UNCTC, *World Investment Directory* (New York, UNCTC, 1991); International Monetary Fund, *Direction of Trade Statistics, 1990 Yearbook* (Washington, D.C., 1990); *International Financial Statistics, 1990 Yearbook* (Washington, D.C., 1990); United Nations, *National Accounts Statistics: Analysis of Main Aggregates, 1987* (United Nations publication, Sales No. 90.XVII.2); and *World Economic Survey, 1990* (United Nations publication, Sales No. 90.II.C.1.)

The unparalleled growth of foreign direct investment since 1985 may be explained, in part, by the strong recovery of the world economy from the recession of the early 1980s and the ensuing high growth rates in both developed and developing countries. After 1985, the gross domestic product at constant prices grew at an average annual rate of 3.5 per cent in developed countries and 3.4 per cent in developing countries, compared to 2.2 and 1.7 per cent, respectively, between 1980 and 1984. 5/ The improved economic performance of several developing countries in the second half of the 1980s, particularly those experiencing debt-servicing problems, reversed some factors which had been inhibiting foreign investment in the first half of the 1980s, such as the ability of investors to repatriate profits. 6/ Another factor behind the growth of foreign direct investment is that, during the 1980s, the number of

developed countries which became significant outward investors increased, eroding the established positions of the United States and the United Kingdom. The most important of the new outward investors was Japan: investments abroad by Japanese transnational corporations increased at an annual rate of 62 per cent from 1985 to 1989. One reason for the rapid growth of foreign direct investment from Japan has been the appreciation of the yen *vis-à-vis* other currencies rendering the acquisition of assets abroad less expensive compared to domestic assets, coupled with large current account surpluses and protectionist forces in its export markets. In addition, a number of newly-industrializing economies, such as Singapore, Hong Kong and Taiwan Province of China, facing current account surpluses, appreciating currencies and rising production costs at home and fearing protectionist

Figure I. Index of current value of exports and foreign-direct-investment outflows, 1975-1989



Sources: UNCTC estimates, based on UNCTC, *World Investment Directory* (New York, UNCTC 1991), International Monetary Fund balance-of-payments tape, retrieved on 10 January 1991; and United Nations, *Monthly Bulletin of Statistics*, October 1984 (ST/ESA/STAT/SER.Q/142) and October 1990 (ST/ESA/STAT/SER.Q/214).

forces in their export markets, have emerged as outward investors.

The growth in the number of cross-border mergers and acquisitions, driven by technological and competitive forces, has contributed significantly to the rise of foreign direct investment. The 1992 programme to integrate the European Community (EC) has led not only to a rise in foreign direct investment into the Community, but also to an

increase in investment activity between EC members. Finally, the rise of the services sector in the world economy — mostly products which are difficult to trade — coupled with the liberalization of regulations on the movement of capital flows in that sector has resulted in increased investment activity by transnational service corporations.

As noted earlier, foreign-direct-investment flows have grown faster than output in

recent years, with the consequence that, overall, a larger share of output may be accounted for by foreign direct investment. One indicator of this is the ratio of foreign direct investment to gross domestic capital formation. (The use of this indicator is not without problems; for instance, foreign direct investment reflects both the acquisition of existing assets in the host country, as well as newly-established investments and, as such, it is not totally comparable to gross domestic capital formation, which measures only additions to the existing stock of domestic capital.) According to this indicator, foreign direct investment has increased in importance in most developed and developing countries in the late-1980s, as compared to the early-1980s (table 2). Given the drawbacks associated with the use of this indicator, the focus is on the direction of change. Differences in the relative importance of foreign direct investment among host countries may reflect not only declining levels of foreign direct investment, but also faster growth of domestic investment.

In Latin America and the Caribbean, the ratio of foreign direct investment to gross domestic capital formation declined in 1985-1987 in about half the countries presented in table 2, whereas in East, South and South-East Asia and the Pacific Islands, the corresponding ratio increased in all but two countries. The decline in the ratio observed in most countries in Latin America can be explained by the drop in foreign-direct-investment flows to that region resulting from debt-related economic problems. In contrast, foreign direct investment has become increasingly important in East, South and South-East Asia, with the ratio rising from a

low level in many cases. Since domestic investment increased rapidly in that region during the 1985-1987 period, it appears that the rate of growth of foreign direct investment has surpassed that of domestic investment. In Africa, significant increases were registered in the case of the seven reporting countries. Finally, for the most part, foreign direct investment has become increasingly important in developed countries. In all of the five largest outward investors, namely, France, Germany, Japan, the United Kingdom and the United States, the ratio of foreign direct investment to gross domestic capital formation either increased or remained the same.

Overall, the importance of foreign direct investment in relation to domestic investment is significantly higher in developing countries than in developed countries. Among the former, the average ratio of foreign to domestic investment was 6 per cent in 1985-1987; among developed countries the average was 3.4 per cent. Thus, while foreign-direct-investment flows are highly concentrated in developed countries, from a host-country perspective, foreign direct investment plays, on the whole, a much greater role in the economies of developing than in developed countries. The data presented at the bottom of table 2, however, indicate that the gap between the importance of foreign direct investment in developed as compared with developing countries may be narrowing: the average ratio among developed host countries appears to be rising, while among developing host countries the overall ratio has remained unchanged. This illustrates the growing importance of foreign direct investment in developed host countries, as transna-

Table 2. Share of average annual foreign-direct-investment inflows in gross domestic capital formation (percentage)

<i>Region and economy</i>	<i>1980-1982</i>	<i>1985-1987</i>
Developed market economies		
United Kingdom	8.2	8.8
Netherlands	5.8	8.4
Greece	6.3	7.4
Spain	4.1	7.3
Australia	4.9	6.8
Belgium and Luxembourg	7.6	6.6
New Zealand	4.9	4.7
United States	3.5	4.5
Portugal	2.1	4.1
France	1.8	2.7
Sweden	0.9	2.0
Ireland	4.4	1.8
Austria	1.7	1.6
Canada	-2.1	1.6
Italy	0.8	1.3
Norway	2.8	1.1
Finland	0.1	1.0
Denmark	1.1	0.8
Germany, Federal Republic of	0.3	0.6
Japan	0.1	0.1
South Africa	0.8	-1.4
Developing economies		
<i>Latin America and the Caribbean</i>		
Antigua and Barbuda	46.0	23.5
Colombia	4.3	13.2*
Grenada	2.0	11.8*
St. Vincent and the Grenadines	4.4	9.4*
Guatemala	9.0	8.3*
Costa Rica	7.1	8.2*
Mexico	4.3	6.6
Uruguay	5.8	6.6
Honduras	1.0	5.5
Dominican Republic	3.6	4.6
El Salvador	-0.1	3.2
Barbados	2.3	3.1
Chile	7.2	3.0
Ecuador	1.8	2.4
Brazil	4.6	2.1
Panama	-1.2	2.1
Guyana	0.8	1.9*
Paraguay	2.4	1.4
Peru	17.5	0.8
Trinidad and Tobago	11.4	0.7
Venezuela	1.1	0.3
Bolivia	5.4	0.0
Jamaica	0.0	-1.5*
Suriname	5.1	-19.4
<i>Asia and the Pacific</i>		
Singapore	23.4	25.5
Hong Kong	7.1	15.2

/.....

<i>Region and economy</i>	<i>1980-1982</i>	<i>1985-1987</i>
Table 2. (continued)		
Asia and the Pacific (continued)		
Indonesia	11.1	14.4
Papua New Guinea	11.7	12.8
Malaysia	8.2	8.7
Philippines	1.6	3.5
Taiwan Province of China	1.0	3.3
Fiji	9.9	3.1
Thailand	2.6	2.7
Sri Lanka	4.0	2.1
Pakistan	0.7	1.4
Republic of Korea	0.5	1.4
Bangladesh	0.2	0.4
India	0.1	0.2
Africa		
Seychelles	19.2	31.2
Nigeria	0.4	12.1
Egypt	7.4	9.9
Tunisia	11.6	4.1
Mauritius	0.6	2.8
Kenya	2.1	1.9
Ghana	1.5	0.9
Average share, by region and economy		
Developed market economies	2.9	3.4
Developing countries	6.0	6.1
Latin America and the Caribbean	6.0	5.0
Asia and the Pacific	5.9	6.8
Africa	6.1	9.0
<p><i>Sources:</i> United Nations, <i>National Accounts Statistics: Analysis of Main Aggregates, 1987</i> (United Nations publication, Sales No. 90.XVII.2); International Monetary Fund, balance-of-payments tape; UNCTC, <i>World Investment Directory</i> (New York, UNCTC, 1991).</p> <p><i>Note:</i> A negative share represents negative inflows of foreign direct investment.</p> <p>* 1985-1986.</p>		

tional corporations strive to win competitive positions in the Triad (this trend is examined in detail in chapter II).

Other indicators of the relative importance of foreign direct investment to the economies of the recipient countries are

presented in the annex. The share of sales, assets, employment and exports of foreign affiliates, among others, expressed in relation to the respective totals, provides a measure of the relative significance of the activities of foreign affiliates in particular sectors and

industries. The importance of their activities varies depending on the country and industry in question. In Taiwan Province of China, for example, over two fifths of all exports of electrical equipment in 1986 were accounted for by foreign affiliates. In Hong Kong in 1987, about half of total sales in that industry were accounted for by foreign affiliates, whereas the corresponding share for the secondary sector as a whole was less than 20 per cent.

For most of the developing countries shown in the table, foreign direct investment

is more important in the manufacturing sector than it is in the primary and services sectors. Within manufacturing, the three industries shown in the table — electrical equipment, motor vehicles and transportation equipment — are among the most important industries for the activities of transnational corporations. Overall, the table underlines the greater importance of foreign direct investment in the economies of developing as compared to developed countries.

B. Regional distribution

1. Developed countries

Foreign-direct-investment inflows to developed countries have grown at an average annual rate of 46 per cent since 1985, and reached a value of \$163 billion in 1989. The share of developed countries in world-wide inflows increased to 81 per cent in the 1985-1989 period, up from 75 per cent in the 1980-1984 period. The five major home countries (with the exception of Japan) are also among the largest host countries, with an average share of 57 per cent of world flows during the 1980s (table 3).

Foreign-direct-investment outflows from developed countries grew by 38 per cent annually after 1985, and reached \$187 billion in 1989. The five major home countries maintained their 70 per cent share of total outflows throughout the 1980s (table 3). The United Kingdom, the United States and Japan were the largest home countries for outflows over the 1980-1989 period; the United Kingdom was the largest home country for the period

overall, with average annual outflows of \$17 billion (20 per cent of world outflows). Outflows from Japan, however, have exceeded those from the United States since 1986 and surpassed those from the United Kingdom in 1989, such that Japan replaced the United Kingdom as the largest source country of investment flows, accounting for 23 per cent of total world-wide outflows in that year.

2. Developing countries

Foreign-direct-investment inflows to the developing countries have increased continuously since 1983, to reach about \$30 billion in 1989 (table 4). ^{7/} Since 1985, those inflows have grown at an annual rate of 22 per cent, compared to 3 per cent during the 1980-1984 period and 13 per cent during the 1975-1979 period. Although the rate of growth of foreign direct investment to the developing countries lagged behind that of the developed countries during the 1985-1989 period, it is significantly higher than com-

Table 3. Outflows of foreign direct investment from five major home countries, 1985-1989

Home country	1985	1986	1987	1988	1989	1980-1984	1985-1989
	(Billions of dollars)					(Percentage)	
France	2.2	5.4	9.2	14.5	19.4	6.0	8.0
Germany, Federal Republic of	5.0	10.1	9.2	11.2	13.5	7.4	7.8
Japan <i>a/</i>	6.4	14.5	19.5	34.2	44.2	8.9	18.8
United Kingdom	11.1	16.5	31.1	37.0	32.0	19.4	20.2
United States <i>b/</i>	8.9	13.8	28.0	13.3	26.5	28.1	14.3
Total	33.7	60.2	97.1	110.2	135.6	69.8	69.1
Developed countries	52.1	84.7	132.6	155.4	187.1	98.4	96.8
Developing countries	1.2	1.7	2.4	5.9	8.9	1.6	3.2
All countries	53.3	86.5	135.0	161.3	196.1	100.0	100.0

Source: International Monetary Fund, balance-of-payments tape, retrieved on 10 January 1991.

a/ Data for Japan do not include reinvested earnings.

b/ Excluding outflows to the finance (except banking), insurance and real estate sectors of the Netherlands Antilles. Also excludes currency translation adjustments.

parable rates of earlier periods. The highest growth of inflows was experienced by East, South and South-East Asia, where it reached a rate of 37 per cent per annum during the 1985-1989 period. *8/*

In spite of a near doubling of average annual flows to the developing countries between 1980-1984 and 1985-1989, their share in world-wide inflows between those two periods fell from 25 per cent to 19 per cent. Ten developing economies maintained a share of about three fourths of total inflows to developing countries throughout the

1980s. The ten and their respective shares of the \$16 billion in average annual inflows to developing countries and territories over the 1980-1989 period (excluding tax havens) are: Singapore (12 per cent), Brazil (12 per cent), Mexico (11 per cent), China (10 per cent), Hong Kong (7 per cent), Malaysia (6 per cent), Egypt (6 per cent), Argentina (4 per cent), Thailand (3 per cent) and Colombia (3 per cent). *9/*

While the shares of Africa and East, South and South-East Asia in total world-wide inflows remained stable over the periods

Table 4. Inflows of foreign direct investment to developing regions, by region, 1980-1984, 1985-1989 and 1988-1989

<i>Host region and economy</i>	<i>Annual average inflows (Billions of dollars)</i>			<i>Shares (Percentage)</i>		
	<i>1980-1984</i>	<i>1985-1989</i>	<i>1988-1989</i>	<i>1980-1984</i>	<i>1985-1989</i>	<i>1988-1989</i>
All countries	49.70	119.00	173.00	100.0	100.0	100.0
<i>Developing countries</i>	12.50	22.20	29.20	25.2	18.6	16.9
Africa	1.20	2.60	3.20	2.4	2.2	1.9
Latin America and the Caribbean	6.10	8.30	10.00	12.3	7.0	5.8
East, South and South-East Asia	4.70	10.70	15.20	9.4	9.0	8.8
Oceania	0.13	0.14	0.20	0.3	0.1	0.1
West Asia	0.37	0.40	0.54	0.8	0.3	0.3
Other ^{a/}	0.04	0.03	0.05	0.1	0.0	0.0
<i>Ten largest host economies</i>	9.01	14.31	19.26	18.1	12.0	11.1
Argentina	0.44	0.73	1.09	0.9	0.6	0.6
Brazil	2.10	1.59	2.53	4.2	1.3	1.5
China	0.53	2.49	3.29	1.1	2.1	1.9
Colombia	0.40	0.56	0.39	0.8	0.5	0.2
Egypt	0.56	1.23	1.40	1.1	1.0	0.8
Hong Kong	0.68	1.65	2.04	1.4	1.4	1.2
Malaysia	1.13	0.83	1.28	2.3	0.7	0.7
Mexico	1.50	2.02	2.42	3.0	1.7	1.4
Singapore	1.39	2.50	3.29	2.8	2.1	2.0
Thailand	0.29	0.72	1.40	0.6	0.6	0.8
<i>Least developed countries</i>	0.19	0.15	0.17	0.4	0.1	0.1

Source: UNCTC estimates, based on International Monetary Fund balance-of-payments tape, retrieved on 10 January 1991; OECD estimates; and UNCTC, *World Investment Directory* (New York, UNCTC, 1991).

^{a/} Includes Malta and Yugoslavia.

1980-1984 and 1985-1989, the share of *Latin America and the Caribbean* in world inflows declined from 12 to 7 per cent, although in absolute terms average annual inflows to Latin America increased. As a share of inflows to only developing countries, Latin America also experienced a substantial decline, from 49 to 38 per cent, while the corresponding share of South-East Asia increased from 37 to 48 per cent.

In spite of the increase in annual average inflows, foreign-direct-investment flows to Latin America and the Caribbean in 1989 fell by \$2.8 billion from their 1988 level of \$11.4 billion. Although most of this decline can be accounted for by Bermuda — the exclusion of which reduces the fall in the inflows to \$ 0.8 billion — continued debt-related problems in Latin America are in some measure behind the decade-long decline in the region's share of both world-wide inflows and flows to developing countries. Initiatives for economic integration in the potential extension of the United States-Canada free trade area to Mexico, and the Asunción agreement to create a common market between Argentina, Brazil, Paraguay and Uruguay (Mercosur), are likely to encourage foreign direct investment, since transnational corporations will be able to reap the benefits of economies of scale and access to a wider market.

Foreign-direct-investment flows to *East, South and South-East Asia* increased steadily after 1985. In 1986, that region surpassed Latin America and the Caribbean for the first time as the largest host region for foreign-direct-investment inflows in the developing world. In the period 1988-1989, over half of all foreign-direct-investment flows to developing countries went to that region. This sustained increase can be partly attributed to

the continuous attractiveness of the newly industrializing economies, to the growth of investment opportunities in several ASEAN member countries and to the emergence of China as an important host country in the region, in spite of the small increase in foreign-direct-investment flows to the latter between 1988 and 1989. In addition, intra-regional foreign direct investment became increasingly important for East, South and South-East Asia in the latter half of the 1980s, as the newly industrializing economies emerged as important investors, seeking new low-cost production locations in neighbouring countries in order to maintain their competitiveness in export markets. One implication of this trend may be the continuation of the overall increase in foreign direct investment in East, South and South-East Asia even if total flows from developed countries decline or are diverted to other regions.

The share of *Africa* in total average annual inflows to developing countries increased from 9 per cent in the 1980-1984 period to 12 per cent in the 1985-1989 period, with oil exporting countries in Africa accounting for the bulk of the increase. In absolute terms, inflows to Africa reached \$4.3 billion in 1989, two times the level reached in 1988. Egypt and Nigeria, both oil-producing countries, accounted for about 86 per cent of that amount. Foreign direct investment in sub-Saharan African countries also increased significantly, although Nigeria was the main recipient of those flows. For the non-oil-exporting sub-Saharan African countries, foreign-direct-investment inflows have remained below \$0.5 billion since 1981, with some year-to-year fluctuations. Despite the increasing openness towards transnational

corporations in sub-Saharan Africa, deteriorating business conditions and political instability in many of those countries have been contributing factors to the persistently low levels of foreign direct investment.

The *least developed countries* accounted for only 0.7 per cent of average annual inflows to developing countries in the 1985-1989 period, down from 1.5 per cent in the 1980-1984 period, reaching about \$200 million in 1989, one fourth of what Austria received in that year. The marginalization of least-developed countries, most of which are located in Africa, is likely to continue, since flows to developing countries are highly concentrated in newly industrializing and resource-rich countries.

Overall, net resource transfers through foreign direct investment to developing countries have shown a reversal from -\$1.0

billion in the 1980-1984 period to \$3.1 billion in the 1985-1988 period (table 5). ^{10/} That shift is due to a decrease in repatriated dividend and profit payments, coupled with increased foreign-direct-investment inflows. As indicated in table 5, for developing countries in South and South-East Asia and, to a lesser extent, in Africa, the reversal is more pronounced. In contrast, Latin America has experienced a relative decline in the transfer of net resources through foreign direct investment in the 1985-1988 period, compared to the 1980-1984 period. The positive transfer on account of foreign direct investment contrasts with negative transfers exceeding \$30 billion in both these periods on account of private credit.

It should be noted that net resource transfer, as defined here, is not a very meaningful indicator of the economic impact of foreign

Table 5. Net resource transfer through foreign direct investment by region, for 96 capital-importing developing countries, 1980-1984 and 1985-1988 (Billions of dollars)

Region	Average	
	1980-1984	1985-1988
Africa	-0.74	0.52
Latin America and the Caribbean ^{a/}	2.07	1.36
Europe ^{b/}	0.02	0.01
West Asia	-0.04	0.33
East, South, South-East Asia	-2.39	0.91
Oceania	0.00	0.01
Total	-1.08	3.14

Source: International Monetary Fund, balance-of-payments tape, retrieved on 27 February 1991.

^{a/} Excluding Bermuda, the Netherlands Antilles and the Cayman Islands.

^{b/} Malta and Yugoslavia.

direct investment. For example, outflows in the form of a repatriation of profits are directly related to past investments, the economic benefits of which (employment, technology transfer etc.) are not reflected in the figure for resource transfer. Nevertheless, data on the direction and the magnitude of resource transfer are of interest to policy makers, largely because of their implications for the balance of payments.

3. *Central and Eastern Europe*

By the end of 1990, virtually all countries in Central and Eastern Europe had passed legislation encouraging foreign direct investment, and several countries had passed privatization laws. An important development in 1990 has been the allowing of 100 per cent foreign ownership of enterprises in the USSR and of profit repatriation. As a result, most of the countries of the region (and especially the USSR) are potentially quite attractive to foreign investors: they represent large domestic markets with relatively high purchasing power and consumer demand, as well as considerable untapped business opportunities; in addition, skill levels are high and, particularly in the USSR, natural resources plentiful. At the same time, the transition from centrally planned to market economies creates, at least in the short run, major economic uncertainties in an environment which, in any event, has an underdeveloped business infrastructure (for example, regarding telecommunications, transport, the financial and retail system and other basic business services).

The number of registered joint ventures in Bulgaria, Czechoslovakia, Hungary, Poland, Romania and the USSR grew rapidly

in 1990, reaching 13,120 by the beginning of 1991, compared to 3,287 at the beginning of 1990, with Hungary surpassing the USSR in terms of number of registrations. ^{11/} In Yugoslavia, the number of registered joint ventures was about 3,000 at the beginning of 1991. Estimates of the value of foreign investment in joint ventures registered in Czechoslovakia, Hungary, Poland and the USSR range from about \$3.5 billion to \$5 billion, half of which occurred in the course of 1990. ^{12/} Nevertheless, only a few of these ventures have actually commenced operations; it has been reported that, for example, less than 10 per cent have done so in the USSR. ^{13/}

Foreign equity capital in joint ventures with domestic partners is concentrated in the manufacturing sector. In Poland and Hungary, foreign capital in the manufacturing sector accounted for over 60 per cent of the total foreign capital during the past few years. Foreign capital in the services sector, which accounts for the overwhelming majority of the remaining share, is mostly in finance, trade, transport, storage and communication and in other business activities. In the USSR, foreign equity capital in the manufacturing sector accounted for about 60 per cent of the total foreign statutory capital by the end of 1990. ^{14/} The majority of foreign capital in services was in hotels and restaurants and in wholesale and retail trade, which may be explained by the small size of initial capital required for investment, by the short duration between setting-up and beginning to operate those joint ventures and by the increasing demand for such services by both domestic and foreign enterprises. In all countries, the number of joint ventures and the amount of foreign equity participation in the primary sector is very small.

More than half of the total number of joint ventures and foreign equity participation in Central and Eastern Europe originate from countries in Western Europe, particularly the European Community and Austria and, to a lesser extent, the United States. These home countries are likely to remain the largest investors over the next few years, although several Japanese companies in a recent survey have indicated that they plan to invest

considerable amounts in Central and Eastern Europe. ^{15/} However, the rapid growth in the number of new joint ventures by the beginning of 1991 is likely to decline in the course of the year, given the possible disillusionment of foreign investors after an initial burst of euphoria, once they are confronted with a deteriorating economic situation and inadequate infrastructure in Central and Eastern Europe.

C. Sectoral pattern of foreign direct investment

1. *Shifts among sectors*

The rapid increase of foreign-direct-investment flows in the 1980s has been accompanied by a transformation in the sectoral composition of both the flows and stocks of this investment. During the 1950s, foreign direct investment was concentrated in raw materials, other primary products and resource-based manufacturing; today, it is mainly in services and in technology-intensive manufacturing. ^{16/}

The shift towards services accelerated during the 1980s (table 6). As a result, while services represented around a quarter of the total world stock of foreign direct investment at the beginning of the 1970s, by the late-1980s, the share of services in world stock of foreign direct investment was close to 50 per cent, and services accounted for some 55 to 60 per cent of annual flows.

Table 7 shows recent sectoral changes in the stock of foreign direct investment for the seven major home countries which largely determine the global geographical and sec-

toral patterns of foreign direct investment. Although, in absolute terms, foreign direct investment in all three sectors has been growing, investment in services grew the fastest in *all* countries, followed by manufacturing and the primary sector.

Trends in the sectoral distribution of foreign direct investment generally conform to long-term changes in the structure of economic activities in both home and host countries, in which the role of the primary sector in gross national product has declined while that of the services sector has increased. In addition, changes in the policies of many developing countries with regard to the ownership of their natural resources contributed to the decline in foreign direct investment in the extractive sector. By the middle of the 1970s, ownership by transnational corporations of facilities producing — and, to a lesser extent, processing — petroleum, natural gas, non-fuel minerals and agricultural export commodities had been reduced to a great extent through nationalizations by host countries. ^{17/}

Table 6. Sectoral distribution of foreign-direct-investment outflows for five major home countries, 1981-1984 and 1985-1989 (Millions of national currency and percentage)				
Country	Average annual flows		(Percentage share)	
	1981-1984	1985-1989	1981-1984	1985-1989
United States a/				
Services	5 981	10 289	52	57
Non-services	5 435	7 804	48	43
Total	11 416	18 093	100	100
France				
Services	8 031	29 213	41	49
Non-services	11 468	30 790	59	51
Total	19 498	60 004	100	100
Japan b/				
Services	5 280	26 723	61	73
Non-services	3 448	9 770	39	27
Total	8 727	36 493	100	100
United Kingdom c/				
Services	1 396	5 699 d/	35	38 d/
Non-services	2 650	9 360	65	62
Total	4 046	15 059	100	100
Germany, Federal Republic of e/				
Services	8 415	6 160 d/	55	64 d/
Non-services	6 865	3 455	45	36
Total	15 280	9 615	100	100
<p>Source: UNCTC estimates, based on UNCTC, <i>World Investment Directory</i> (New York, UNCTC, 1991).</p> <p>a/ Excluding outflows to the finance (except banking), insurance and real estate sectors of the Netherlands Antilles. Data for 1985-1989 exclude currency translation adjustments. Other industries have been broken into services and non-services. The petroleum industry, a portion of which includes services (for instance, trading activities) is included in the non-services category.</p> <p>b/ In dollars.</p> <p>c/ Data prior to 1984 exclude investments by oil companies.</p> <p>d/ Covers 1985-1988.</p> <p>e/ Calculated from changes in outward stocks between consecutive years.</p>				

Table 7. Changes in the sectoral composition of the stock of outward foreign direct investment of major home countries
(Percentage share and compound annual growth rate)

Country	Period	Sectors			Total
		Primary	Secondary	Tertiary	
Canada					
Composition	1975	21.1	50.5	28.4	100
	1987	13.2	43.3	43.5	100
Growth rate	1975-1987	12.1	15.1	16.6	16.4
France a/					
Composition	1975	22.1	38.2	39.7	100
	1988	15.0	36.6	48.3	100
Growth rate	1975-1988	22.6	26.0	28.3	26.3
Germany, Federal Republic of					
Composition	1976	4.5	48.3	47.2	100
	1988	2.8	43.4	53.7	100
Growth rate	1976-1988	7.6	10.7	12.9	11.5
Japan					
Composition	1975	28.1	32.4	39.5	100
	1989	6.7	26.1	67.2	100
Growth rate	1975-1989	10.0	19.9	26.5	21.8
Netherlands					
Composition	1975	46.8	38.6	14.6	100
	1988	36.4	24.7	38.8	100
Growth rate	1975-1988	5.9	4.2	16.5	7.9
United Kingdom b/					
Composition	1981	..	..	35.6	100
	1987	26.9	34.4	38.6	100
Growth rate	1981-1987	..	..	12.3	11.3
United States c/					
Composition	1975	26.4	45.0	28.6	100
	1989	16.7	40.9	42.3	100
Growth rate	1975-1989	4.7	7.4	11.4	8.2

Source: UNCTC estimates, based on UNCTC, *World Investment Directory* (New York, UNCTC, 1991).

a/ Based on cumulative flows of direct investment from 1972.

b/ Data for primary and secondary sectors are not available separately for 1981. The combined growth rate of the two sectors for the 1981-1987 period was 10.3 per cent.

c/ The vertically-integrated petroleum industry is included in the primary sector in 1975. In 1989, only the extractive portion of the industry is included in the primary sector, with processing included in the secondary sector and marketing and distribution in the tertiary sector.

2. *The growing importance of services*

The growing importance of services foreign direct investment has resulted from a number of factors related to the pattern of economic development, policy changes, technological advances and the strategies of both services and industrial transnational corporations. The most important among those factors are the following:

- Services have become the largest sector in the world economy, growing continuously in most countries. During the past two decades, total demand for services has grown because of the growth in demand for consumer services resulting from a rise in real income per capita mainly in developed countries, and because technological advances have increased the demand for intermediate services, while the externalization of producer services have increased their supply.
- The expansion of services would not have been possible without the profound qualitative changes which many services have undergone during the past decade. In particular, the technological, information and knowledge component of most services has vastly increased. Telecommunications, not long ago based on simple electro-mechanical technology, has become a sophisticated set of activities employing the most modern technology and is closely linked to development in computers, micro-electronics, fibre optics and satellites. As a result, telecommunication services are now more widely in demand. New uses have emerged for accounting as a tool for management information and control; changes have also occurred in financial services and transportation, and tourism has exploded. The growth of demand for producer services is also due to the fact that many goods have become technically more complex, and are sold under much more competitive conditions than a decade or two ago. As a result, the value of goods consists increasingly of various service inputs, ranging from design to marketing, and decreasingly of direct production costs and material inputs. For instance, IBM is a service company, although it appears annually on the list of the United States' largest industrial firms. ^{18/}
- Transnational corporations, relative to other firms, have been particularly well placed to benefit from those developments. Previously, the competitive advantages of foreign transnational corporations seeking to establish a local presence in many service industries were not as great as those of domestic companies or were insufficient to compensate for the additional cost of serving a foreign market. ^{19/} In addition, Governments of both developed and developing countries strictly controlled the extent and form of non-resident involvement in such strategically, politically and culturally sensitive industries as transport, telecommunications, banking, advertising and community services (for example, education, health and public utilities) and, by a variety of fiscal instruments or direct measures, favoured production by indigenous companies. Qualitative changes which have taken place in most service industries and, most importantly, the technological and information revolution, have redefined those parameters. The

pattern of competitive or ownership-specific advantages have shifted to favour corporations which have been in the forefront of change. Also, they have forced Governments to revise their protectionist policies with regard to many service industries; as a result, many countries have set in motion a process of liberalizing domestic and international policies and have relied more on competition as a tool to increase efficiency. 20/

- While transnational corporations in manufacturing usually have many options in serving foreign markets, ranging from exports to the establishment of wholly-owned foreign affiliates, the range of options available to service corporations is often limited, since many services are not tradable. This helps to explain the much faster expansion of foreign direct investment in services than that of services trade, along with the slower growth in foreign direct investment in the manufacturing sector compared to growth in the services sector. Those trends have been accelerated by a combination of a growing demand for services and the opening up of markets. The trend towards services foreign direct investment has been reinforced by industrial corporations, which have increasingly established service affiliates abroad, particularly in finance and trade-related areas, where investments appear to be designed to strengthen and internalize corporate functions, rather than diversify into services *per se*. 21/
- The opening of developed-country markets in some service industries encourages transnational service corporations to exploit their advantages in new

markets. It also leads to increased investment, as competing transnational corporations follow each other into important markets to protect or strengthen their international market position *vis-à-vis* their competitors. 22/ The industries most affected by these strategic considerations include banking and other financial services (which, along with wholesale and retail trade, constitute the bulk of services foreign direct investment) and, in selected locations, other services, such as management consultancy, advertising, air transportation and hotels.

- The increasing importance of those developments has led to a diversification of home countries undertaking services foreign direct investment. In the second half of the 1980s, Japan and the European Community became the largest sources of services foreign-direct-investment flows, with average annual investments in services three times and almost two times larger, respectively, than those of the United States. 23/ Japanese and Western European transnational service corporations are catching up with United States corporations in many important industries and markets, including those of the United States, a country which has been one of the most dynamic areas for the expansion of transnational service corporations. Also, transnational corporations based in a few newly industrializing countries have emerged in such industries as trading, banking, construction and hotels.
- The single most important destination for services foreign direct investment during the second half of the 1980s was the

European Community; growth in that region alone accounts, to a considerable extent, for the rapid expansion of world services foreign direct investment during that period. From 1984 to 1988, cumulated investment flows (excluding reinvested earnings) in services in the European Community by both third countries and firms from the Community, exceeded by far those in all other sectors and amounted, respectively, to ECU 28 billion and 16 billion for third countries and ECU 34 billion and 21 billion for intra-Community foreign direct investment. ^{24/} The creation of the Single Market has provided a powerful inducement for both Community and non-Community transnational service corporations to invest in the Community. This is not surprising, given that services will be greatly affected by the Single Market programme. While the European Community started dismantling its internal barriers to trade and foreign direct investment in goods some 30 years ago, obstacles to foreign direct investment and trade in services remained untouched until the late 1980s when the 1992 project began. The mere announcement of the Single Market and the process to remove those obstacles has led to a massive reorganization of service industries in the Community and has created a substantial interest on the part of transnational service corporations from all major home countries which rapidly started positioning themselves in the large and dynamic Community market. As a result, the share of services in total foreign direct investment in the European Community by both third-country and Community

transnational corporations rarely fell below 60 per cent in each of the years during the 1984-1988 period (see table 8).

Although services foreign direct investment has rapidly increased in absolute terms in both developed and developing countries, it has done so much faster in the former than in the latter. As a result, by the mid-1980s, some 84 per cent of the stock of foreign direct investment in services was located in developed countries, compared with 75 per cent of all foreign direct investment. ^{25/} The structure of transnational-corporations-related service activity in developed countries is very different from that in developing countries. In the former, intermediate services, such as financial, business and professional services, and services competing for the discretionary income of consumers play a much more important role. In developing countries, there is a higher proportion of investment in trading, construction, tourism and basic financial services. That discrepancy underlines the locational advantages of developed countries *vis-à-vis* developing countries stemming from large and dynamic markets for modern and efficient services which, together with more liberal policies towards transnational service corporations, constitute compelling locational inducements for transnational service corporations. Exceptions include a few developing countries offering fiscal incentives to induce tax-haven and flags-of-convenience-related activities, as well as such capital-intensive projects as the construction of hotels. That pattern of locational advantages is, however, rapidly changing. Developing countries increasingly emphasize the efficiency of services as a principal policy objective and, in that context, seek a greater role for transnational corpora-

Table 8. Share of services in total foreign-direct-investment flows *a/* from, into and within the European Community, 1984-1988 (percentage)

Direction of flows	Share of services in total flows					Share for the period 1984-1988
	1984	1985	1986	1987	1988	
A. Outward investment from the EC	35	51	43	44	26	37
B. Inward investment in the EC						
By third countries	60	57	71	56	62	60
By the EC (intra-EC)						
• Reported by investing country	-7 <i>b/</i>	53	44	66	75	57
• Reported by country of investment	70	78	60	68	53	62

Source: Eurostat, "Les investissements directs de la Communauté Européenne" (Luxembourg, August 1990).

a/ Excluding reinvested earnings.
b/ Negative figure is due to disinvestment.

tions in the provision of services. ^{26/} It remains to be seen, however, whether policy changes alone will prove to be sufficient to attract increased investment by transnational service corporations.

All indications are that the internationalization of service industries through foreign direct investment is in its early stages and that the momentum in the growth of services foreign direct investment will be maintained or even increased during the 1990s. For one, demand for modern producer services, supplied mostly by transnational corporations, is growing rapidly in all countries, including developing countries. In addition, the countries of Central and Eastern Europe will need increasingly to make use of such services as banking, insurance

and other financial services, telecommunication, accounting and legal services in the transition towards a market economy. Countries also realize that the provision of many of those services will not be possible without the participation of transnational corporations. Secondly, the process of liberalization of foreign direct investment in services is a relatively recent phenomenon which is spreading to more countries and more service industries, including capital-intensive infrastructure services, such as telecommunications, transportation and public utilities, in which foreign ownership was previously not allowed by most countries. Thirdly, transnational service corporations as a group are much less transnational than industrial firms, implying that there is con-

siderable potential for rapid growth in services foreign direct investment in the future.

While there is little doubt that these and other factors will lead to an increasing transnationalization of service industries in the near term, technological developments may, in the longer run, alter the ways in which services are delivered to foreign markets. As pointed out earlier, the limited tradability of many services has been a key factor favouring the rapid growth of foreign direct investment rather than trade. The advent of transborder data flows through the convergence of computer and telecommunication technologies changes that situation fundamentally, because transborder data flows permit instantaneous, long-distance interactive transactions via transnational computer-communication systems. 27/ By collapsing time and space, transborder data flows make it possible for certain services to be produced in one place and consumed in another. The result is an increased transportability and, therefore, tradability of certain services, especially information-intensive services. It is conceivable that the increased use of transborder data flows will make a whole range of intangible and non-storable services tradable and, in that manner, either reduce the need for foreign direct investment to deliver those services to foreign markets or change the nature of the investments involved.

On the other hand, the increased use of transborder data flows could lead to further foreign direct investment in services. One implication of such a development is that

transnational service firms, like their manufacturing counterparts, may find themselves in a position in which they, too, can split their production processes into parts and allocate certain operations to foreign affiliates — for instance, to take advantage of lower wages and other costs; that would result in both increased foreign investment and intra-firm trade in services. The increased application of data services can also stimulate new foreign direct investment in a wide range of service industries, especially those which are information-intensive. The reason is that the use of transborder data flows makes it easier to establish foreign affiliates abroad by linking them to their parent corporations in an interactive manner via transnational computer-communication systems and allowing them to locate value-added activities in the parent corporation or the affiliate (or both).

In conclusion, technological changes have opened new opportunities in the areas of both trade and foreign direct investment in services. In some cases, those changes may lead, in the long run, to trade replacing foreign direct investment; in others, the result may be an increase in both foreign direct investment and intra-firm trade in services. In still other cases, a potential for new foreign direct investment in services may also emerge. Although the precise nature of the new opportunities and their full implications are still far from clear, there is little doubt that they will act in favour of a continued expansion of foreign direct investment and trade in services.

D. Policies affecting foreign direct investment

In recent years, the area of foreign direct investment has been given increased attention by policy makers at both the international and the national levels. At the international level, OECD and GATT are currently perhaps the two most important forums for crafting and implementing multilateral policies relating to foreign direct investment. Concerning the former, OECD recently took measures to harmonize the treatment of transnational corporations by host countries and to strengthen the OECD Codes of Liberalisation, and it added a chapter on transnational corporations and the environment to its Guidelines on Multinational Enterprises. In the current Uruguay Round of Multilateral Negotiations, two issues stand out as particularly important for the future of a multilateral approach to foreign-direct-investment issues: the creation of a framework to govern international transactions in services, and rules governing the application of trade-related investment measures by member States. In this section, both of these issues, which are two of the most important ones currently being tackled in the international arena, are examined. 28/

In terms of policy developments at the domestic level, privatization, de-regulation and debt-equity swaps have been among the most important policies related to foreign direct investment in many countries. The discussion below draws on the results of an empirical study which examined the impact of liberalization on foreign-direct-investment flows, with the finding that liberalization alone is unlikely to cause a significant change in investment inflows in the absence of favourable conditions in the domestic

economy. Thus, while actions are being taken at the international level to encourage the growth of foreign direct investment, the most important foreign-direct-investment policy arena remains at the national level, in the efforts of policy makers to improve the overall competitiveness of their economies.

1. *International policy changes*

(a) *The Uruguay Round and foreign direct investment in services*

The establishment of a multilateral framework of rules governing trade in services is likely to have important implications for the volume and pattern of foreign direct investment in services. Such a framework has been under negotiation in the Uruguay Round of Multilateral Trade Negotiations (MTN) since 1986. The Group of Negotiations on Services in the MTN has made significant progress in bringing about a convergence of views among countries as regards the need for an international regime which would facilitate the flow of services among member States of the world community. Thus, provided the negotiations can overcome the difficulties relating to a few remaining issues regarding goods as well as services trade, the emergence of an international framework for services is likely.

The implications of the Uruguay Round for foreign direct investment arise largely out of the importance of foreign direct investment as a vehicle for the delivery of services to foreign markets as described in section C above. Data for the United States indicate that, in at least half of the 22 service activities

for which figures are available, sales by affiliates account for a greater proportion of service firms' total foreign revenues than do direct or cross-border exports. ²⁹ Particularly in business services such as accounting, advertising, data-processing and software, United States firms serve foreign markets primarily through the establishment of affiliates or other arrangements which allow for the direct relationships between clients and producers that are an essential element of the production process in many services.

The fact that there is a continuum of means, involving varying degrees of direct participation by services producers, for delivering services to foreign markets has been recognized by the negotiations on services in the discussions on a definition of trade in services. Trade in services has been interpreted to include the cross-border supply of services, as well as the cross-border movement of consumers and providers, and the establishment of a commercial presence for the production, distribution, marketing, sales and delivery of a service. Furthermore, although the emergence of a multilateral framework awaits the successful conclusion of the Uruguay Round, many countries, both developed and developing, have begun to anticipate a freer regime for services by opening up their services markets to foreign investors. Those policy changes are likely to consolidate further the prevailing trend towards increasing flows of foreign direct investment in services in the developed countries and to provide a stimulus to increased services foreign-direct-investment flows to developing countries as well. While the comparative advantage in many services lies with developed countries and one would therefore expect investment flows from those countries to ex-

pand significantly, the proposed multilateral framework explicitly includes provisions that would increase the participation of developing countries in world trade in services and would expand their exports of services. It also provides for the inclusion of provisions that would promote the strengthening of the efficiency and competitiveness of the domestic services sector in developing countries; affiliates of transnational service corporations in developing countries can influence that process considerably through the transfer of technology and skills.

(b) The Uruguay Round and TRIMs

One of the new issues being discussed in the Uruguay Round concerns trade-related investment measures (TRIMs), such as incentives and performance requirements for transnational corporations wishing to invest in a host country. Local content rules (that a given per cent of a good must be domestic in order to be treated as "local" and, hence, be sold free of duty), trade balancing (that imports must be matched with a given amount of exports) and export-performance requirements are among the most familiar TRIMs, which can take on a variety of forms and degrees of applicability. The United States was instrumental in having TRIMs included in the current round of negotiations; it has been estimated that one half of the latter's foreign direct investments in developing countries were subjected to TRIMs. ³⁰ However, while TRIMs are more frequently found in developing countries, developed countries — as the larger recipients of foreign direct investment flows — are far more important in terms of the amount of investment actually covered by TRIMs. In that regard, TRIMs

might be seen as an issue primarily between developed countries. Furthermore, among developing host countries there is a wide discrepancy between the amount of investment officially subject to a TRIM (between one half and two thirds) and the amount that transnational corporations actually report as being covered by a TRIM (2 to 6 per cent).³¹ This seems to imply that a good portion of TRIMs, while officially legislated, is being imposed on an ad-hoc basis or not at all; and/or that TRIMs are unnecessary, because many transnational corporations are meeting the requirements of their own accord. In either case, the findings on TRIMs suggest that they are more of an international issue in theory than in practice.

Negotiations on TRIMs in the Uruguay Round have not yet resulted in an agreed draft, and there is still a broad spectrum of opinion among members regarding the treatment of those measures by GATT. The United States and Japan hold that a range of TRIMs is trade- and investment-distorting and should be prohibited, and that GATT rules should be elaborated to cover TRIMs explicitly; they also call for disciplines on other investment measures, not necessarily directly trade-related, such as local equity requirements and controlled access to foreign exchange, as those may also lead to trade distortions. The EC countries consider only a limited number of investment measures to have a direct impact on trade and to fall under GATT rules; they maintain that disciplinary action should focus on eliminating the trade-distorting aspect of those TRIMs rather than on their outright prohibition. Developing countries take the view that TRIMs are a legitimate instrument when applied in the broader context of a Government's overall

economic development objectives, and that attempts to impose comprehensive restrictions on investment measures go beyond the GATT mandate by limiting a Government's ability to achieve its development goals. They also argue that some corporate behaviour can be trade-distorting (predatory pricing is an example) and that investment measures can be used to offset such negative effects.

Overall, the differences of opinions concerning TRIMs centre on four basic issues: the coverage of a TRIMs agreement (whether it should be extended to measures applied to established firms or only to measures on new investments); the level of discipline to be imposed; the treatment of developing countries (whether they may be granted a special allowance to use TRIMs in the context of their socio-economic development goals); and the treatment of restrictive business practices in the context of restrictions of TRIMs. Negotiations are continuing on those issues.

2. National policy changes and their impact

(a) Recent policy developments

During the 1980s, a large number of countries changed their policies and regulations affecting transnational corporations. In many cases, especially in *developed market economies*, those changes were a component of policies aimed at improving the climate for business operations in general, and did not single out the activities of transnational corporations. For example, while the privatization of previously Government-owned or Government-regulated assets in developed market economies frequently meant opening up to both domestic firms and foreign transnational corporations, it appears to

have contributed to a growing presence of foreign transnational corporations in domestic markets previously dominated by state enterprises. Policies involving privatization and deregulation opened to all competitors markets that had previously been restricted to Government-owned or regulated domestic enterprises. In telecommunications, strategic alliances and mergers and acquisitions have served to increase the role of foreign transnational corporations in domestic markets for equipment. Similar changes are occurring in air transport. Early in 1991, for instance, the United States agreed to reduce restrictions on foreign ownership of domestic air carriers, a change that is expected to lead to an increase in equity participation by foreign transnational corporations.

Beyond the issue of privatization, there are indications that some developed countries are treating the expansion of foreign production within their economies as an element fostering national competitiveness. The United Kingdom, for example, has actively welcomed foreign transnational corporations in such industries as computers, consumer electronics and automobiles, to expand purchasing power and employment on the one hand, and to help revitalize domestic industry on the other. In other developed economies, while there are clear signs that attitudes towards foreign production are becoming more tolerant, major policy changes have yet to occur, and policy towards foreign production remains either neutral or mildly restrictive in key sectors. In the EC, for example, the issue of local content requirements has yet to be resolved.

In *developing countries*, policy changes in the 1980s were frequently part of explicit attempts to attract greater amounts of

foreign direct investment by transnational corporations and/or to influence the impact of such investment. Some countries have reduced or removed their exchange controls, thus permitting wider currency convertibility and allowing greater repatriation of profits and dividends. Price controls have been eased or lifted, giving greater play to market forces. Conditions restricting the entry of transnational corporations into key industries are more adaptable and new investment codes have been formulated that make regulations more flexible. Those changes contributed to improving the climate for foreign direct investment in a number of developing countries, including the Republic of Korea and China. On the other hand, changes in performance requirements in the 1980s were in the direction of imposing greater restrictions on transnational corporations. In many instances, however, the restrictions implied by performance requirements were linked to investment incentives granted to transnational corporations. Performance requirements, the incidence of which is not high, represent the only major area of policy where changes appear to have been in the direction of greater restrictions.

Furthermore, the growth of debt-equity swaps has enabled a number of heavily indebted countries both to reduce their external debt and expand the inflow of foreign direct investment. A number of debtor developing countries have instituted official mechanisms to convert a portion of their external debt into domestic equity. A foreigner wishing to invest in the host country can purchase debt on the open market at a discount, sell the debt to the host country central bank, and receive local currency with which to make an approved investment. Debt-equity swaps have made a

significant contribution to debt reduction in only one instance, Chile. In other cases, they have become an instrument of policy aimed at expanding and channelling inflows of foreign direct investment. ^{32/}

Data from five debtor developing countries found that debt-equity swaps accounted for between 20 and 80 per cent of inflows of foreign direct investment in the last half of the 1980s (table 9). It is not clear, however, to what extent this represents a net increase in foreign direct investment, since it is not always possible to isolate the effect of a debt-equity swap programme from other important economic changes within host countries and, especially, since it is difficult to ascertain what part of the debt-equity related foreign direct investment is additional

to investment that would have been made in any event.

Policy changes in the countries of *Central and Eastern Europe* have been among the most dramatic. As described above, the opening of those economies to allow substantial foreign participation has led to a large increase in the number of agreements, such as joint ventures, involving the participation of foreign transnational corporations, although inflows of foreign direct investment have not as yet grown as sharply. The initial openings have included, or have been followed by, the establishment of stock exchanges and the formulation of new legal and regulatory environments. In addition, there has been a growing attempt to align accounting systems to those prevailing in the major home countries of

Table 9. Foreign direct investment financed through debt-equity swaps in selected developing debtor countries, 1985-1989 (millions of dollars)

Country	Total foreign direct investment inflows	Foreign direct investment through debt-equity swaps ^{a/}	Foreign direct investment through debt-equity swaps as percentage of total foreign direct investment
Argentina	3 646	731	20
Brazil ^{b/}	7 687	4 529	59
Chile ^{c/}	3 947	3 160	80
Mexico	10 098	3 052	30
Philippines	2 306	473	21

Source: UNCTC, "Transnational banks and debt-equity conversions" (E/C.10/1991/5).

^{a/} Includes only that portion of swaps which corresponds to foreign direct investment.

^{b/} Excludes informal conversions.

^{c/} Excludes chapter XVIII transactions.

transnational corporations. While such policy changes will undoubtedly increase the attractiveness of those countries as hosts to international production by transnational corporations, larger inflows of foreign direct investment are not likely to occur until domestic economic environment stabilizes, growth rates increase and the regulatory framework has become stable and predictable.

(b) The impact of liberalization

The trend towards reducing restrictions on the activities of transnational corporations in host developing countries is one of the more important policy developments of the past decade. A sample of more than 300 instances of changes in policies and regulations affecting foreign direct investment by transnational corporations covering 46 countries (20 developed market economy countries and 26 developing countries, including five newly industrializing countries) over 11 years (1977-1987) illustrates the scope and direction of the changes. ^{33/} More than two thirds of the changes in the sample were in the direction of reducing restrictions on the activities of transnational corporations. In the case of the newly industrializing countries, more than three fourths of the changes were in the direction of reducing restrictions on transnational corporations.

Despite such substantial changes in policies, flows of foreign direct investment to developing countries have increased only slightly, and those increases have tended to be concentrated in the largest and most rapidly growing developing countries, as discussed above. Thus, policy changes may have a limited impact by themselves.

The sample of over 300 policy changes was analysed statistically to assess the relative importance of policy changes and economic variables in explaining changes in flows of foreign direct investment to host countries. For most countries, and especially for the developing countries, the policy changes explained very little of the observed changes in foreign-direct-investment flows. For the developing countries in the sample, except for the newly industrializing countries, the policy changes explained almost none of the flows of foreign direct investment. Instead, the size of host country markets was the most important determinant in the analysis. In the sample of newly industrializing countries, extensive policy liberalization was accompanied by a significant augmentation of foreign-direct-investment inflows, indicating that policy changes enhanced the growing economic attractiveness of those countries as hosts to foreign direct investment.

Statistical analysis of the type undertaken in the research cited above is limited in its ability to provide definitive answers. For example, when a policy change is recorded, it is not always possible to distinguish whether one type of policy change is more important than another. Changes in the implementation of existing policies are not measured, and such changes may be more important than alterations in the policies themselves. It is difficult to measure the lag between when a policy is changed and when market responses occur. In addition, it is easier to obtain measures of some possible explanatory variables than for others. Moreover, the lack of a stronger response may be due to the fact that many countries liberalized more or less simultaneously, offsetting, to some extent, the benefits that might accrue to any one of

them. Future research on this issue may have to explore new data and seek measures that can discriminate among various policy instruments to assess their projected importance.

At the same time, the statistical results are consistent with research on the behaviour of transnational corporations, which indicates that basic economic conditions are the most important determinants of where transnational corporations engage in foreign production, and of how much capital they transfer to their foreign production locations. In developing countries that possess a large and growing internal market or substantial

productive resources, and in countries that are in geographical proximity to a major developed country market, changes in policies and regulations can be instrumental in helping attract greater amounts of foreign direct investment. This appears to have been the case in China, the Republic of Korea and recently in Mexico. In general, however, while appropriate policies appear to be a necessary precondition for attracting foreign direct investment, they are not sufficient, by themselves, to improve the ability of host countries to obtain larger inflows of foreign direct investment.



Chapter II

PATTERNS OF FOREIGN DIRECT INVESTMENT IN THE TRIAD

A. The Triad members: the United States, the European Community and Japan

In the early 1980s, the global pattern of foreign direct investment could be characterized as bi-polar, dominated by the United States and the EC, with the latter not yet fully integrated in terms of foreign-direct-investment flows. By the beginning of the 1990s, Japan emerged as an equally important foreign-direct-investment power, at least as far as outward flows are concerned. As a result, the global pattern of foreign direct investment can now be characterized as tri-polar, with the EC, the United States and Japan being the members of the Triad. 34/

The Triad accounts for some four fifths of total outward stocks and flows, a percentage substantially higher than that in the area of trade, where the Triad accounted for one half of total world trade during the 1980s. Fur-

thermore, while other countries have increased somewhat their relative position as outward foreign investors (although the Triad still accounts for over 80 per cent of outward world stock), a growing share of world-wide investment is being concentrated in the Triad itself (table 10).

A major reason for the shift from a bi-polar to a tri-polar foreign-direct-investment pattern has been the rapidly declining share of the United States in the Triad's total outward stocks and flows in favour of a rising share of Japan, which, in terms of average outflows, had surpassed the United States during the second half of the 1980s by a substantial margin. Those shifting global patterns are examined in the following sections, which analyse the position of each

Table 10. Foreign direct investment to/from the European Community, the United States and Japan, 1980-1989 (Billions of dollars)								
	<i>Stock</i>				<i>Flow</i> (Annual average)			
	<i>Outward</i>		<i>Inward</i>		<i>Outward</i>		<i>Inward</i>	
	1980	1988	1980	1988	1980-1984	1985-1989	1980-1984	1985-1989
<i>EC (excludes intra-EC foreign direct investment)</i>								
Billions of dollars	153	332	143	239	18	39	10	19
Percentage of world total	33	34	31	23	41	37	23	19
<i>United States</i>								
Billions of dollars	220	345	83	329	14	18	19	46
Percentage of world total	46	35	18	31	31	17	41	46
<i>Japan</i>								
Billions of dollars	20	111	3	10	4	24	—	—
Percentage of world total	4	11	1	1	10	23	1	—
<i>Triad</i>								
Billions of dollars	398	788	230	579	36	81	29	65
Percentage of world total	84	81	50	55	82	77	64	65
<i>World, excluding intra-EC foreign direct investment</i>								
Billions of dollars	474	974	464	1059	44	105	45	100
Memorandum item:								
<i>EC, including intra-EC foreign direct investment</i>								
Billions of dollars	203	492	188	399	22	59	15	40
Percentage of world total	39	44	37	34	47	47	30	33
<p><i>Sources:</i> UNCTC, <i>World Investment Directory</i> (New York, UNCTC, 1991); United States Department of Commerce, International Trade Administration, Office of Trade and Investment Analysis, "Trends in international direct investment", 1990, mimeo.</p> <p><i>Note:</i> The data for Japan and several European countries do not include reinvested profits. The data on intra-EC represent UNCTC estimates based on national sources. The data for the EC do not include Ireland, Greece or Luxembourg.</p>								

Triad member, current trends regarding intra-Triad foreign direct investment and the investment linkages between the Triad and developing countries.

1. The United States and Japan

The United States is no longer the most important foreign investor in the Triad, as it was in 1980. By 1988, the EC (not including intra-EC foreign direct investment) was at parity with the United States in terms of stock, and Japan now invests more abroad than does the United States in terms of flows. At the same time as its role as a home (source) country was declining, the position of the United States as a host (recipient) country has grown; in fact, the overall rise in world foreign direct investment located in the Triad is largely due to increased foreign direct investment located in the United States.

Over the same eight-year period, outflows of foreign direct investment from Japan increased by nearly six times. In 1980, Japanese outflows were one tenth of the outflows from the United States; by 1989, they were two thirds higher. However, as a relative newcomer to the Triad (at least in terms of foreign direct investment), Japan does not yet match the United States nor the EC in terms of outward stock, although it is likely that it will do so within the next decade. In contrast, foreign-direct-investment stock and flows into Japan have remained very low over the decade, and explain the relatively low share (about one half) of world-wide inward stock located in the Triad as a whole. In terms of its position as a host country, then, Japan is not an equal Triad member, and is not likely to become one until transnational corporations take greater advantage of existing

investment opportunities in that country, while at the same time remaining barriers to such investment are lowered.

2. The European Community

Over the decade of the 1980s, the EC has increased its importance in the Triad as a foreign investor, such that its share of total outward stock (34 per cent) is now roughly equal to that of the United States (35 per cent). Its relative position as a host region, in contrast, declined somewhat over the period, although in absolute terms foreign direct investment into the EC grew at about 8 per cent a year. Much of the relative decline in the EC as a host region and its concurrent rise as a home region can be explained by shifts in the bilateral foreign-direct-investment relationship between the EC and the United States, in which investment from the former to the latter grew far more rapidly than flows in the reverse direction. Those relationships are analysed in more detail below in section B.

The 1992 programme to unify the regional market has provoked an unprecedented level of intraregional foreign direct investment within the EC, such that intra-EC foreign direct investment increased from one quarter of total inward stock in the EC in 1980 to 40 per cent in 1988, when it reached a level of approximately \$160 billion. That rapid increase (about 17 per cent a year) outpaced the growth of intra-EC trade, which grew at only 9 per cent a year during the 1980s.

Growing foreign direct investment between EC countries means that it is increasingly possible to conceive of the region as a single, integrated home and host region for foreign direct investment to the rest of the world. The EC is now the dominant investor

in six EC countries, accounting for over 50 per cent of inward stock, whereas in 1980 the EC was dominant in only one EC country. ^{35/} The accelerated integration of the regional economy is further illustrated by the fact that intra-EC investment flows grew by an average of 38 per cent a year from 1980 to 1987, while flows from the EC to the rest of the world grew at only 17 per cent a year.

In terms of corporate strategy, the increasing importance of intraregional foreign direct investment within the EC can be characterized as the "regionalization" of EC-owned industry, motivated in large part by the 1992 programme to unify the regional market. The level of intra-EC foreign direct investment in the EC is intensifying, since foreign-direct-investment flows within the region have grown substantially faster than inflows from the United States. Even though the latter have risen by about 24 per cent a year, the United States' share of total inward foreign-direct-investment stock in the EC declined from 42 per cent in 1980 to 36 per cent in 1987. This is a reflection of the strong positions held by United States transnational corporations, many of which had already built up substantial pan-European capabilities by the 1970s.

Many EC transnational corporations, in contrast, are only now rationalizing their operations on a regional scale, in part encouraged by policies to foster pan-European firms (with moves by the European Commission to develop EC-wide competition and company laws, for example). The outcome of EC-wide industrial restructuring may be a shift from an economy characterized by a set of "national champions" which were protected on a national level, to one with a far fewer number of larger, regional "EC champions",

which would look to the EC rather than the home nation as their principal market and their relevant policy and investment arena.

The restructuring of many EC industries reflects the strategies of EC transnational corporations to regionalize their activities, such that the EC region, rather than the firm's country of origin, will increasingly be considered as the relevant home base. In those industries which were fragmented due to non-tariff barriers, such as telephone exchange manufacturing, semiconductors, computer services and white goods, intra-EC merger-and-acquisition activity has led to a sharp decline in the number of competitors and the creation of a handful of EC-based players. In other industries, such as chemicals, the prospect of a single market has led European transnational corporations to restructure in order to specialize in their core businesses, divesting themselves of auxiliary activities. Access to new national markets and the consolidation of supermarkets in Europe has been an important driver of heightened cross-border activity in the food industry, one of the more merger-intensive industries in the EC in recent years. ^{36/} The need to achieve scale in the face of increasingly international competition has led to a number of large-scale cross-border acquisitions, particularly in the paper and motor vehicle industries. Consolidating distribution systems on a regional scale has been another important strategic objective of EC companies, such that the wholesale-distribution sector accounted for the highest number (76) of EC cross-border acquisitions in the first half of 1990. ^{37/}

Even though EC transnational corporations are restructuring to prepare for the Single Market, it is possible that the

strongest EC-wide firms could be from outside the region, notably from the United States and possibly Japan. Local content levels of United States transnational corporations in the EC are high enough and their operations are rationalized to the extent that their behaviour is, in many cases, indistinguishable from that of European-owned companies.

Japanese transnational corporations are likely to have a more difficult time in rising to the level of "Euro-champions", as they are relatively newcomers to the EC and potential targets for policies aimed at promoting European industry. A prominent example concerns Fujitsu, which, in November 1990, purchased a controlling interest (80 per cent) of ICL, the United Kingdom's premier computer manufacturer and a major supplier to the Government. Although Japanese management insisted that the firm would remain "European" in all its aspects except for its Japanese ownership, a decision was made in March 1991 to eject ICL from three

of five projects under way at JESSI, a semiconductor research programme funded by European companies and the European Commission. Earlier that year, the company had been ejected from the European Information Technology Round Table, an influential lobbying group in the electronics industry on the grounds that ICL — a founding member of the Round Table in the late 1970s — was no longer European-owned. Such moves point to the resistance of EC transnational corporations to the growing influence of Japanese firms in high-technology sectors; indeed, Japanese foreign direct investment in industries such as computers, electronic components and automobiles poses a credible threat to EC firms, which in many cases are less efficient than their Japanese counterparts. Policy decisions by the European Commission, along with lobbying efforts of EC transnational corporations, will influence the ability of Japanese transnational corporations to establish themselves as key players in the regional market.

* * * * *

The above analysis suggests that the role of the Triad in the world economy as measured by foreign-direct-investment stock and flows is dominant, and that its role as a recipient of foreign direct investment has increased during the 1980s. Moreover, the Triad's position in world-wide foreign direct investment is greater than its share of world trade flows; in the future, that discrepancy is likely to increase, given the high growth rates of foreign direct investment from and to the Triad, as compared with the growth of the Triad's trade with the world. Within the

Triad, several shifts can be observed over the 1980s: the decline of the United States as the major home country, while it emerged as the most important host country; the integration of the EC through intraregional foreign direct investment and the rise of that region as the most important home country in the Triad; and very high growth rates of outflows from Japan, which are likely to give that country an equal, if not greater, role in the Triad *vis-à-vis* the other two members in the near future.

B. Intra-Triad investment relationships

1. *The significance of intra-Triad foreign direct investment in global stocks and flows*

Between 1980 and 1988, intra-Triad foreign-direct-investment stock nearly tripled, from \$142 billion to \$410 billion. In 1980, the stock within the Triad accounted for 30 per cent of the world-wide stock of inward investment; by 1988, intra-Triad stock had increased to an estimated 39 per cent of world-wide inward stock. Intra-Triad trade also grew more rapidly than world trade, increasing from 13 per cent to 17 per cent of world trade over the period. Thus, in terms of both foreign direct investment and in terms of trade, interactions **within** the Triad have outpaced both interactions in the rest of the world, and interactions between the Triad and the rest of the world, indicating a faster rate of integration within the Triad than between the Triad and the rest of the world.

The large and growing share of intra-Triad activities in world-wide stock and flows of foreign direct investment, as well as in worldwide trade flows, can in large part be explained by the market size in the Triad, a changing regulatory framework (particularly in the EC) and emerging corporate strategies in the 1980s.

Although real gross domestic product growth in the Triad was only 3 per cent over the 1980-1987 period, the combined GDP of Triad members accounted for \$11 trillion, or 65 per cent of the world gross domestic product in 1987, with the United States, the EC and Japan accounting for 26 per cent, 25 per cent and 14 per cent of world-wide GDP,

respectively. ^{38/} The Triad members are also among the world's most important trading areas, accounting for 50 per cent of world trade in 1989, with the United States, the EC and Japan accounting for 21 per cent, 20 per cent and 9 per cent of total world trade, respectively (excluding intra-EC trade).

A changing regulatory framework also helps explain the rapid growth of intra-Triad investment stocks and flows in the 1980s. In Europe, the 1992 Single Market programme has attracted foreign direct investment from many countries through the pull of projected market growth as well as the possibility (real or imagined) of future difficulties in exporting to the region from outside the EC. In the United States, some of the growth of inward EC and Japanese investment can be explained by the growth of the United States economy coupled with the fall in the value of the dollar after 1985 and its impact on the prices of domestic assets. Pressure to reduce Japan's trade surplus with the United States is also likely to have played a role; fear of protectionism led Japanese firms, in several cases, to opt for foreign direct investment instead of exports for servicing the United States market. Finally, the growth of EC and United States investment in Japan could be attributed to a gradual relaxation of Japanese policies in response to demands by its two key trade and investment partners.

Finally, the growth of intra-Triad foreign direct investment can, in part, be explained by heightened competition between increasingly global transnational corporations, particularly in research- and technology-intensive industries. In the 1980s, the

economies of each of the Triad members have become increasingly linked to such industries as computers and electronics, specialty chemicals and communication equipment, whose growth is sustained through high and continuous expenditures in research and development. The growing significance of research- and technology-intensive industries in each of the Triad member's economies is an important factor in increased intra-Triad foreign direct investment flows as transnational corporations seek to access new technologies, to join alliances with firms with complementary technologies and to amortize their fixed research expenditures by expanding their market share. The need for transnational corporations in a wide range of industries to position themselves strategically in Triad markets is a very important factor behind rising intra-Triad foreign-direct-investment flows, and it is likely that mergers and acquisitions make up a high proportion of those flows. In some cases, changes in the competitive environment would appear to encourage an allocation of investment capital in the Triad; for instance, the unification of the European Community and anticipated demand growth has led to increased foreign direct investment in that region. In other cases, trends such as the proliferation of production locations would tend to attract investment to countries outside of the Triad. Yet those two sets of forces — those pulling foreign direct investment into the Triad and those pulling it to other locations — are not necessarily mutually exclusive and, as the discussion on regional core networks (below) shows, foreign-direct-investment activities located outside the Triad are in many instances closely linked and integrated to the investing firm's Triad-based activities. In other

words, foreign direct investment in some non-Triad locations may be influenced by and indeed depend on a firm's investment strategy in one or more Triad locations (box 1).

2. The relative significance of the intra-Triad investment relationship segments

Figure II shows that, in terms of stock, the most important foreign-direct-investment relationship within the Triad is between the EC and the United States, which together accounted for 79 per cent of intra-Triad foreign-direct-investment stock in 1988. However, Japan's share of intra-Triad stock more than tripled in the 1980s, from 5 per cent in 1980 to 16 per cent in 1988. The United States was the most important host country for foreign direct investment from both Japan and the EC. The following sections analyse the relative significance of bilateral intra-Triad foreign-direct-investment relationships (expressed by stock data) and emerging trends which are reshaping those relationships (as expressed by size and growth of flows).

(a) Intra-Triad foreign direct investment by the European Community

The EC accounts for the largest share (48 per cent) of intra-Triad foreign-direct-investment stock. Most of that investment is captured by the investment of the EC in the United States; Japan, as a host country, accounts for less than 1 per cent of the intra-Triad investment stock of the EC, which amounted to \$196 billion in 1988. The rapid rise of intra-EC foreign direct investment

Box 1. Factors behind the strategies of transnational corporations

The most important changes in the competitive environment which are forcing transnational corporations to adopt new strategies — or to adapt existing ones — can be described as, on the one hand, factors which are converging across borders and, on the other, those which are diffusing through the international economy. Factors which are converging include national economic policies, technologies and consumer tastes. The convergence of these market characteristics across national borders means that transnational corporations now face larger, more homogenous markets and that the economic “distance” between countries, particularly developed countries, is narrowing. That implies new opportunities for the integration of international activities, along with greater returns stemming from those activities.

The second category groups together those elements which appear to be diffusing and/or proliferating, rather than converging: innovative activity, international competitors and production locations. The diffusion of those key elements of competition means that the internationalization of activities is increasingly becoming a strategic imperative in a growing number of industries, rather than a profitable option open only to a handful of large firms.

The regionalization of developed market economies is an important trend which is unifying the policy environment in which transnational corporations operate. Regional economic integration both expands the size of the available market (and, in the case of Europe, the market growth rate), while narrowing the economic “distance” between countries by lowering the costs of cross-border activities such as transport, trade and transfers of capital. Regional integration efforts among developed economies thus represent significant new profit opportunities for transnational corporations, particularly those which are able to reorganize and integrate their activities in the region to reap the benefits of economies of scale and country specialization.

It is important to note that regional integration, even among developed countries, does not supplant domestic economic conditions as a prime determinant of foreign direct investment, and that individual countries in a region do not always gain foreign direct investment as a result of integration. In the case of the Free Trade Agreement between Canada and the United States, in those instances where transnational corporations consolidated their activities in response to market integration (as have Proctor and Gamble, Campbell Soup and Stelco, a Canadian steel maker), production was often shifted out of Canada to the United States.

The convergence of discrete technologies. Micro-electronics technology has enabled firms to enter into new businesses by integrating what were formerly discrete technologies. The underlying technologies in fields such as computing, telecommunications, audio and video are converging, allowing producers in each of those fields to compete in new markets and for new customers; for instance, leading television manufacturers are also the leaders in computer-screen technologies, and computer companies are increasingly competing in the market for consumer video equipment, where computerization is the underlying technology. The convergence of computer technology with management information systems is also an important factor in increasing the organizational and strategic flexibility of transnational corporations: such developments (including point-of-sale ordering systems and computer-assisted design and manufacturing) mean that, in many cases, firms are able to lower costs without having to increase scale; that, when scale is increased, flexibility need not be sacrificed; and that firms are able to integrate operations more closely, at a lower cost, and hence raise their overall productivity.

The convergence of consumer tastes. The demand for a number of products has been converging on an international scale, enabling firms to realize economies of scale and scope on a multi-country basis rather than on a

Box 1. (continued)

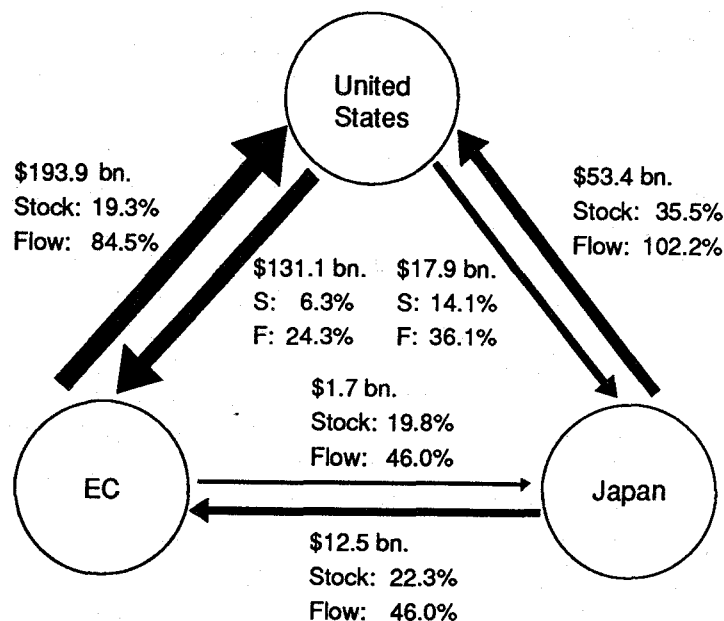
national basis, and to develop globally-recognized brand names. Important factors behind the globalization of consumer tastes are rapid income growth in newly industrializing countries, which has led to rising demand for high income-elastic products such as consumer electronics, and growth in international flows of information about products and cultures through mass media and travel.

The diffusion of innovative activity and standardized technologies implies that transnational corporations can no longer rely on their home market to supply them with the technologies they need to compete both domestically as well as abroad. The diffusion of standardized technology within the Triad also gives transnational corporations the option to integrate and coordinate geographically as well as functionally dispersed value-adding activities. The rapid development and adoption of new technologies and new production techniques in the international market-place has made innovation a key competitive variable for transnational corporations in a wide range of industries, from automobiles (where new technologies tend to be "soft", that is, centred on new organizational and production methods which greatly raise productivity and market responsiveness), to apparel (where retailers can be linked electronically with manufacturers, domestic or overseas). The diffusion of communications technology, such as telefax equipment, to a wide number of locations, has greatly decreased the economic distance between countries, such that overseas activities can be coordinated and integrated to a degree never before possible.

The proliferation of production locations. In the past two decades, transnational corporations have been faced with a growing number of locations in which to invest and from which to source their inputs, including labour and capital. A number of factors are behind this trend: the industrialization and rapid income growth in parts of South-East Asia, combined with increased technological progress in those areas; the liberalization and rapid growth of world trade since the 1960s and the removal of barriers to foreign direct investment in a number of countries since the 1970s, including a trend towards privatization; the de-regulation of world financial markets; and, more recently, the opening of Central and Eastern Europe to foreign direct investment. The multiplication of the number of places where transnational corporations can produce and eventually market their goods is an important factor behind the increasing transnationalization of the world economy. Furthermore, the opportunity to raise capital in a number of international financial markets has widened the strategic options available to transnational corporations in almost all industries.

The diffusion of competition from domestic to international levels is a closely-related phenomenon to the above two trends. Since the 1970s, United States and European firms have faced a wave of new foreign competition in their domestic markets, especially from Japanese firms. Though trade has been and is still the main instrument of those competitive battles, foreign direct investment is increasingly important in establishing the competitive position of firms from countries which had previously played marginal roles in the arena of international competition. The proliferation of the number of players in the international market-place means that transnational corporations can no longer draw their primary competitive boundaries around their domestic markets, with foreign producers relegated to a minor role, but must instead view firms from nearly all parts of the world as potential rivals for market share, technological leadership and customer loyalty.

While it is impossible to generalize about the strategic responses of transnational corporations to the above developments, it is clear that most of them can no longer depend on their home markets alone to maintain their competitive position, and must increasingly engage in competitive battles in all three legs of the Triad with all instruments available to them: productive capacity, technological leadership, organizational strength and marketing know-how.

Figure II. Intra-Triad foreign direct investment, 1988

Source: UNCTC, *World Investment Directory* (New York, UNCTC, 1991).

Note: Dollar figures show 1988 outward stock; percentages show average annual growth rates, stocks and flows. Stock growth rates are for the period 1980 to 1988. Flow growth rates are for the period 1985 to 1989. The data for United States outward and inward stocks in and from the EC and Japan include reinvested earnings.

during the 1980s, noted above, has not prevented an even more rapid rise in EC investment located in the United States: the latter, with \$194 billion of inward stock from the EC, is still a more important recipient of EC foreign direct investment than the EC itself. Indeed, the size and growth of EC investment in the United States has been such that the EC is now the largest home country in the Triad. From a strategy point of view, many of those investments are aimed at gaining the critical mass which will propel EC

companies to the status of global competitors, able to compete effectively with large United States and Japanese transnational corporations. For instance, the 1989 purchase of Uniroyal-Goodrich by the French company Michelin made it the world's largest tire manufacturer; other major EC transnational corporations with substantial investments in the United States include ICI of the United Kingdom; Philips of the Netherlands; Rhône-Poulenc and Thomson of France; and BASF of Germany. The United States market ac-

counts for upwards of 30 per cent of sales for many of those companies, which also export hundreds of millions of dollars from their American subsidiaries to overseas markets. 39/

(b) Intra-Triad foreign direct investment by the United States

In 1988, the United States had \$149 billion stock invested in the Triad, of which 88 per cent was located in the EC. In terms of flows, foreign direct investment in Japan has grown rapidly (though from a small base), while the growth of flows to the EC, at 24 per cent a year, was the slowest growth rate of all flows within the Triad. This is due in part to the strong foreign investment position in the EC already attained by United States transnational corporations by the late 1980s. United States transnational corporations, many of which were world market leaders in the 1960s, have had substantial investments in the EC since that time. They often tended to treat the EC as a regional market from the outset, and to devise single European strategies where appropriate. United States transnational corporations therefore do not face the intense pressure to make new investments in the EC, as do most Japanese transnational corporations, nor to regionalize existing operations to prepare for the Single Market, as do most European transnational corporations; many of them are already the leaders in key EC markets. Evidence of the pre-existing regional integration of networks of United States transnational corporations in Europe is given by the fact that, by 1982 (three years before the 1992 programme was initiated), United States affiliates in the EC engaged in a significant amount of intra-EC,

intra-firm trade. In that year, 72 per cent of the non-United States exports of EC affiliates of United States firms were sold to other EC countries, indicating that most of the international integration of the EC affiliates took place within the EC itself. Furthermore, 51 per cent of the non-United States exports of EC-based United States affiliates went to other affiliates of the same parent, as compared with only 39 per cent for all United States affiliates worldwide. 40/ Notwithstanding that advantage of early rationalization, the EC has grown as a key region for the globalization strategies of United States transnational corporations, as witnessed by the recent decision of IBM to move its communications headquarters from the United States to London. While such organizational changes are not captured in foreign-direct-investment data, they reflect a qualitative increase in the importance of the EC as a location for foreign direct investment by United States transnational corporations.

(c) Intra-Triad foreign direct investment by Japan

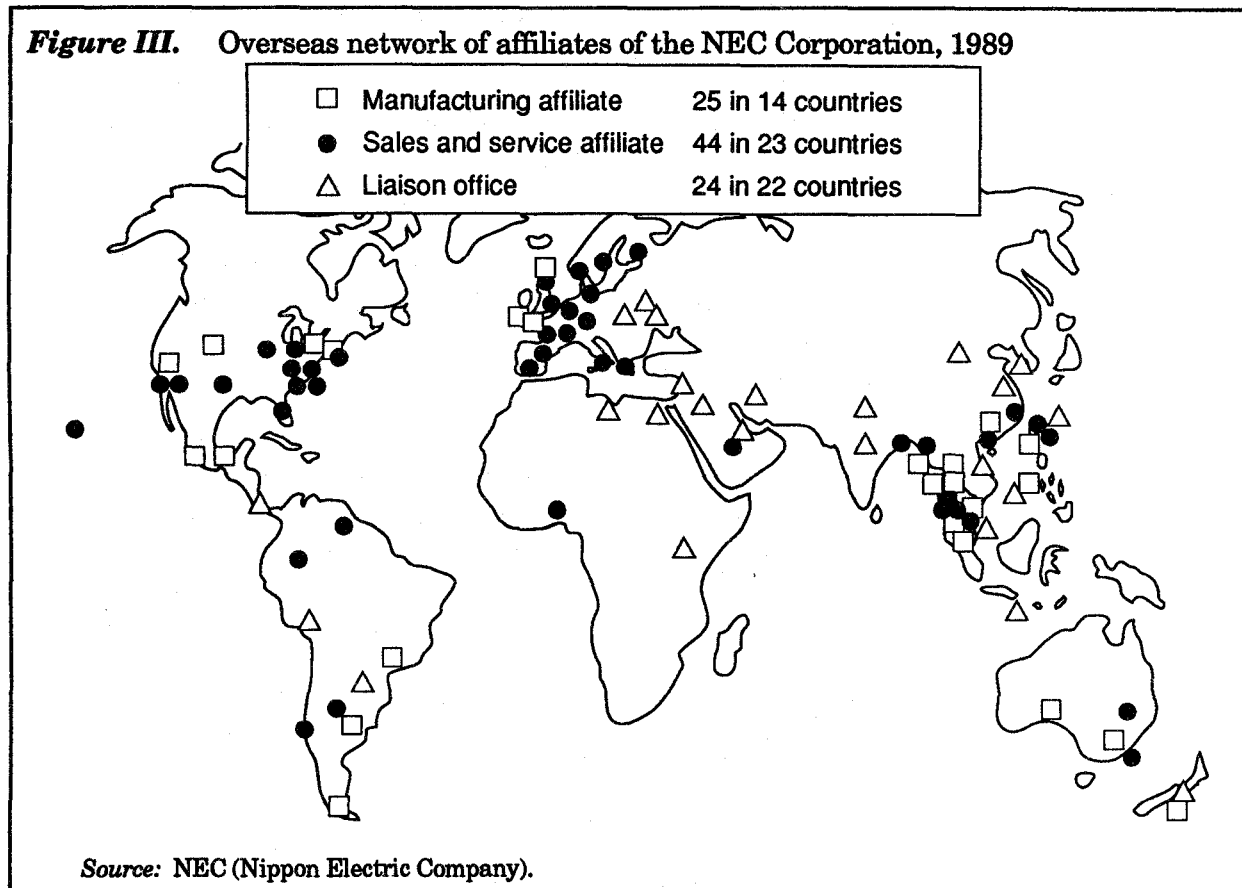
While the absolute volume of Japanese foreign-direct-investment stock in the Triad is still relatively low (\$66 billion), the growth of outflows in the late 1980s has been remarkable. According to approvals recorded in Japan, in the two-year period from March 1988 to March 1990, Japanese investment flows to the EC were 13 per cent higher than the total flows over **the previous 36 years combined**; as regards the United States, Japanese flows over the 1988-1989 period exceeded by 8 per cent the total amount invested over the previous 36 years combined. 41/

Those trends reflect, in part, a new strategy being adopted by many Japanese companies to become regional "insiders" in the Triad. During the 1970s and early 1980s, Japanese transnational corporations relied mainly on exports from Japan to serve world markets, with relatively low levels of foreign direct investment. Furthermore, that investment, at least in the Triad, was geared primarily towards supporting and maintaining that export strategy, concentrated in financial services (which support trading activities of domestic firms in overseas markets) and in trade and distribution outlets in the United States and the EC.

Now, in both the EC and the United States as well as in Asia, **there is evidence that Japanese transnational corporations are building regionally-integrated, independently sustainable networks of overseas investments centred on a Triad member ("regional core networks")**. Those networks serve multiple strategic objectives: to ensure access to each of the three regions, which represent two of the world's largest markets (Europe and the United States) and its most dynamic region (Asia); to insulate Japanese transnational corporations from the threat (real or perceived) of protectionism against Japanese exports to the United States and Europe; and to leverage locational advantages in each of the three regions to increase trade with other markets — including Japan — so as to reduce Japan's trade surplus with its major trading partners. (An example of such a network is shown in figure III.) In other words, Japanese transnational corporations appear to be shifting from an export-led strategy to a strategy in which foreign direct investment plays a central role. ^{42/}

Within the Triad, the bulk of Japanese manufacturing investments are trade-replacing in nature, concentrated in industries such as automobiles and electronics. Japanese strategies in the United States and Europe are predominantly geared to serving local markets, with less than 5 per cent of sales exported to other countries, although that proportion may rise as Japanese affiliates mature. ^{43/} Recent evidence shows that Japanese transnational corporations are beginning to build networks of suppliers to serve their overseas affiliates, and that they are increasingly replicating overseas the close inter-firm relationships within those networks that have been the key to their successful growth in Japan. The overseas suppliers of Japanese affiliates in the United States and Europe are often themselves affiliates of Japanese companies. By the late 1980s, about 300 Japanese supplier firms had established subsidiaries in the United States to sell to Japanese manufacturers located there. ^{44/} Trends thus indicate a rise in local content by Japanese affiliates located in the Triad (though often achieved through sourcing from locally-based Japanese suppliers), as well as rising independence from the parent in an effort to achieve "insider" status.

In 1989, the EC surpassed the United States for the first time in terms of the growth of inward flows from Japan. That was a result of the rising strategic importance of the EC for Japanese firms: a recent poll found that, between 1987 and 1989, the percentage of Japanese companies citing North America as the most important region for investment fell from 53 per cent to 43 per cent; those citing Asia remained stable at 42 per cent; and those citing the EC as the most important investment location rose from 3 per cent to 12 per



cent. 45/ That shift indicates that a longer-term relative shift of Japanese transnational corporations from the United States to the EC may be taking place, as improved economic conditions and new opportunities in the EC make that area more attractive for foreign investors.

3. Movement towards parity within the Triad?

In the early 1980s, it would have been difficult to characterize the United States,

the EC and Japan as forming a Triad which dominated global foreign-direct-investment stocks and flows; the role of Japan was then relatively small, and the EC was too fragmented, more a collection of 12 countries than an integrated regional economy. At that time, the United States was alone the single most important home and host country for foreign direct investment in the world economy. By the end of the 1980s, as the above data show, a Triad had indeed emerged, at least in terms of flow data. Behind this emergence of a tri-polar structure are the rapid growth of out-

ward investment from Japan and the integration of the EC, such that the latter now may properly be considered a single Triad member. While by 1990 it appears that the United States and the EC are jointly the most important Triad members, if current trends continue, the EC could eventually surpass the importance of the United States as the most important home and host region, and Japan could, within the next few years, surpass the importance of United States as a home country, also in terms of stock. (Those changes could be mitigated if the growth of investment into the EC slackens once the initial impact of the 1992 programme has occurred, and if Japanese investment abroad slows down in the 1990s.)

From a strategy point of view, the convergence of intra-Triad foreign-direct-investment relationships points to the growing importance given to the Triad by transnational corporations. That strategy, often referred to as "globalization", means that transnational corporations are increasingly regarding their non-domestic Triad activities to be as important as their home-country operations. The recent strategy of Japanese transnational corporations to become "regional insiders" in each leg of the Triad is motivated by both efficiency reasons (country specialization and

regional economies of scale), as well as by policy considerations (extra-regional tariff and non-tariff barriers). If that strategy (which is examined in greater detail in the section below) proves successful, then the question arises as to whether EC and United States transnational corporations, in order to ensure competitive survival, will also have to adopt a three-legged strategy in each member of the Triad. The incentive to do so will be greater if regional trade blocs are strengthened in Europe, North America and Asia such that achieving "insider" status would be an important competitive advantage to gaining access to those markets.

Against such a scenario, the low levels of investment into Japan stand out as a striking imbalance. That situation might eventually lead to increased policy pressures on Japan to open its economy to more inward foreign investment from the other two Triad members. It would also be likely that the EC and, in particular, the United States, would respond to this potential competitive threat to their transnational corporations by utilizing strategic trade and foreign-direct-investment policy tools in an attempt to attain a "level playing field" in bilateral foreign-direct-investment relationships with Japan.

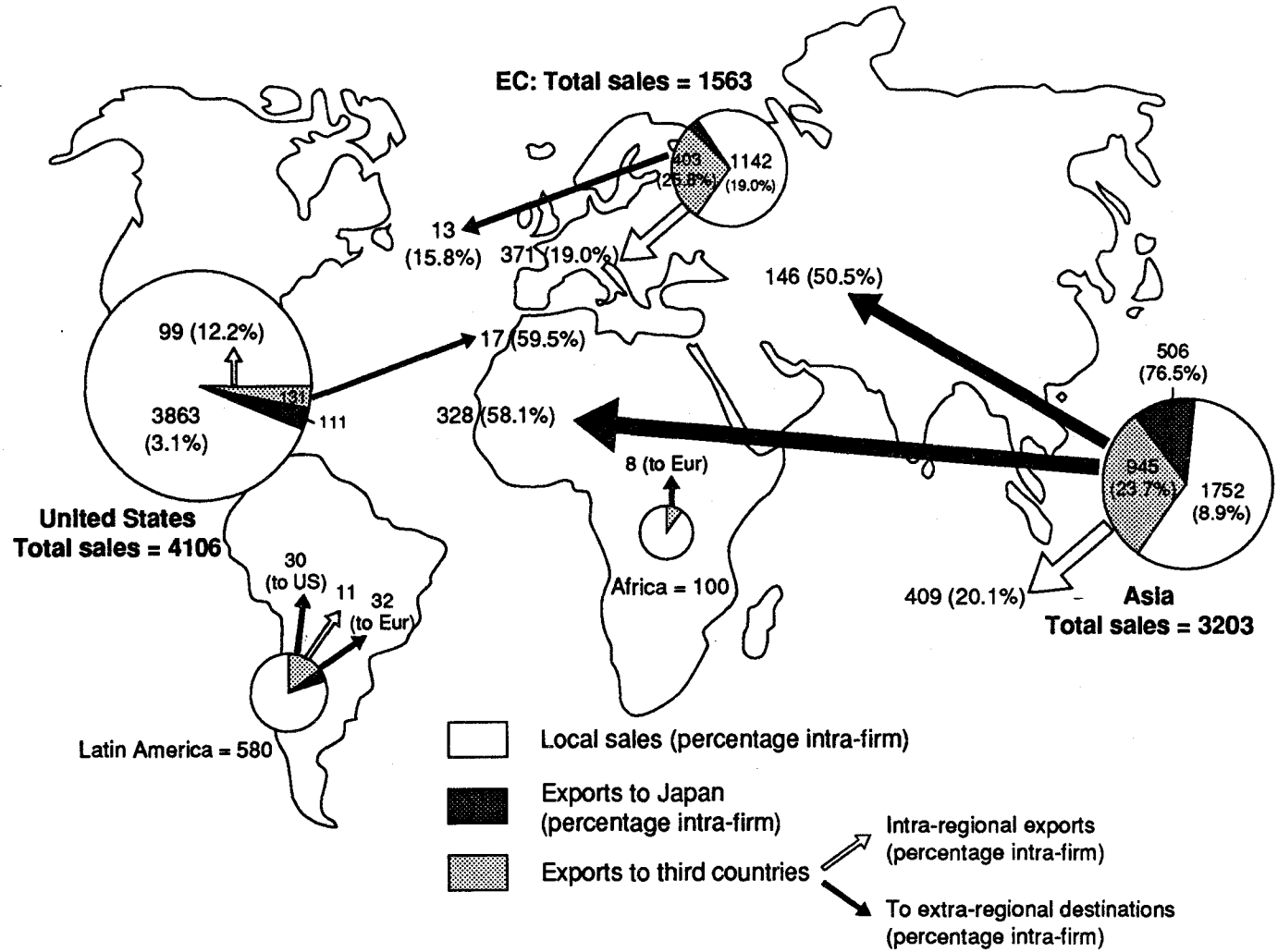
C. Regional networks of Japanese transnational corporations

1. *Global activities of Japanese transnational corporations in manufacturing*

Figure IV shows the sales of the overseas affiliates of Japanese manufacturing transnational corporations in the United States, the EC, Asia, Latin America and

Africa for the year 1987. It shows the amount and destination of sales, as well as the percentage of those sales which took place within the firm (that is, sales from one affiliate to another of the same parent, referred to as intra-firm sales). From a global perspective, the diagram underscores the importance of

Figure IV. Sales of Japanese affiliates in manufacturing, 1987
(Billions of yen)



Source: Ministry of International Trade and Industry (MITI), *Dai-sankai Kaigai Jigyō Katsudō Kihan Dhosan Kaigai Toshi Tokei Soran* (Tokyo, Keibun Shuppan, May 1989).

the Triad in the strategies of Japanese transnational corporations: of the total 10.5 trillion yen of manufactured goods sold by Japanese foreign affiliates in 1987, 54 per cent were sales *by* affiliates located in the two other Triad members (the United States and the EC) and 64 per cent were sales *to* a Triad country (sales to the United States, Japan or an EC country from affiliates in all countries). Clearly, the Triad dominates the activities of Japanese affiliates abroad, at least in terms of their marketing orientation. Developing country markets in Latin America and Africa are on the whole relatively small.

Having said this, it is interesting to note that the Asian market, as measured by the sum of local sales and exports to other Asian countries, is the second most important market for overseas Japanese affiliates. (The United States market, at 4 trillion yen in sales, is by far the largest, and is nearly double the size of the Asian market.) Indeed, the Asian market is some 30 per cent larger than the entire EC market; in terms of total sales (extraregional exports included), Asian affiliates sold more than twice the amount of manufactured goods than did EC affiliates. That demonstrates the relative newness of the EC as a host area for Japanese foreign direct investment, and underscores the importance of the Asian region in the global strategies of Japanese transnational corporations. Furthermore, the high level of exports from Asia to the EC is likely to substitute, to some extent, for direct investment in the latter. An important issue is whether the development of an EC-wide external trade policy as part of the 1992 programme would threaten that pattern, by discriminating against non-EC imports through tariff or non-tariff barriers such as local-content legisla-

tion. In that case, it would be expected that the sales of EC affiliates would expand to serve the regional market, with a corresponding decline in the EC exports of Asian affiliates.

The diagram shows that some, but not all, Japanese affiliates are part of a regional core network strategy, as discussed above. Regional networks appear to have been established in the EC and in Asia. In the EC, about a quarter of affiliates' sales are exported, with 92 per cent of those exports destined for other EC countries. Furthermore, 19 per cent of both the local sales and the intra-EC exports of EC affiliates are sales between related affiliates of the same parent (intra-firm sales). The high degree of intraregional trade suggests that Japanese transnational corporations are, through their foreign affiliates, building up regional networks in the EC. The relatively low level of intra-firm sales (19 per cent) by Japanese affiliates in the EC indicates that production networks were still in a developmental stage in 1987, reflecting the relative newness of Japanese investment in that region, with fewer highly specialized regional plants. (In contrast, intra-firm trade of United States affiliates in the EC is over 50 per cent, as mentioned earlier.)

Given the recent rapid growth of Japanese foreign direct investment in the EC, it can be predicted that intra-firm regional networks are likely to emerge. It is doubtful that such networks would have been established in the absence of the 1992 Single Market programme to harmonize the EC market by removing remaining non-tariff barriers to trade: regional networks imply a market orientation towards the region, rather than towards only the domestic market; from a production viewpoint, they

involve a strategy of cross-border trade among affiliates to take advantage of economies of scale and country specialization. In the case of Western Europe, however, those networks barely seem to reach beyond the EC, as witnessed by the insignificant exports of EC affiliates to any other part of the world. Networks of Japanese affiliates in the EC, therefore, are likely to be self-contained, aimed at producing and marketing within the region itself.

Evidence of regional networks is strong in the Asian region. Here, the networks include locations in developing countries that are strongly linked to Japan, indicating a regional core network strategy, in which affiliates in a set of developing countries are linked operationally to affiliates (or the parent itself) located in a Triad country. Furthermore, Asian regional core networks, unlike those in the EC, span beyond Asia to a certain extent and are linked to markets in the EC and the United States. Thus, Asian regional core networks appear to be more developed than those in the EC, and seem to perform multiple functions: to serve local and regional markets in countries where the affiliates are based (the only apparent function of EC networks); to sell finished goods directly to the United States and Europe; and to act as low-cost suppliers to other affiliates located in the Triad. Of the total exports of Asian manufacturing affiliates, 68 per cent were to the Triad, with 35 per cent, 23 per cent and 10 per cent exported to Japan, the United States and the EC, respectively. A very high proportion of those exports, particularly those to Japan, are to other affiliates of the same parent. Such intra-firm trade is likely to be made up of semi-finished goods exported from Asia for final manufacture or

assembly by another affiliate in the Triad, or low-cost finished goods to be sold by an affiliated distributor in the Triad.

The above analysis suggests that the foreign-direct-investment strategy of Japanese firms in the Asian region is linked to strategies in the domestic (Japanese) market, as well as to strategies in the other two legs of the Triad. The three-legged strategy in the Triad is thus supported by networks of low-cost suppliers based in Asia.

Several issues arise from that observation. One is whether a further regionalization of markets will allow a continuation of this pattern. In other words, will the creation of internal markets in the EC and North America (including Mexico) through regional integration programmes limit the extent to which firms may integrate *across* regions, or, instead, encourage them to deepen networks *within* regions? In that case, intraregional trade is likely to grow (that is, within North America, the EC and Asia), while inter-regional trade (primarily from Asia to the EC and the United States) would decline, especially if Japanese firms in North America and the European Community pursue a regional core network strategy in those regions as well, that is, incorporate affiliates in associated low-cost countries into an otherwise fairly closed regional network.

A second issue is whether the strategies of Japanese transnational corporations to build relatively self-contained regional (core) networks will provide them with competitive advantages that will force other transnational corporations, notably from the EC and the United States, to adopt similar strategies. In such a scenario, it might be expected that transnational corporations from the United States would increase their investments in

Latin America (possibly assisted by free-trade agreements with those nations, as envisaged, for example, by the "Enterprise for the Americas" initiative of the Government of the United States), and that EC transnational corporations would invest in low-cost operations in Central and Eastern Europe and North Africa; those investments would be integrated closely with home-based operations, to match the low-cost supplier networks provided to Japanese transnational corporations by their Asian affiliates. At the same time, similar networks would have to be built in relation to the other two Triad members.

The next section (section D) of this chapter examines recent trends in this regard, and indeed reveals that "clusters" of developing countries appear to be emerging around the three poles of the Triad, although there is not yet enough evidence to conclude that integration levels are high enough to assume that these are, or will be, regional core networks similar to those established by Japanese transnational corporations. First, however, the regional core network strategies of Japanese transnational corporations will be examined in greater detail for two industries — electrical and electronic equipment, as well as automobiles — in which they are most developed.

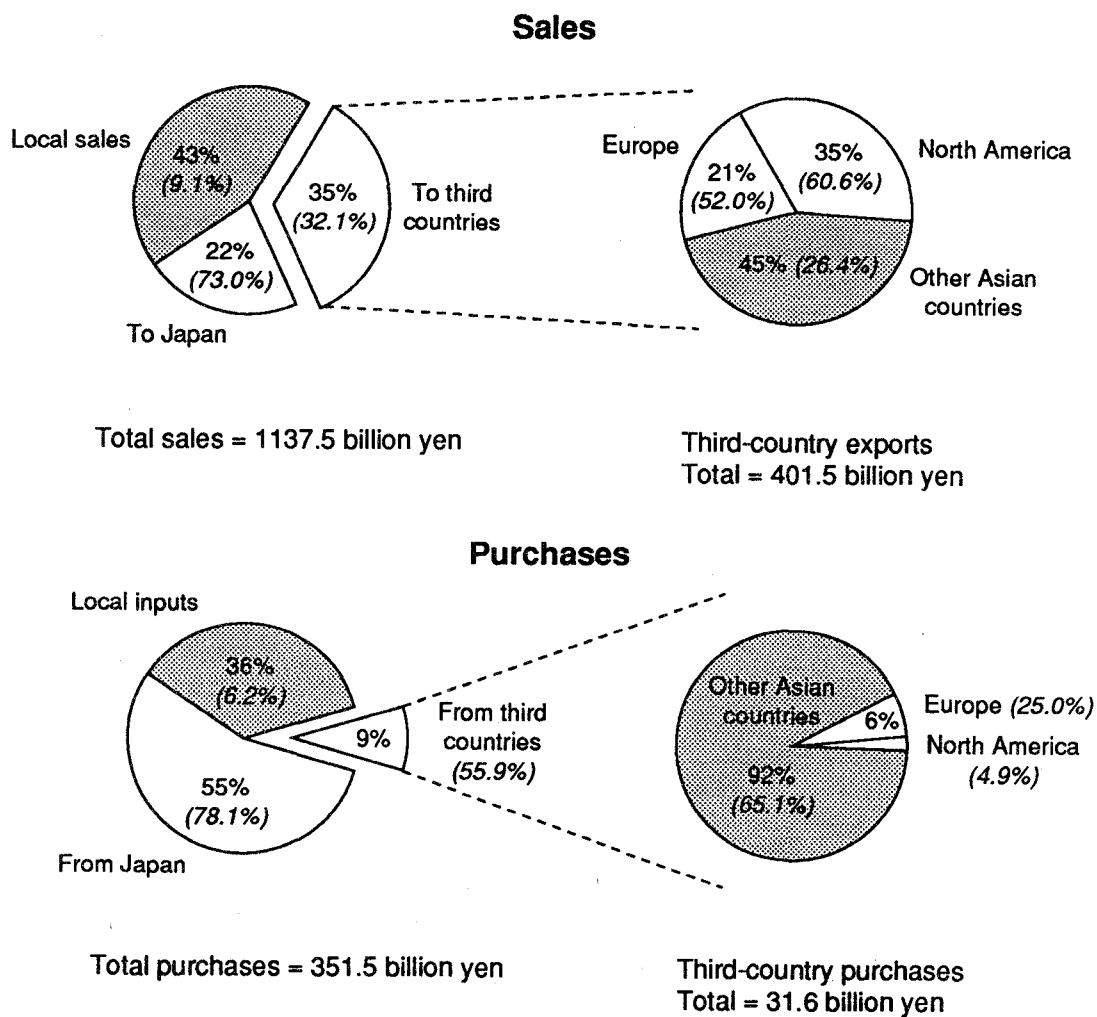
2. Regional networks in Asia in the electrical and electronic equipment and automobile industries

Figures V and VI provide a detailed look at the regional core networks that Japanese transnational corporations have established among Asian countries. The two industries examined, electrical and electronic equip-

ment, as well as automobiles, were selected because of their importance in the international division of labour (firms in those industries are relatively advanced in terms of the globalization of their operations) and because they represent the most important sectors for Japanese manufacturing affiliates in Asia, accounting for 36 per cent and 14 per cent, respectively, of their total sales. Both provide strong evidence for the existence of regional core networks, with affiliates in a set of developing countries linked to operations in Japan, as well as to other affiliates located in the Triad.

The figures show the geographic distribution of both the sales and purchases of Asian-based affiliates. In terms of sales, both affiliate groups are significant exporters, although the automobile affiliates are far more oriented towards local markets, with three quarters of sales made domestically, as compared with only two fifths for the electrical and electronic equipment suppliers. In the former, then, an important element of corporate strategy is to capture a significant share of *local* markets. This is not surprising, given the rapid growth of South-East Asian demand for automobiles in recent years; market analysts expect such demand to double in the next five years.^{46/} Furthermore, domestic policies to promote local car industries may discourage a high-degree of intra-Asian trade in finished automobiles, whereas in the electrical and electronic equipment industry the regional market plays an important role, capturing 45 per cent of total exports. Indeed, if the exports to other Asian countries are added to the local sales of the electrical and electronic equipment affiliates, then the share of sales to Asia (local sales plus regional exports) reaches 59 per cent, still

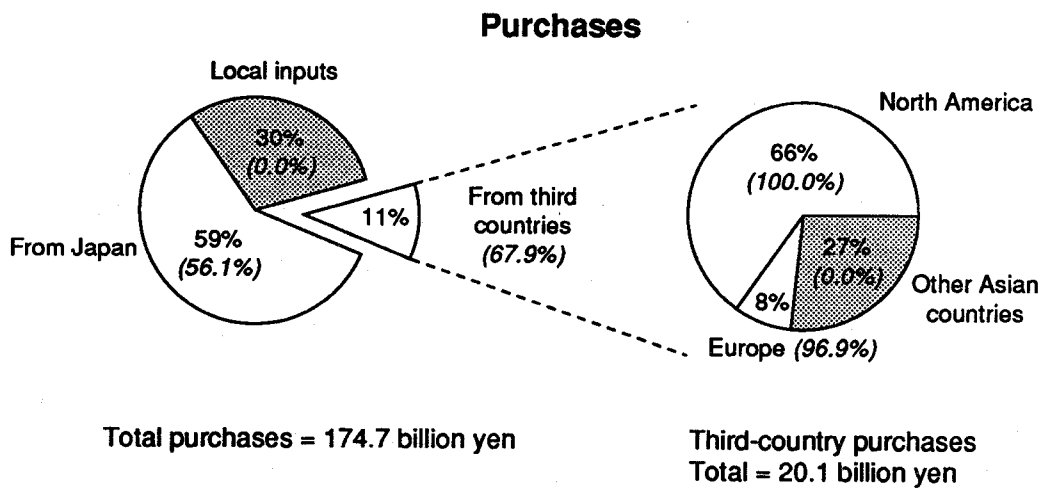
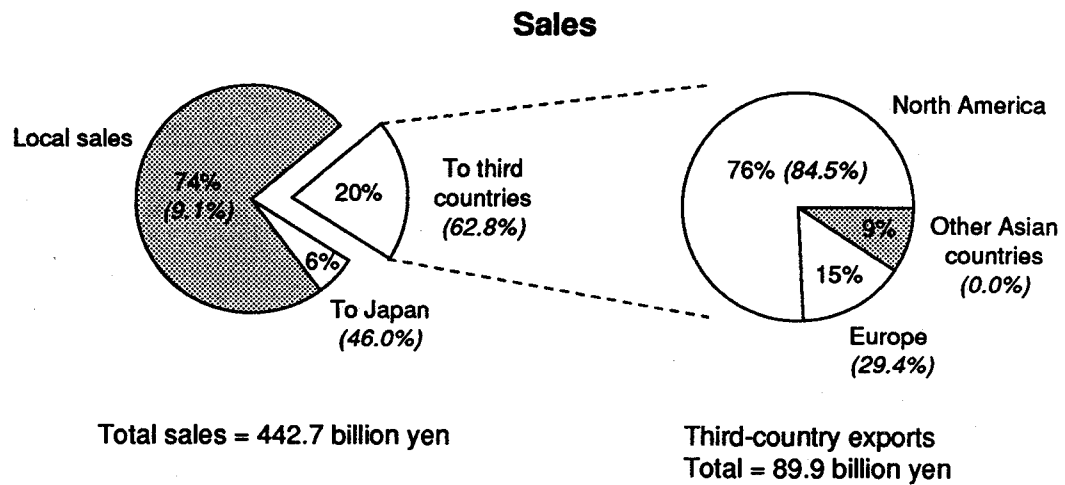
Figure V. Sales and purchases of Japanese affiliates in Asia: electrical and electronic equipment industry, 1987 (Billions of yen)



Note: Numbers in parentheses indicate percentage accounted for by intra-firm transactions.

Source: Ministry of International Trade and Industry (MITI), *Dai-sankai Kaigai Jigyo Katsudo Kihon Dhosan Kaigai Toshi Tokei Soran* (Tokyo, Keibun Shuppan, May 1989).

Figure VI. Sales and purchases of Japanese affiliates in Asia:
automobile industry, 1987
(Billions of yen)



Note: Numbers in parentheses indicate percentage accounted for by intra-firm transactions.

Source: Ministry of International Trade and Industry (MITI), *Dai-sankai Kaigai Jigyo Katsudo Kihon Dhosan Kaigai Toshi Tokei Soran* (Tokyo, Keibun Shuppan, May 1989).

well below that of automobiles (76 per cent), but demonstrating the importance of Asia as a market for those goods. Developing Asian countries, therefore, are the primary markets for Japanese firms in those industries.

In the automobile industry, the intra-firm percentage of sales in Asia is very low, indicating that these are finished goods sold directly to independent distributors and retailers, or else semi-finished goods sold to independent manufacturers in the region. In the case of electrical and electronic equipment, there is some intraregional integration of operations; but nearly three quarters of exports to other Asian countries are outside of the firm. Within Asia, then, most of the trade of Japanese affiliates is likely to be made up of final products, geared towards gaining local and regional market shares rather than supplying other affiliates with low-cost inputs.

Besides Asia, Japan, North America and Europe are significant outlets for the sales of affiliates in both industries, but the strategic orientation towards those markets appears to be different from that in Asia. In Asian markets, Japanese transnational corporations are adopting an import-substituting strategy (supplying local and regional markets with manufactured goods which otherwise would have to be imported from Japan), whereas a rationalizing strategy appears to dominate Asian sales to the Triad, using Asia as a low-cost export base for Triad-based affiliates. In terms of their market orientation towards the Triad itself, the two industries differ from one another: affiliates in the electrical and electronic equipment industry, besides having a more diversified export base, sell far more of their goods to Japan. In the automobile industry, North

America (largely the United States) accounts for three quarters of third-country exports, with nearly all of these being intra-firm sales. In automobiles, there thus appears to be a pattern whereby the affiliates of Japanese transnational corporations located in the United States import components (and perhaps finished cars) from related affiliates located in Asia. In the case of electrical and electronic equipment, such supply linkages are stronger with affiliates located in Japan. In both cases, the role of Asian affiliates appears to be that of low-cost supply networks integrated with operations located in the Triad (North America in the case of automobiles, Japan in that of electrical and electronic equipment). It is also interesting to note that total sales and intra-firm sales to Europe, while lower than to the United States, are still quite significant in both industries, indicating low-cost supply networks to support operations in that region as well.

Looking now at purchases, it is clear that, while extraregional markets are important in terms of sales, Asia — including Japan — dominates purchases, accounting for 92 per cent and 99 per cent of the total for automobile and electrical and electronic equipment affiliates, respectively. In the case of automobiles, the North American affiliates of Japanese transnational corporations do supply about 7 per cent of Asian affiliates' purchases, with all of that trade being within the firm. Overall, however, whatever supply networks exist among those affiliates are largely contained within the region and Japan, with insignificant interregional trade from the United States and the EC to Asian affiliates.

Japan plays a central role in supplying Asian affiliates; indeed, its role as a supplier

of their inputs far exceeds its role as a market for their goods. A good portion — 56 per cent in the case of automobiles and 78 per cent in electrical and electronic equipment — of inputs sourced from Japan are intra-firm transactions, attesting to the close integration of Asian affiliates with domestic (Japanese) operations. Those inputs which are sourced locally (roughly a third of the total in both industries) are largely purchased from independent suppliers. Furthermore, the Asian region itself accounts for a low share (less than 10 per cent) of the total purchases of Asian affiliates in both industries. Supply networks thus appear to be strongly centred on Japan.

Although the proportion of total inputs sourced from the Asian region in the electrical and electronic equipment industry is low (8 per cent), 65 per cent of those purchases are intrafirm sales. This indicates the existence of intraregional supply networks, in which production among Asian countries is integrated through intra-firm trade, allowing for country specialization and regional economies of scale. Such networks are altogether absent in the automobile industry, which sources only 3 per cent of purchases from within the region, and 100 per cent of that from independent suppliers. A likely reason for this difference in the structure of the two industries is that the electrical and electronic equipment industry in Asia is relatively more mature than the automobile industry, such that the necessary volumes have been reached to allow for country specialization (the diagrams show that sales of electrical and electronic equipment by Japanese affiliates were more than two and a half times larger than the sales of automobile affiliates in 1987). Larger overseas export markets in

the electrical and electronic equipment industry also provide the necessary scale which can drive country specialization and intra-regional supply networks. One implication is that as Japanese investments in the Asian automobile industry mature, such intra-regional, intra-firm networks might indeed emerge, particularly if those affiliates increase their exports to Triad markets. Indeed, the recent strategies of Japanese automobile transnational corporations to integrate their operations among different ASEAN countries, described in section D below, may point to signs that regional supply networks are indeed beginning to emerge in this industry, driven by Japanese foreign direct investment.

In summary, the regional core network strategies of Japanese transnational corporations thus appear to follow a pattern of strong upstream (supply) linkages from Japan to Asian affiliates, which then serve the dual function of, firstly, selling finished goods to local and regional markets (import-substituting investments), and secondly, exporting to affiliates in the Triad to support their own operations with low-cost inputs (rationalized investments). Finally, in the electrical and electronic equipment industry, high sales volumes and larger export markets have enabled the development of regional supply networks, with integrated operations in several Asian countries supplying inputs to one another.

Several conclusions follow from this analysis. The very high percentage of local and regional markets in the sales of affiliates in both industries indicates that a strong domestic and/or regional market is an important variable in attracting foreign direct investment, even if a large portion of that

investment is geared towards exporting to the Triad. Secondly, Japanese regional core networks show that foreign direct investment and trade are in many cases complementary, as illustrated by the high levels of Japanese exports to their affiliates in Asia. Finally, it appears that regional investments of transnational corporations and regional economic integration of countries are mutually reinforcing, and that indeed the former may drive, to a certain extent, the latter. As investments by transnational corporations mature and reach the volumes which would allow them to specialize production among countries and to integrate those operations through intraregional trade, they can provide the "engine" which would drive the im-

plementation of regional integration policies. Indeed, the role of transnational corporations and the globalization of high-growth industries through foreign direct investment was an important factor behind the 1992 Single Market programme of the EC. Similarly, the rapid growth of foreign direct investment into Mexico for export to the United States has been a necessary ingredient in the political initiative to integrate that country into a North American free trade area. Given this, Japanese foreign direct investment in Asia is likely to hasten the process of economic integration in that region, and will almost certainly play an important role in shaping the development of the regional economy.

D. The Triad, developing and Central and Eastern European countries

1. Foreign-direct-investment clusters of the Triad members and newly industrializing countries

The Triad was the main source of foreign direct investment to the rest of the world in the 1980s. This is captured in table 11, which shows stock and flow data as reported by some 30 host developing and Central and Eastern European countries, which collectively account for about 16 per cent of world foreign-direct-investment inflows (77 per cent of inflows to all developing countries). Stock data, shown at the top of table 11, reflect the historical activity of transnational corporations which has led to the current distribution of foreign direct investment, while flow data, at the bottom of table 11, point to emerging trends which are likely to re-shape the distribution of foreign-direct-in-

vestment stock in the future. The table is organized to show the relative position of each of the Triad members from a host-country perspective, by measuring the extent to which any single Triad member dominates the inward investment of a host country. It reveals that, for most host countries, a single Triad member accounts for over half of total inward investment stocks and flows or is the largest investor by a substantial margin. Thus, the three Triad members not only dominate foreign direct investment within the Triad, but do so individually as well in most other countries. The foreign-direct-investment activities of the Triad members are thus having repercussions for the rest of the world, most of which is closely linked to one or more Triad members as a host country.

Within that overall pattern, the association of host countries with home countries in

Table 11. (continued)

Group I. Absolute or relative dominance by a Triad member <i>a/</i>											
B. Flow data											
United States				Japan				European Community			
1980-1984		1985-1988		1980-1984		1985-1988		1980-1984		1985-1988	
Bolivia	79.3	Colombia	98.1			Republic of Korea	51.8	Pakistan	40.2	Viet Nam	57.2
Mexico	62.7	Bolivia	82.1			Thailand	46.1	Bangladesh	35.9	Indonesia	28.9
Colombia	60.1	Mexico	60.5			Hong Kong	31.9				
Venezuela	59.6	Panama	54.3					Chile	45.1	Brazil	48.8
Argentina	50.3	Argentina	49.7			Fiji <i>d/</i>	47.2			Peru	23.0
Brazil	48.3	Chile	45.1					Nigeria	60.2	Ghana <i>d/</i>	39.5
Panama	42.8	Venezuela	44.7							Yugoslavia <i>d/</i>	64.1
Peru	29.0									Poland <i>d/</i>	63.2
Hong Kong	55.8	Philippines	61.5							Czechoslovakia <i>d/</i>	44.8
Philippines	55.7	Pakistan	51.3							Hungary <i>d/</i>	44.8
Singapore	51.6	Papua New Guinea	42.7							USSR <i>d/</i>	38.3
Republic of Korea	46.6										
Papua New Guinea	44.2	Saudi Arabia <i>d/</i>	34.3								
Taiwan Province of China	37.1										
Group II. Competing shares of two Triad members <i>b/</i>											
United States/Japan				Japan/European Community				United States/European Community			
1980-1984		1985-1988		1980-1984		1985-1988		1980-1984		1985-1988	
Thailand	27.6/25.8	Taiwan Province of China	27.9/30.9	Indonesia	22.1/24.4					India	33.7/33.3
		Singapore	38.6/39.2							Nigeria	36.5/33.3
Group III. Non-Triad countries are the largest investors <i>c/</i>											
East, South and South-East Asia				Australia				Other			
1980-1984		1985-1988		1980-1984		1985-1988		1980-1984		1985-1988	
China	67.0	China	61.0	Morocco	35.2	Morocco	40.0	Ecuador	34.8	Ecuador	36.0
Sri Lanka	37.5	Sri Lanka	32.4							Uruguay	56.8
Malaysia	22.2	Malaysia	30.8								
		Nepal <i>d/</i>	57.4								
		Mauritius	37.3								

Source: UNCTC, *World Investment Directory* (New York, UNCTC, 1991).

a/ Group I: A Triad member has absolute dominance in a host country if it accounts for more than 50 per cent of total inward foreign direct investment in that host country. A Triad member has relative dominance in a host country if it is the largest foreign direct investor by a margin of at least 10 per cent more than the next largest investor.

b/ Group II shows host countries for which two Triad members hold comparable shares of total inward foreign direct investment and for which the Triad as a whole constitutes the dominant foreign direct investor (greater than 50 per cent share of total inward foreign direct investment).

c/ Group III shows countries for which foreign direct investment by non-Triad countries exceeds that of the Triad. The home country or region and its share are indicated.

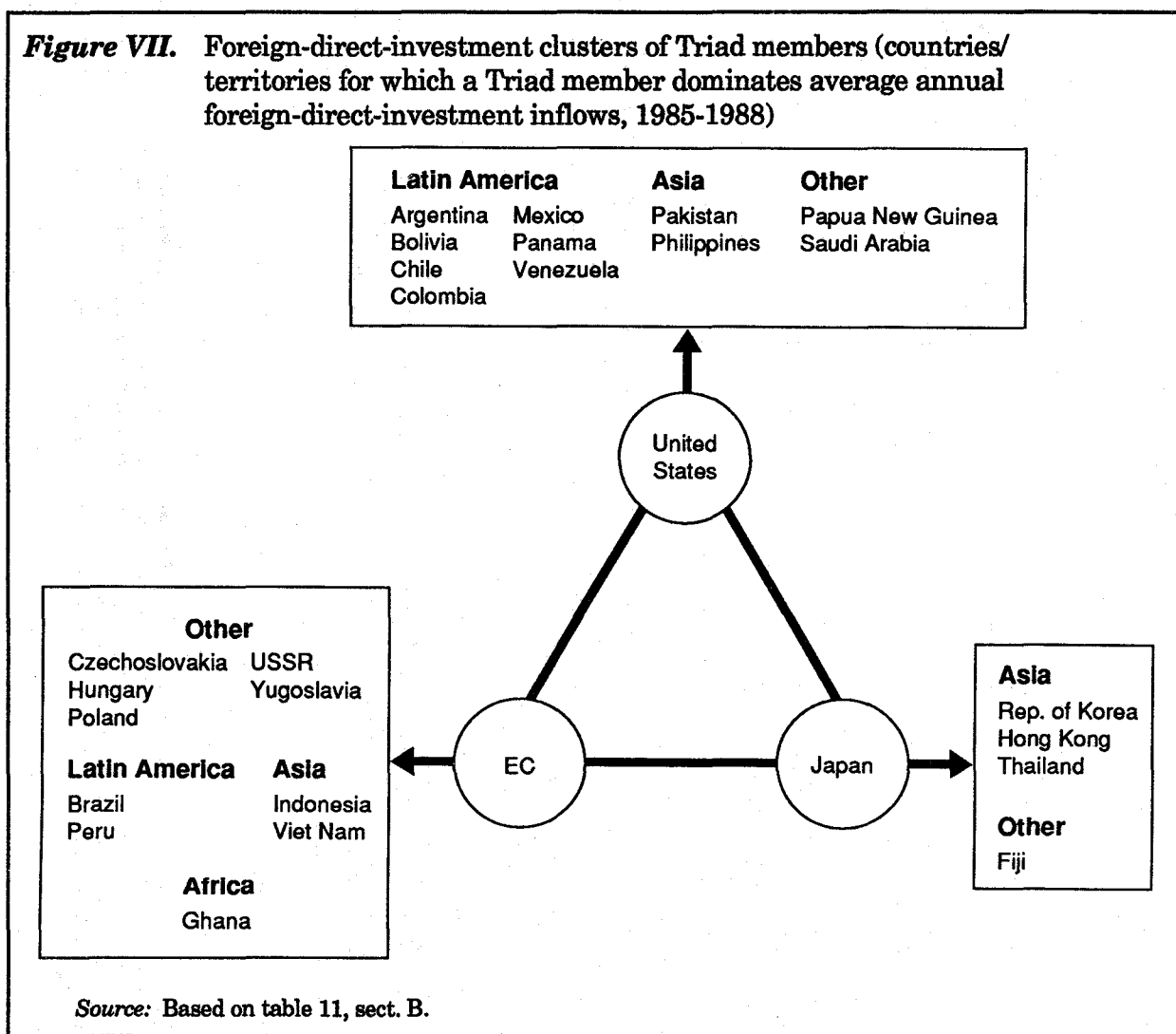
d/ Data are available for 1987 only.

the Triad shifted in the 1980s. Those changes, which are best captured in flows rather than stocks of foreign direct investment, suggest a pattern whereby host countries **located in the same geographical region** are clustered around a single Triad member in the same region (figure VII, which summarizes the data in table 11, sect. B). While the *number* of countries for which individual

members of the Triad dominate foreign direct investment has remained about the same over the 1980s, by the late 1980s the *distribution* of several of those countries had shifted.

From the viewpoint of corporate strategy, a parallel pattern is emerging, which is likely to further the trends noted above. Thus, the emerging pattern in the data, which shows

Figure VII. Foreign-direct-investment clusters of Triad members (countries/territories for which a Triad member dominates average annual foreign-direct-investment inflows, 1985-1988)



countries in a region clustered around a single Triad member, partly reflects the strategies of transnational corporations in the Triad to build up regionally-integrated core networks of affiliates, clustered around their home country (figures III and VII). (See also the discussion in the preceding section.)

(a) The United States cluster

Both flow and stock data for the 1980s indicate a decline in the number of host countries for which the United States is the dominant investor. Still, the United States remains the largest investor in many countries, most of which are located in Central and South America. Indeed, the share of United States investment flows to those countries during the 1980s either increased or remained stable over the decade (with the exception of Brazil and Peru, where, by the late 1980s, the EC held the largest share of inward flows, and Venezuela, where the United States remained dominant, but where its share fell). However, there has been a clear decline in the relative position of the United States as the largest investor in five Asian host economies (Hong Kong, Taiwan Province of China, Thailand, Singapore and the Republic of Korea). In the case of Taiwan Province of China, the United States went from a position of relative dominance to one of shared dominance in terms of inward stock; for the others, there was a fall in the United States share of inward flows. In nearly all cases, the loss in share was in favour of Japan, which, by the late 1980s, either increased its share to hold a share comparable to that of the United States, or replaced the latter altogether as the single dominant home country.

Within Latin America, Mexico is emerging as a key host country for many United States transnational corporations. While the foreign direct investment position of the United States in Mexico remained stable over the 1980s, the latter accounted for two thirds of the total 1987-1988 growth in employment by the developing-country affiliates of United States transnational corporations. 47/ In the 1970s and early 1980s, United States transnational corporations were attracted by Mexico's geographical position, its low wage rates and the free-export zones (*maquiladoras*) on the United States-Mexican border. Now, several transnational corporations are responding to an improved economic and political climate in Mexico by increasing investment in that country, to engage in production for both the Mexican as well as United States markets. Ford has recently invested \$1 billion in its Mexican export subsidiary, a state-of-the-art manufacturing plant; IBM and Hewlett Packard manufacture computers for both the local market as well as for export; and GE has integrated its Mexican joint venture with its Canadian and United States operations. Some of that investment strongly suggests that United States transnational corporations, too, are building regional core networks (see box 2).

The free trade agreement, now being considered and favoured in principle by the United States, Mexico and Canada, is likely to stimulate increased foreign direct investment in Mexico, aimed at both local and export markets, while lessening the importance of *maquiladoras*. If such an agreement were to stipulate strict local-content requirements set on a regional level in order for goods to be freely traded in the region, then the Mexican subsidiaries of transnational corporations

Box 2. Regional core networks in North America: the case of United States automobile transnational corporations in Mexico

There are two groups of transnational automotive producers with substantial direct investments in Mexico: the affiliates of the "Big Three" United States car-makers — Chrysler, General Motors and Ford — and the affiliates of non-United States transnational corporations: Volkswagen (German), Nissan (Japanese) and, until 1986, Renault (French). The two groups pursued very different trade and investment strategies in the 1980s, and the differences point to the emergence of a regional core network strategy for the United States transnational corporations versus a more traditional import-substituting strategy for the non-United States firms (see table).

Automotive exports from Mexico, by company, 1987

Firm	Share of exports in total sales (Percentage of value)	Composition of exports (Percentage of value)			Share of exports to North America	Intra-firm exports (Percentage of value)
		Vehicles	Engines	Auto parts		
GM	48.4	20	80	—	60	80
Chrysler	81.5	70	—	30	100	100
Ford	68.4	—	100	—	100	80
VW	34.3	—	65	35	20	80
Nissan	20-35 ^{a/}	..	..	..	..	..

Source: ECLAC/UNCTC Joint Unit on Transnational Corporations.

^{a/} Estimated.

The automobile sector in Mexico exhibits the following three characteristics: a large, fast-growing domestic market (domestic demand for cars increased by 39 per cent between 1988 and 1989, to reach 342,000 units); high quality and productivity coupled with low costs of production (a 1989 study found that Mexico's automobile assembly plants were above world average for quality and near world average for productivity, despite below-average volumes and Mexican wages in the car industry which are half of those in the United States); and, finally, proximity to a Triad market. United States transnational corporations appear to be taking advantage of these attributes by implementing strategies which are geared towards both selling in the local market as well as integrating their Mexican operations with their North American car-making plants. In contrast, non-United States automobile transnational corporations, while also investing large sums in their Mexican affiliates, are more geared towards selling in the Mexican market, and the majority of their exports are destined for Latin America and other markets outside of North America.

Chrysler, General Motors and Ford all have a long history of producing cars in Mexico for the local market. However, before the economic crisis of 1982 — when the domestic car market in Mexico all but collapsed — all three firms began substantial investment programmes in Mexico to increase production capacity for assembling engines and vehicles for

Box 2. (continued)

intra-firm exports to the United States. The new plants were equipped with modern, highly productive and capital-intensive technology: Ford's assembly plant in Hermosillo was judged to be one of the two best-quality assembly plants in the world, tying with Germany's Daimler-Benz. In addition to its Hermosillo plant, Ford recently announced that it was investing \$700 million to double capacity at its Chihuahua engine production plant, which exports most of its output intra-firm to the United States and Canada. Chrysler and General Motors are among the top exporters in Mexico; indeed Chrysler, which mainly exports finished cars to the United States, is the country's second-largest exporter, after the state-owned oil company Pemex. The fact that United States car-makers are highly export-oriented is illustrated in the table, which shows that exports range from 48 per cent of total sales value in the case of General Motors to 82 per cent in the case of Chrysler. Ford and Chrysler export exclusively to North America, while General Motors has a more diversified export pattern, which is none the less centred on the Triad: 60 per cent of the exports from Mexico are to North America, and 30 per cent to Japan, where General Motors has a joint operations with two Japanese car-makers.

Export dynamism in general, and to North America in particular, has been much lower in the case of the two major non-United States car-makers operating in Mexico, Volkswagen and Nissan. The table shows not only that their export activities are significantly lower than those of their United States counterparts, but that the North American market, at least in 1987, was not the prime target for their exports. The strategy of Volkswagen has primarily been to supply the domestic market with low-priced cars, and the company made substantial investments in Mexico in the 1970s. From 1982 to 1986, exports were undertaken primarily as a defensive reaction, to make use of excess capacity brought about by the debt crisis and the subsequent fall in domestic demand, and to satisfy performance requirements of the Government of Mexico. Most of those exports went to Germany, although 20 per cent were composed of engine exports to its United States plant. That plant was closed in 1988, and all of its operations were moved to Mexico. It was not until 1988 that Volkswagen launched an ambitious export programme from Mexico, deciding in 1990 that the successor of the Golf and the new Jetta model would be produced in and exported from Mexico to North America. Since Volkswagen no longer has any manufacturing capacity in the United States, the company appears to be pursuing a low-cost export strategy — but not a regional core network strategy, in which affiliates are integrated across borders to take advantage of country specialization and economies of scale. Nissan, which vies with Chrysler for top position in the domestic market, had a strategy very similar to that of Volkswagen, and only penetrated foreign markets to a limited extent via exports to Central America, the Caribbean and Chile with its low-priced model, the Nissan Sunny. Recently, however, Nissan invested \$1 billion in its Mexican car operations and has begun exporting engines to its United States production plant as well as parts to Japan, although export volumes are still well below those of the United States companies. Still, this would appear to be the beginning of a regional core network strategy for that firm, centred on the North American market.

Sources: 1989 Initial Quality Survey, conducted by J. D. Power and Associates, cited in Susan Walsh Sanderson and Robert H. Hayes, "Mexico: opening ahead of Eastern Europe", *Harvard Business Review*, 68 (September-October 1990), pp. 32-43; Andrew Marshall, "Motor industry comes of age", *Financial Times*, special section on Mexico, 12 October 1989; "Ford doubles capacity at its Mexican plant", *Financial Times*, 22 January 1991; interview with Ulrich Seiffert, director at Volkswagen, in "Industria automotriz: el preámbulo de la apertura", *Expansion*, 31 January 1990; Wilson Peres Nuñez, *Foreign Direct Investment and Industrial Development in Mexico* (Paris, OECD Development Centre, 1990), p. 121.

from third countries (particularly from Japan and Europe, which have also invested substantially in Mexico) could be at a disadvantage *vis-à-vis* North American transnational corporations, thus furthering the trend of a North American regional core network. Such a trend could eventually spread to include other Latin American countries, as indicated by current discussions of a hemispheric free trade zone which would comprise North, Central and South America, thereby creating the largest free-trade area in the world.

(b) *The Japanese cluster*

As indicated above, the data in table 11 show a gradual clustering of a number of Asian host countries around Japan, as a home country, although by the late 1980s Japan was the dominant investor in only two Asian countries in terms of stock and in only three in terms of flows. (By the late 1980s, however, no other Triad member dominated flows to any Asian country, with the exception of the EC in Indonesia and Viet Nam.) Thus, Japan has not yet emerged as an equal member of the Triad from the point of view of its non-Triad foreign-direct-investment position, but current trends point to its growing importance, particularly in Asia.

The regional networks of Japanese transnational corporations were analysed at an aggregate level in section C above. Here, a more micro-level view is presented, focusing on corporate strategies in the region which are deepening economic links among host countries, particularly regarding trade. Rather than being geared mainly to the local market, as they are in the Triad, the Asian affiliates of Japanese transnational corpora-

tions tend to be part of regional core networks and export nearly 50 per cent of their sales. The dominant strategy until now has thus been to utilize the region as a low-cost export base; the high export ratio of Asian affiliates also points to the more mature phase of Japanese investments in that region (which began in the late 1960s in labour-intensive industries in which Japan had lost its competitive advantage).

Trends in the strategies of Japanese transnational corporations indicate that, in the late 1980s and early 1990s, a new phase in Japanese investment in the region may be beginning, which is fuelling the rapid ascent of Japan as a home country. Since the appreciation of the yen in 1985, Japanese foreign direct investment into East and South-East Asia has grown so rapidly (faster than it did in Europe or the United States) that press reports have recently referred to the region as a "Japan-led economic bloc". 48/

While Japanese transnational corporations are still attracted to the developing Asian nations by low-cost labour, rapid demand growth in the region has increasingly been an important motive. In recent years, growth in the Asian newly industrializing economies has outpaced that in the OECD countries, a trend which is expected to continue in the 1990s. Rationalized, export-oriented strategies that take advantage of low labour costs are yielding to rationalized market-oriented investments, aimed at capturing regional market share; the importance of regional markets in two key industries is illustrated above in figures V and VI. In those economies in which labour costs have risen, such as Hong Kong, the Republic of Korea, Singapore, and Taiwan Province of China, total foreign direct investment has not

declined, but rather manufacturing investments are giving way to investments in finance and other services where low labour costs are less of a consideration.

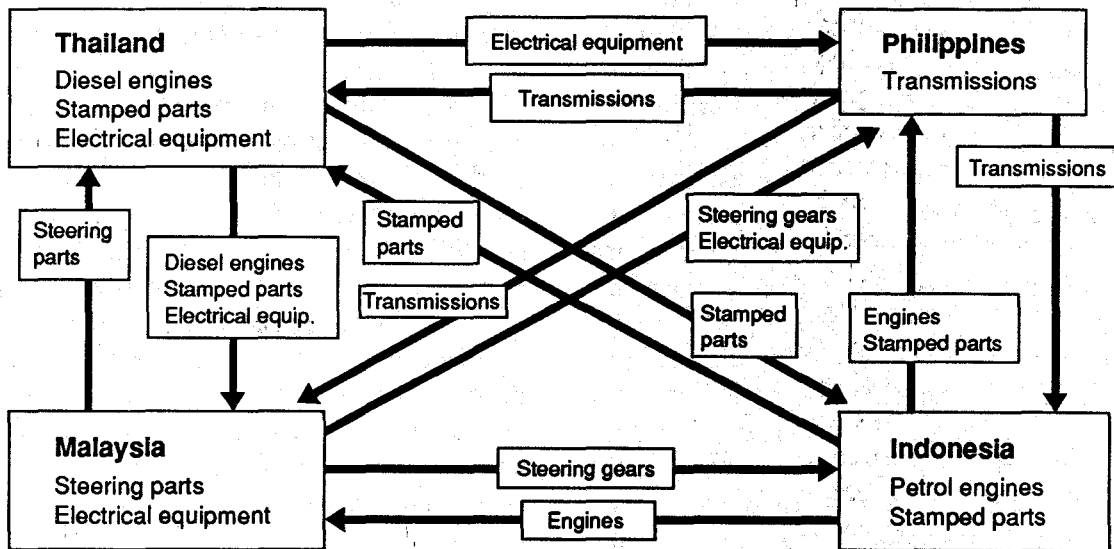
Perhaps most importantly, however, are the regional core network strategies pursued by Japanese transnational corporations, as described in section C above. In manufacturing, many Japanese transnational corporations are integrating their Asian affiliates on a regional scale, investing in complementary operations in different countries. Singapore often serves as the regional headquarters and information-and-distribution centre (as well as the site for the most sophisticated manufacturing operations), with plants in such less-developed countries as Thailand, Malaysia and the Philippines performing a range of discrete manufacturing operations. As discussed in section C above, such networks are often geared towards supplying the regional market as well as exporting to the three legs of the Triad. Recent moves by Japanese transnational corporations in the region point to the future emergence of regional core networks in the automobile industry, similar to those which already exist in the electronic equipment industry. Mitsubishi and Toyota appear to have the most developed multi-country networks in the region. In 1989, Toyota integrated its Asian subsidiaries (in four ASEAN countries with regional headquarters in Singapore) so that they can supply one another, rather than import components from the Japanese parent, which instead will import from the ASEAN affiliates; the strategy was prompted, in part, by a 1988 reduction in tariffs on intra-firm trade in the region (figure VIII). ^{49/} Toyota plans to trade at least \$100 million among its South-East Asian affiliates

by 1993. ^{50/} Japanese motor vehicle manufacturers direct their affiliates in each country, some of which are joint ventures with local firms, to specialize in certain components, and have negotiated with Governments to allow such output to be treated as if it were "domestic content". ^{51/} Such a strategy allows for plant specialization, regional economies of scale and intra-firm trade for transnational corporations, and furthers regional economic integration among the ASEAN countries. If current trends continue, it is not only likely that Japanese transnational corporations will come to dominate investment flows to East and South-East Asian nations, but that they will also account for a rising proportion of trade among those countries and between the region and the rest of the world.

(c) The European Community cluster

The data in table 11 show an increase in the number of host countries in which the EC is the largest investor, at least in terms of flows, attesting to the rise of the position of the EC within the Triad. In terms of stock, the EC has maintained its share in those Asian and African countries where historical ties remain strong, although no particular regional pattern emerges from an analysis of those countries. However, in all of the countries in Central and Eastern Europe for which data are available, the EC is the dominant inward investor. In 1990, EC members accounted for 31 per cent of a total number of 602 joint ventures in the Czechoslovakia, 36 per cent of 556 joint ventures in Hungary, 63 per cent of 869 joint ventures in Poland and 42 per cent of 1531 joint ventures in the USSR. ^{52/} In most of

Figure VIII. Automobile operations of Toyota in four ASEAN countries



Source: "Part exchange" in *Far Eastern Economic Review* (21 September 1989), p. 73.

those countries, new equity investments build on long-standing non-equity relationships, particularly subcontracting arrangements.

Thus, the opening of Central and Eastern Europe to foreign direct investment appears to be leading to a similar clustering pattern, as can be observed in Asia and Latin America. As with Japanese investments in Asia and United States investments in Mexico, EC investments in Central and Eastern Europe are aimed at both capturing local demand and at creating a production base from which to ex-

port to other countries. Unlike the first two instances, however, many investments in Central and Eastern Europe must rely more on future potential than on present returns.

Using their pre-existing distribution and marketing channels, EC firms are in many cases striving to integrate their Central and Eastern European operations into their current networks, with the EC 1992 Single Market programme an added incentive to extend production to the East. Fiat's strategy in the region, for instance, envisions an integrated trans-European network which will

not only produce for Central and Eastern European markets, but will strengthen Fiat's competitive position in the EC through plant specialization and intra-firm trade. Although in the current climate the risk factor of investments in that region is high, many transnational corporations hope to gain "first-mover" advantages by setting up joint ventures with local firms. The growth of such investments may be limited by the number of existing firms able to cooperate with them, and could plateau in a few years. Still, if current trends continue, the role of EC transnational corporations in Central and Eastern Europe may come to resemble the relationships of Japanese transnational corporations with their Asian subsidiaries and United States transnational corporations with their Mexican subsidiaries, especially if Central and Eastern European countries are allowed to trade freely with the EC.

(d) The newly-industrializing-countries cluster

Table 11 shows that the Asian newly industrializing economies have emerged in the 1980s as increasingly important foreign investors themselves, particularly in their region, where such countries are now the largest foreign investors in four developing Asian countries (in terms of flows). Behind this rise are increasing wage rates at home, appreciating currencies coupled with large balance-of-payments surpluses owing to high export earnings, capital market liberalizations in Taiwan Province of China and the Republic of Korea and the loss of Generalized System of Preferences (GSP) status. Taiwan Province of China, in particular, has emerged as a major investor in the region, establishing

production facilities in several countries in South-East Asia and in China, either directly or through affiliates in Hong Kong. In 1989, foreign-direct-investment outflows from Taiwan Province of China were four times the level of inflows. Foreign direct investment from Hong Kong has also grown rapidly since 1986 and, by one estimate, accounts for 10 per cent of all foreign direct investment in East Asia (excluding China).^{53/} The newly industrializing countries are therefore emerging as important sources of foreign direct investment in Asia, which, along with Japanese investments in the region, will serve to further economic integration among the individual countries.

2. Explaining regional investment clusters

The data presented above indicate a continuing pattern of clustering of host countries in a region around a single home Triad member located in the same region. According to theory, such a pattern is unlikely to occur: the distribution of foreign direct investment should reflect the location advantages of host countries, rather than their geographical proximity to a home country. While geographical factors are certainly important, other location advantages include the host country's natural endowments, its infrastructure and human resources, as well as those aspects of its policy environment which impact foreign direct investment. Such factors are considered to be a primary determinant of why transnational corporations, once having decided to invest abroad, will invest in one host country as opposed to another. A geographically-based pattern of foreign direct investment would not be expected to occur, since the type of foreign direct investment

that transnational corporations wish to undertake, rather than a corporation's country of origin, should determine the relevant location advantages of a host country. For resource-based foreign direct investment, for example, the availability of natural resources in the host country will be an important locational determinant for transnational corporations, irrespective of their country of origin. For export-oriented foreign direct investment, production costs and exchange rate policy would be important factors. For foreign direct investment to serve the local market, the size and growth of domestic demand would be relevant. (As discussed above, the locational advantage of market size is an important variable behind the high levels of foreign direct investment in the Triad, since much of the latter is geared towards serving Triad markets.) Assuming a similar set of possible locations available to foreign investors, it would thus be expected that the distribution of global foreign-direct-investment stocks and flows would not disproportionately reflect investment from any individual Triad member. Transnational corporations would invest in those host countries which best met their investment requirements, regardless of their country of origin. Therefore, no single Triad member would be expected to emerge as the dominant investor in a particular host country.

However, other factors may play a role in the distribution of world-wide investment flows, which might lead to the concentration of foreign direct investment by a single Triad member in a given host country. These include cultural, historical, commercial and political links between home and host countries. Also relevant is the competitiveness of firms from the home country, especial-

ly in regard to their experience in investing abroad and, in particular, to their access to market information for a wide range of possible host countries (as opposed to a limited set of nearby locations). Specifically, at the early stage of the home country's outward investment development path, firms tend to be small or medium-size enterprises which lack the necessary resources and information to behave as global investors. Such firms may limit their initial overseas investments to nearby countries and to those with historical, political and commercial ties with their home country, even if superior locational advantages exist elsewhere.

Indeed, the notion that foreign direct investment would follow a pattern based on the proximity of home and host countries acquires stronger explanatory power if the concept of "proximity" is enlarged to encompass factors other than geographical distance. Such other factors include the costs of obtaining information on the conditions affecting investment in a country, the existence of historical and cultural links and the costs of cross-border communications. Those and other factors determine the "economic distance" between countries; ^{54/} in that sense, distance is not fixed but can decrease through improved communications technology and closer economic integration. Indeed, many of the directives of the EC 1992 programme are aimed at shortening the economic distance between EC members, by reducing or eliminating cross-border costs such as time spent at customs posts and harmonizing accounting and technical standards.

The formation of a regional free-trade area with one of the Triad members at its core could, hypothetically, also lead to a pattern in which foreign direct investment from the

Triad member would predominate in other countries within its free-trade area. This might occur if the regional integration programme, as designed by its members, incorporates measures that discriminate against firms from outside the region. For example, investment incentives for firms from the region only; local content levels set at a regional level; and public procurement markets that are closed to firms from outside the region are all examples of measures associated with regional integration that would favour member-State firms at the expense of extraregional ones. In such a scenario, investment from a Triad member could dominate inward investment in the other countries belonging to its regional grouping.

If those factors play an important role in the locational decisions of foreign investors, then a pattern might emerge in which foreign direct investment in a given host country or region is centred on a single home country. Such a pattern is indeed evident in the data presented in table 11, and the question arises

as to which of the factors described above can explain the emergence of regional investment clusters. Colonial and, in some cases, political relationships appear to explain some of the linkages. But in others the key explanatory variables appear to be the globalization — and, more specifically, the regional core network — strategies of transnational corporations, coupled with a trend towards the formation of regional trading blocs around each Triad member. Thus, the interaction of several variables — the emergence of the EC and Japan as key Triad members, the opening up of Central and Eastern Europe to foreign direct investment, the efforts by transnational corporations to attain global market shares, and regional integration efforts at the policy level — appears to be leading to a pattern in which geographical and policy linkages to the home country, in addition to the locational advantages of host countries, are emerging as the key determinants of the global distribution of foreign direct investment.



Chapter III

INTERLINKAGES

It has been noted in the introduction that the global pattern of foreign-direct-investment stocks and flows, along with the global patterns of trade, technology transfer and financial flows, is one of the most significant

structural characteristics of the international economy. All four dimensions are interlinked to a significant extent through the activities of the transnational corporation.

A. Foreign direct investment and international trade

1. The relationship between foreign direct investment and international trade

Transnational corporations engage in international transactions through trade with firms in foreign markets, through international production or through some intermediate form involving agreements with foreign parties that fall short of full ownership and control. Since international production and international trade are frequently seen as alternative means of delivering goods

(and certain services) to foreign markets, the question is often raised whether international production is a substitute for trade. This question does not have an obvious answer. International production can have both direct and indirect effects on trade, they can differ for home and host countries and they can vary across sectors.

To the extent that foreign production is a response to actual or expected trade barriers, it can be seen as a substitute for international trade. A recent illustration of this is the

growth of foreign direct investment in the United States by Japanese transnational corporations in automobiles, consumer electronics, machine tools and other industries. However, to the extent that a large portion of those export markets would have been lost due to rising trade barriers, international production is filling a gap, and is not replacing exports.

At the same time, international production via foreign direct investment or non-equity arrangements by transnational corporations can complement trade, to the extent that foreign trade is either a component, or an outgrowth, of international production strategies by transnational corporations. Some foreign direct investment is specifically designed to take advantage of host country production conditions in order to export to home-country markets. The bulk of foreign direct investment occurs in developed market economies, and much of this involves cross-national vertical integration by firms with a consequent increase in the international trade of components and finished products. In addition, as discussed below, the establishment of successful international operations increasingly involves trade by affiliates of transnational corporations operating in host countries and selling to third-country markets.

The impacts on trade are also complex in the case of import-substituting international production. The effect on home-country exports involves both a substitution effect, as host-country production replaces home-country exports, and an expansion effect, since the growth of host-country production invariably involves the importation of components and related products or services. To the extent that host-country production in-

volves greater efficiencies, for example through the ability of transnational corporations to gain from greater internalization, a larger market share could result and the expansion effect could outweigh the substitution effect.

There are also sectoral differences in the impact of international production on trade. Foreign direct investment in primary sector industries is frequently oriented towards export markets. In services, on the other hand, non-tradability is an issue and international production is frequently the only way to serve foreign markets. In manufacturing, the costs of serving markets and the structure of international linkages within firms and between firms are likely to be important determinants of the degree to which international production is a complement or substitute with respect to international trade.

2. Impact of foreign direct investment on home- and host-country trade

Available evidence on the impact of international production on the trade of home countries is mixed. Some studies have found a net substitution of international production for trade, while other studies found no effect or an increase in exports from home countries. One study of Swedish transnational corporations found that the expansion effect was considerably larger than the substitution effect, leading to a net increase in exports from parent companies to host countries following increases in foreign production in those same host countries. ^{55/}

In the case of host countries, there are a number of indirect effects that are potentially important in evaluating the impact of international production on foreign trade. When

foreign transnational corporations operate in host countries, they often integrate local firms into their international supplier networks which, in turn, eases the way for those firms to enter world markets. Foreign transnational corporations can increase competition within host economies, stimulating local firms to become more competitive. In addition, spillover benefits from international production in host countries — technology, labour skills, infrastructure — can also contribute to enhanced international competitiveness on the part of local firms. On the other hand, to the extent that foreign transnational corporations dominate local markets, or conduct their operations within enclaves isolated from the host economy, those potential benefits would be minimized.

Transnational corporations have come to be responsible for a substantial share of world exports and imports; in the case of the United States, for example, at least 80 per cent of the country's trade was undertaken by transnational corporations in 1988, including parent companies in the United States, foreign affiliates of United States transnational corporations and United States affiliates of foreign transnational corporations. If only trade that passes through foreign affiliates of home-country transnational corporations is considered, the role of transnational corporations is still quite important. To use again the example of the United States, in 1988, approximately half of United States merchandise trade passed through either the foreign affiliates of United States transnational corporations or the United States affiliates of foreign transnational corporations. At the same time, more than a third of United States trade represented intra-firm transactions, between foreign affiliates and their parent

corporations (see table 12). ^{56/}

The decline in the share of imports into the United States accounted for by foreign affiliates of United States-based transnational corporations between 1977 and 1982 is largely due to changes in ownership structure in a number of industries. For example, the expansion of national ownership in both upstream and downstream facilities in petroleum served to reduce the proportion of imports into the United States originating in the foreign affiliates of United States transnational corporations. The expansion of final assembly facilities within the United States by foreign transnational corporations contributed to an increase in imports by foreign corporations. At the same time, the competitive strength of United States firms in many foreign locations contributed to their strong export performance.

Japanese transnational corporations have a smaller share of world international trade than firms from the United States, but the role of Japanese corporations in trade is growing. As of 1983, Japanese transnational corporations — including both parents and foreign affiliates — accounted for 10 per cent of the world's exports of manufactures, up from 7.4 per cent in 1974, while United States-based transnational corporations have accounted for 17-18 per cent of those exports at least since 1966. ^{57/} However, almost all of this trade by Japanese transnational corporations involves exports by parent companies from their home-country production locations. The foreign affiliates of Japanese transnational corporations accounted for less than 1 per cent of world manufacturing exports in 1986, compared with a share of close to 9 per cent for the foreign affiliates of United States transna-

Table 12. Percentage of United States merchandise exports and imports accounted for by transnational corporations, 1977-1988

Year	Exports from the United States				Imports into United States			
	United States affiliates of foreign TNCs	Foreign affiliates of United States TNCs	All TNCs	Intra-firm all TNCs	United States affiliates of foreign TNCs	Foreign affiliates of United States TNCs	All TNCs	Intra-firm all TNCs
1977	20.6	33.8	54.4	36.5	28.9	27.3	56.2	41.8
1978	22.7	..	..	..	32.2	..	..	..
1979	24.0	..	..	..	29.7	..	..	..
1980	23.3	..	..	..	30.4	..	..	..
1981	27.0	..	..	..	31.0	..	..	..
1982	28.5	26.8	55.3	33.8	34.0	20.8	54.8	37.8
1983	26.7	28.5	55.2	35.7	30.3	19.8	50.1	36.6
1984	26.5	30.2	56.7	37.8	30.2	19.0	49.2	37.0
1985	26.1	32.2	58.3	40.7	33.5	20.2	53.7	40.2
1986	22.2	31.8	54.0	37.8	34.1	17.8	51.9	40.3
1987	19.2	31.5	50.7	34.4	35.0	18.5	53.5	41.2
1988 ^{a/}	18.7	29.8	48.5	32.5	33.5	19.5	53.0	41.2

Sources: United States, Department of Commerce, Bureau of Economic Analysis, *U.S. Direct Investment Abroad*, various annual issues; and *Foreign Direct Investment in the United States*, various annual issues.

^{a/} Preliminary.

tional corporations. The surge in Japanese foreign direct investment in the 1980s has probably led to an expansion of the world export share attributed to the foreign affiliates of Japanese transnational corporations. As mentioned earlier, foreign direct investment-related sales of manufactured goods from developing countries in Asia to Japan have been growing, though overall the volumes involved are still relatively low. However, in some industries (such as general machinery, electrical machinery, transportation and precision equipment), about three quarters of Japanese imports from Asia in 1986 were shipped by Japanese affiliates. ^{58/}

3. Transnational corporations and developing-country trade

Transnational corporations have helped stimulate exports from developing countries, either through their affiliates or through links with national companies. In the case of newly industrializing countries in Latin America and Asia, transnational corporations from Japan, Sweden and the United States have helped stimulate exports in manufacturing industries. ^{59/} Several Asian developing countries have become major exporters, in part by drawing upon the technology, organizational skills and marketing

networks of transnational corporations from developed market economies to produce components, become original equipment manufacturers and exporters of their own branded products in developed country markets.

The growth of non-equity arrangements between transnational corporations and host country producers also contributes to the expansion of developing country exports. Non-equity arrangements, such as franchising, licensing and subcontracting, have become an important component in the strategies of transnational corporations to serve local markets and to export from host country locations, while limiting their capital commitment and reducing their risk.

Differences in the contribution of foreign affiliates to international trade may reflect differences in the role of foreign direct investment in different host economies. Some foreign direct investment is primarily oriented towards serving the local market, and would not play a large role in international trade. In other instances, production within host countries by foreign transnational corporations may represent a small proportion of domestic output, perhaps because local restrictions have limited foreign involvement. And a substantial amount of foreign trade occurs through the aid of non-equity arrangements between parent companies and national companies within the host country; that would lead to an understatement in the share of bilateral trade attributed to home-country transnational corporations.

Overall, the contribution of transnational corporations to the export performance of developing countries as a group has been

limited. The vast bulk of foreign direct investment to developing countries from the developed market economies has been directed to a small number of countries (see table 4). It is, therefore, not possible to generalize for all developing countries from the experience of transnational corporations in the newly industrializing countries.

4. Third-country exporting by transnational corporations

Transnational corporations are also involved in trade between their host country production locations and third-country markets. In 1988, third-country sales by foreign affiliates of United States-based transnational corporations were almost 70 per cent as large as all merchandise exports from the United States; the intra-firm portion of those third-country sales has been rising, from 44 per cent in 1985 to more than 50 per cent in 1987 and 1988. ^{60/} As discussed above, exports to third-country markets by the foreign affiliates of Japanese transnational corporations are an important component of those firm's regional core network strategies.

The growth of third-country exports by foreign affiliates of United States transnational corporations may reflect an evolution of the trade patterns of transnational corporations which goes beyond the traditional patterns linking home and host countries. In many instances, exporting to third countries is a component of the original strategy of transnational corporations in making their foreign investments, and can be seen as part of the development of regional core networks.

For example, component manufacturing facilities in a host country have been established to supply final assembly plants in third countries. Third-country exporting can reflect the importance of host country locational advantages in all world markets, not just *vis-à-vis* home countries. The closer integration of national economies within regions will also be a stimulant of third-country exporting. In addition, the growth of foreign affiliates of transnational corporations as global exporters may be part of a life-cycle pattern of foreign affiliates, which develop important comparative advantages in host country production locations over time, and then apply those enhanced advantages in a wide range of markets, in response to developments in exchange rates and national rates of growth of demand.

For example, third-country exporting has become an important element in the international production strategies of transnational corporations in the automobile industry. An example, mentioned above, involves the production of engines by General Motors (United States) in Mexico for inclusion in auto assembly in Japan. The recent expansion of foreign direct investment into the United States provides additional examples of the growth of third-country exporting. Honda (Japan) exports from its United States locations to Taiwan Province of China, as well as back to Japan, while Nissan (Japan) has announced plans to export from its United States assembly locations to Canada, to replace exports to Canada from Japan. Japanese transnational corporations in automobiles and other industries are developing, as discussed above, regional core networks using third-country exporting.

5. Trade clusters and foreign-direct-investment clusters

It is perhaps partly owing to the interrelationships between foreign direct investment and trade that a certain similarity exists between trade and foreign-direct-investment patterns. The importance of the three major regions of the Triad as centres for international trade has recently been examined by GATT. ⁶¹Data on the importance of each Triad region in the bilateral trade of host developing countries indicate some overlap between the clustering of host countries with respect to foreign direct investment from the Triad and the increasingly regional clustering of trade relationships. In almost all instances in which a host country is linked to one or more of the Triad countries in terms of stocks of foreign direct investment, the home Triad member is also one of the major trading partners of the host country (see table 13).

To the extent that a coincidence in both trade and foreign-direct-investment patterns can be observed, it may be primarily the result of common causes, such as geographical proximity or historical ties. At the same time, a more direct link between the activities of transnational corporations and bilateral trade relations is certainly possible. The foreign affiliates of United States-based transnational corporations make a significant contribution to bilateral trade in a number of economies that are part of the United States foreign-direct-investment cluster, including Mexico, Hong Kong, the Philippines and Singapore, while their contribution to trade in the case of other members of the cluster, such as Venezuela, Taiwan Province of China and Thailand, is

Table 13. Pattern of bilateral trade between the Triad and developing countries/territories, 1988

EC cluster			Japan cluster		
<i>Economy</i>	<i>EC percentage share of country's trade (exports plus imports)</i>	<i>EC rank among trading partners</i>	<i>Economy</i>	<i>Japanese percentage share of country's trade (exports plus imports)</i>	<i>Japanese rank among trading partners</i>
Venezuela	44	1	Indonesia	35	1
Nigeria	43	1	Republic of Korea	25	2
Kenya	40	1	Thailand	22	1
South Africa	31	1	Taiwan Province of China	21	2
Argentina	30	1	Malaysia	20	1
Pakistan	28	1			
Brazil	26	1			
Paraguay	25	2			
Uruguay	23	1			
India	21	1			
Bangladesh	17	1			
Viet Nam	13	2			
Singapore	12	3			
Malaysia	4	3			
United States cluster					
<i>Economy</i>	<i>United States percentage share of country's trade (exports plus imports)</i>	<i>United States rank among trading partners</i>	<i>United States affiliate percentage share of bilateral trade</i>		
Mexico	63	1	27		
Venezuela	44	1	8		
Ecuador	40	1	14		
Colombia	38	1	17		
Taiwan Province of China	35	1	6		
Philippines	28	1	19		
Peru	23	1	10 ^{a/}		
Bolivia	21	2	..		
Chile	20	2	11		
Singapore	20	1	36		
Hong Kong	17	2	23		
Thailand	17	2	9 ^{a/}		
Argentina	15	3	17		
Pakistan	12	2	..		
Other countries, not in United States cluster					
Nigeria	27	2	25		
Brazil	24	1 (tied with EC)	34		
Malaysia	18	2	47		
<p><i>Sources:</i> United Nations trade tapes and International Monetary Fund, <i>Direction of Trade Statistics, Yearbook</i> (Washington, IMF, 1990).</p> <p><i>Note:</i> The placing of a country within a cluster is determined by its placing with respect to the stock of foreign direct investment in 1987 (table 11A, Group I and Group II). Where two Triad members have competing shares of the stock of foreign direct investment in a host country (table 11A, Group II), the country is listed twice.</p> <p>^{a/} 1986.</p>					

much smaller. In addition, the foreign affiliates of United States transnational corporations are important in the bi-lateral

trade with countries that are outside of the United States cluster, including Brazil, Malaysia and Nigeria.

* * * * *

Overall, the clustering of developing countries with respect to foreign direct investment is close to, but not identical with, the clustering of those same countries with respect to international trade. In addition, a large number of developing countries are not included in the clustering pattern with respect to foreign direct investment, owing to the lack of relevant data. The overlap that exists may reflect causal links from the international strategies of transnational corpora-

tions to the trading behaviour of firms in host developing countries; conversely, it could reflect links from historically determined trading patterns to patterns of foreign direct investment. But, to the extent that foreign direct investment is increasingly undertaken as part of regional core network strategies of transnational corporations, trade and foreign direct investment will become increasingly linked and complementary phenomena.

B. Transnational corporations and technology transfer

It is widely accepted that technology is increasing in importance as a determinant of economic growth and change. Transnational corporations are the principal generators of new technologies through research and development, and they play a major role in the international transfer of technology. It is difficult, however, to measure the international flow of technology and the proportion of that flow attributable to the activities of transnational corporations. A substantial amount of technology is embodied in goods and services, especially capital goods. In 1988, world-wide trade in capital goods approached \$700 billion (see table 14). In so far as trade in capital goods is an important mechanism for the transfer of technology, transnational corporations contribute to the process through their participation in trade. Transnational corporations also play a large

role in international trade in high technology products, including, for example, computers, semiconductors, synthetic and composite materials and biotechnology. 62/

Technology is also transferred through the creation of new productive facilities and the expansion or restructuring of existing ones. Thus, foreign-direct-investment flows, which amounted to \$196 billion in 1989, are an important source of technology transfer, a source that is dominated by transnational corporations. In addition, the operation of foreign production facilities by transnational corporations involves the utilization of management skills, new methods of organizing production and various technical skills of a work force. Those various manifestations of "soft" technology are typically transferred through the learning of skills by host country workers and suppliers; their transfer through

Table 14. Indicators of technology-transfer flows in 1988 and growth rates, 1980-1988

<i>Item</i>	<i>Value of flows (Current prices in billions of dollars)</i>	<i>Compound annual growth rate (Percentage)</i>
Capital goods exports a/	701	7.9
Foreign direct investment	161	13.9
Technology payments to developed market economy countries	48	13.9
Technical cooperation grants	13	8.0
World output	17 265	5.1
World exports	2 684	4.1

Sources: UNCTAD, "Transfer and development of technology in a changing world environment: the challenges of the 1990s" (TD/B/C.6/153), table 1; updated data from UNCTAD; International Monetary Fund balance-of-payments tape; International Monetary Fund, *Direction of Trade Statistics Yearbook*, various issues.

a/ Capital goods exports from Central and Eastern Europe are not included.

foreign direct investment is particularly important in the services sector, because of the limited tradability of many services and the need, therefore, to replicate home-country operations as fully as possible.

Beyond foreign investment, the rapid growth of strategic alliances among transnational corporations (which often include national firms) represents an additional avenue for the international transfer of technology. Strategic alliances frequently occur in product areas where research costs are very high, and companies seek to share risks. One such area is telecommunications, where the rapid introduction of micro-electronic technologies, and the deregulation of many national markets, have changed competitive conditions and raised the costs of new investments. Strategic alliances involve the sharing of product and production technologies for specific products, but not necessarily across

the entire range of the participating firms' activities. 63/

Naturally, technology is also transferred directly, through cross-border sales of plans and blueprints and the licensing of processes and inventions. In 1988, payments for such technology transfers amounted to approximately \$50 billion world-wide. For the United States, the bulk of payments associated with such direct technology transfer occur through transnational corporations. The United States received \$11 billion in receipts of royalty and licence fees in 1988, which are, in effect, payments for the sale of technology by United States firms to foreign purchasers. Of that total, 78 per cent occurred through transnational corporations, with the bulk (76 per cent of the total) representing payments from foreign affiliates to their United States parents. In the case of purchases of technology by the United States,

which totalled over \$2 billion in 1988, 55 per cent of payments of royalties and licence fees were transactions involving transnational corporations, with 50 per cent of the total representing payments from United States affiliates of foreign transnational corporations to their parents. ^{64/} In the United Kingdom and the Federal Republic of Germany, between 65 and 85 per cent of payments for the purchase of technology in the period 1975-1985 were paid by affiliates to their foreign parents. ^{65/} Thus, for countries for which data are available, direct technology transfers take place primarily within the framework of transnational corporations.

For developing countries, limited data suggest a similar pattern for the sale and licensing of technology. As of the mid-1980s, some 80 per cent to 90 per cent of technology payments by developing countries to the Federal Republic of Germany and the United States took the form of payments from affiliates to their parent companies, that is, were directly associated with foreign direct investment. ^{66/} From 1980 through 1985 (the most recent period for which data are available), technology payments from developing countries to developed market countries as a group averaged \$2 billion per year. Of greater importance, technical cooperation grants from developed market economies to developing countries jumped from \$8 billion per year in 1984-1985 to more than \$12 billion in 1988, a growth rate of 15 per cent per year. ^{67/}

Technology transfers to developing countries that occur through the intra-firm activities of transnational corporations most directly affect the foreign affiliates of those firms operating within the host economy. However, the impact of such technology transfer frequently spreads into the local

economy. National firms which supply the affiliates of transnational corporations must meet the production standards established by the latter by the importation of new technologies, while firms which compete with the affiliates of foreign transnational corporations are forced to upgrade their own technology. Other mechanisms of spillover include the training of local managers who later work with local enterprises, the hiring and training of local workers and the upgrading of local education systems to meet the needs of the transnational corporations. The effective application of technology spillovers in host developing countries may, however, require substantial local investments. ^{68/}

The three private sector channels of technology transfer — capital goods exports, foreign direct investment and direct payments — indicate a concentration of technology flows to the newly industrializing economies of Asia (table 15); at the same time, developing Asian economies (for example, the Republic of Korea) are becoming technology exporters. ^{69/} It is likely that transnational corporations from Japan, as well as from some of those developing countries, have played a prominent role in that development. Official technology assistance flows — the smallest of the four technology transfer channels — have been more evenly distributed among various developing country recipients than have private flows. For many developing countries, technical cooperation grants form virtually the only source of technology transfer. Given the growing importance of technology flows to economic development, the uneven distribution of aggregate technology flows among developing countries indicates the presence of a substantial barrier to improved development prospects for a large number of countries.

Table 15. Distribution of technology flows to developing countries, 1988
(Billions of dollars, current prices)

<i>Region / type of flow</i>	<i>Capital goods imports</i>	<i>Foreign-direct-investment inflows</i>	<i>Technical cooperation grants</i>
All developing countries	144	28.7	12.6 <i>a/</i>
Africa	17	2.1	4.9
Asia	87	14.9	2.9
Latin America and the Caribbean	36	11.4	2
Memo: Least developed countries	4	0.1	2.6

Sources: UNCTAD, "Transfer and development of technology in a changing world environment: the challenges of the 1990s" (TD/B/C.6/153), table 2; updated data from UNCTAD; International Monetary Fund balance-of-payments tape.

a/ Grants not allocated to individual countries are included in total, but not in regional group.

* * * * *

All four channels of international technology transfer — capital goods exports, foreign-direct-investment flows, direct payments on royalties and fees and technical cooperation grants to developing countries — grew more rapidly than international trade and world output in the period from 1980 to 1988, providing some indication of the growing role for technology transfer in the world economy. The two channels of technology transfer that

grew the most rapidly — foreign-direct-investment flows and technology sales — are both dominated by the activities of transnational corporations, while those corporations also play a substantial role in capital goods exports. Thus, it seems reasonable to conclude that transnational corporations, through their important role in the transfer of technology, are having a growing impact upon economic growth and change.

C. Transnational corporations and financial flows

One reason the flow of technology to developing countries has been so low is that most developing countries have lacked the

financial resources to engage in substantial international purchases. A decade of high debt burdens among developing countries has

contributed to a lowering of growth rates, relative to earlier periods, and to a financial squeeze; indeed, for much of the 1980s, the aggregate net flow of financial resources to developing countries was negative. Traditionally, transnational banks have been the principal sources of private international financial flows; but bank lending to developing countries was severely curtailed in the wake of the debt crisis. Accordingly, transnational corporations have increasingly been seen as a source of financial flows to developing countries, both through direct inflows of foreign direct investment and, indirectly, to the extent that larger foreign-direct-investment flows stimulate other forms of financial inflows.

Foreign-direct-investment flows in and by themselves represent a significant share of international financial flows. In fact, the net resource transfer due to foreign direct investment to developing countries has been positive since the mid-1980s, providing a slight offset to the large negative net transfers of private credit. Foreign-direct-investment flows accounted for 75 per cent of total long-term capital flows from private sources (excluding private non-guaranteed credit) to developing countries during the period 1987-1989. 70/

The linkages between foreign-direct-investment flows and private credit flows, both bank and non-bank, have not been fully established. An increase in foreign direct investment by transnational corporations may be financed through transnational banks or via international credit markets, thereby expanding the flow of credit to the host country. The financing of exports from host countries by transnational banks may be linked to exporting by host-country affiliates of foreign

transnational corporations, or by joint ventures or enterprises linked to transnational corporations via non-equity arrangements. In addition, the expansion of international production in host countries can serve to improve the country's prospects for receiving private credit. On the other hand, host country policies have sometimes favoured foreign direct investment over credit, for instance, by requiring a higher proportion of new equity in a project than might be preferred by the foreign investor.

The evidence that exists does suggest the importance of two-way linkages between foreign direct investment and other financial flows. A cross-national statistical analysis of more than 50 developing countries found positive relationships between inflows of foreign direct investment and inflows of both private credit and official assistance. 71/ This link may be due to the positive impact financial flows have on a developing country's balance of payments, domestic growth and international credit rating, making it a more favourable location for international production. A negative linkage occurred during the 1980s. The drying up of private credit flows to developing countries, in large part due to the debt crisis, led to austerity policies and contributed to the inability of most developing countries to increase their inflows of foreign direct investment, despite an extensive liberalization of their policy and regulatory environments.

A second form of financial flows to developing countries is official development assistance (ODA). Flows from Government to Government or from international agencies to developing countries are not, of course, undertaken through transnational corporations. There is evidence, however, of a coin-

cidence in the distribution of ODA flows when compared with the pattern of foreign direct investment, as well as some indications that the location of foreign production by transnational corporations has an influence on ODA given by major home countries.

The distribution of ODA from two of the major home regions appears to follow a pattern similar to the distribution of the stock of foreign direct investment (see table 16). Five of the six countries that are part of the Japanese foreign-direct-investment cluster in terms of stocks of foreign direct investment in the late 1980s also received the largest single portion of their bilateral ODA from Japan in 1987. (Data for the sixth country are not available.) In the case of the EC, of the 13 countries that are part of the EC foreign-direct-investment cluster, 8 of the 11 countries for which data are available received the largest share of their bilateral aid from the EC, while for the other 3, the EC was the second largest donor within the Triad. Only for the United States among the Triad home regions is the importance of ODA for host countries different from the distribution of stocks of foreign direct investment. One possible reason for that disparity is the exclusion of military aid from the data on ODA. Military aid to developing countries is larger for the United States than for the EC or Japan; its inclusion might yield a clustering pattern for the United States that is closer to the patterns observed with respect to foreign direct investment and international trade. The absence of an overlap in the patterns for ODA and trade and foreign direct investment for the United States could also be the result of additional factors, not considered in this analysis.

The similarity in the ODA and foreign-direct-investment patterns may be coincidental. It may reflect the same underlying patterns of geographical proximity or historical ties that were noted with respect to the clustering patterns for foreign direct investment and international trade. There are indications, however, that donor country Governments see ODA as one among a number of connections between their economies and developing-country economies, and that some policies regarding ODA have been formulated with the objective of strengthening certain of those connections. ^{72/} To the extent that there is a similarity of clustering patterns for ODA and foreign direct investment, it may not be just the result of historical coincidence.

One further linkage of a financial nature can be found in currency relationships. Under the Bretton Woods system, most countries, developed and developing, tied their currency to the United States dollar. Over the past two decades, developing countries appear to be moving towards a system in which their currencies appear to be linked, more or less closely, with the currencies of major home regions, depending upon the strength of their trade, investment and financial relationships. Thus, a dollar bloc appears to exist, composed largely of countries in Latin America and the Caribbean, along with a few other countries, such as some oil-exporting countries whose ties to the dollar are undoubtedly due to the fact that the world price of oil is quoted in dollars. In most cases, those countries operate a managed float versus the dollar, or a float tied to economic indicators which are themselves linked to the dollar. ^{73/}

Table 16. Official development assistance: relative importance of Triad home regions in recipient economy inflows, by Triad cluster, 1987

<i>EC cluster</i>		<i>Japan cluster</i>		<i>United States cluster</i>	
<i>Recipient economy</i>	<i>EC rank</i>	<i>Recipient economy</i>	<i>Japan rank</i>	<i>Recipient economy</i>	<i>United States rank</i>
Argentina	1	Indonesia	1	Argentina	2 (T:J)
Bangladesh	2	Malaysia	1	Bolivia	2
Brazil	1	Republic of Korea	1	Chile	1 (T:EC)
India	1	Taiwan Province	..	Colombia	3
Kenya	1	of China	..	Ecuador	3
Malaysia	2	Thailand	1	Hong Kong	3
Nigeria	1			Mexico	1
Pakistan	1			Pakistan	2 (T:J)
Paraguay	..			Peru	2
Singapore	2			Singapore	3
South Africa	..			Taiwan Province	
Uruguay	1			of China	..
Viet Nam	1			Thailand	3
				Venezuela	..

Source: Organisation for Economic Co-operation and Development, *Geographical Distribution of Financial Flows to Developing Countries* (Paris, OECD, various annual issues).

Note: Clusters are determined by stock of foreign direct investment in 1987 (see table 11). Countries that were judged to be in more than one cluster are listed twice. Rank is determined by the percentage of bilateral ODA received from each Triad region. The letter "T" denotes a country for which two Triad members are roughly tied.

The existence of a franc bloc among a number of African countries, the growing importance of the European Monetary System, the opening up of the Japanese financial system and the growth in the use of the yen in international trade and finance suggest the

possibility that many developing countries will seek stronger currency links with the EC and Japan. 74/ That would further reinforce emerging tendencies towards linkages among trade, foreign direct investment and financial flows.

D. The integrating agents: transnational corporations

The evidence presented above shows that there are, indeed, substantial linkages between foreign direct investment, on the one hand, and trade, transfers of technology and financial flows on the other. Since virtually all foreign direct investment and substantial shares of trade, technology transfers and (private) financial flows are undertaken by transnational corporations, frequently on an intra-firm basis, they all respond, to varying degrees, to the same strategic needs of those corporations. They are, in other words, different facets of the efforts of transnational corporations to enhance their positions in a competitive global environment, in order to ensure their growth and profitability in international markets. Transnational corporations are, therefore, the agents that integrate trade, technology transfer and financial flows for the purpose of international production in the context of the firms' strategy.

The mechanism by which the transnational corporation integrates those various elements is often through foreign direct investment; to the latter must be added means other than ownership by which transnational corporations exert control over cross-border economic activity, such as strategic alliances, foreign licensing and subcontracting. Thus, the concept of transnational corporations as integrating agents is best seen in the context of the firm's overall activities related to international production. And the considerably faster growth of foreign direct investment (as an imperfect, underestimating measure of international production) compared to that of trade and output (see table 1 and figure I) seems to suggest that international production is, in fact, assuming a leading role in

international economic relations, and that transnational corporations are increasingly important agents of international economic activity.

To the extent that transnational corporations are, indeed, assuming such a role, it can be expected that an increasing proportion of trade, technology transfers and private financial flows would be linked to international production and transnational corporations. In the area of trade, the emergence of regional core networks in several parts of the world implies that an increasing share of intra-regional trade in those areas will be controlled by transnational corporations from one or more of the three Triad members. In the area of technology transfers, the importance of transnational corporations is enhanced by the facts that the know-how required for the production of most services — which comprise the largest economic sector in all developed market economies and the majority of developing countries — can in most cases only be transferred through foreign direct investment (or certain non-equity linkages with transnational corporations) and that, more generally, the transfer of soft technology, for service and industrial operations alike, can best be achieved through foreign direct investment. Finally, to the extent that international production grows in importance, the financial flows associated with it — be they in the form of direct investment flows, indirect flows resulting from related trade and technology transactions, or flows connected with the financial activities of transnational corporations — can be expected to play a larger role in international financial transactions in general.

Thus, international transactions are increasingly dominated by transnational corporations. This trend carries important implications for the character of the world economy. One implication of such a development is that the global patterns of trade, technology transfers and private financial flows could tend to converge on the foreign-direct-investment pattern, making the latter a principal force in structuring the world economy. Another implication is that transnational corporations are increasingly important actors in the economies in many countries since, as pointed out in chapter I, foreign direct investment is a growing component of many host countries' economies, and is particularly important in developing countries.

The linkages described above — between foreign direct investment, trade, technology and financial flows — would seem to imply that transnational corporations can play a considerably important role in economic growth and development. In so far as the activities of transnational corporations con-

tribute to host countries' competitiveness, they enhance that country's overall economic performance. Foreign direct investment can stimulate economic growth to the extent that it directly increases capital formation, stimulates exports and upgrades the host country's economic performance with new technologies, organizational techniques and adaptations to market changes. Further investigation is needed to understand the conditions under which such beneficial impacts might occur, and the degree to which the current wave of foreign direct investment has actually resulted in the economic growth of host nations. But the fact that international production is increasingly a means of structuring international economic relations and of transmitting flows of trade, technology and finance, suggests that Governments would be well advised to accord the role of foreign direct investment — and the activities of transnational corporations, both inward and outward — centre stage in their national and especially international economic policies, an issue explored in chapter IV below.

Chapter IV

POLICY IMPLICATIONS

A. The growing role of foreign direct investment in the world economy

The decade of the 1990s promises to be one in which foreign direct investment will play a major role in shaping world economic development and the structure of the international economy. Since recovering from slow growth in the early 1980s, global flows of foreign direct investment have increased far more rapidly than world trade and output, reaching nearly \$200 billion in 1989, for a total world stock of \$1.5 trillion. Developing countries remain relatively marginalized in the rapid rise of global foreign-direct-investment flows: of total outflows in 1990, \$163 billion were invested in developed countries and \$30 billion in developing countries. Although flows of foreign direct investment to developing countries increased by 78 per cent in absolute terms between the periods 1980-1984 and 1985-1989, their share in total in-

flows fell from 25 per cent to 18 per cent. Furthermore, flows to developing countries are highly concentrated, with 10 developing countries accounting for three fourths of total inflows to developing countries. Although current trends indicate a strengthening of the position of certain developing countries and regions, especially in light of the emerging regional core network strategies of transnational corporations, it is unlikely that the declining share of world-wide foreign-direct-investment flows to developing countries as a group will be reversed in the near future, despite efforts by nearly all of those countries to open up their economies to foreign direct investment and liberalize their policy regimes.

The present volume has presented an analysis of the changing structure of world

foreign-direct-investment flows. The bipolar foreign-direct-investment pattern of the early 1980s had been transformed by the end of the 1980s into one dominated by the Triad, comprising the United States, the EC and Japan, which account for some 80 per cent of world-wide outward stocks and flows. Part of the reason for the emergence of a tripolar structure is that integration within the EC has reached a level such that the EC can now be properly considered as a single home region. If current trends continue, the EC could eventually surpass the United States as the most important host region for foreign direct investment; Japan, which invests more abroad than does the United States in terms of flows, could soon surpass the United States as a home country in terms of stock.

The rate of growth of foreign direct investment within the Triad has outpaced that in the rest of the world. The increasing share of intra-Triad stock reflects, in part, the growing strategic orientation of transnational corporations from the Triad towards other Triad members. Japanese transnational corporations, in particular, appear to be pursuing a

strategy to build self-contained, regionally-sustainable networks of affiliates in each of the Triad members. The low level of foreign direct investment in Japan stands out against an otherwise growing convergence of the Triad members in outward and inward foreign direct investment.

The Triad members individually also dominate foreign direct investment in most other countries. The pattern for over 30 host countries shows a clustering of those countries around a single Triad member, typically located in the same region. Trade data reveal a similar pattern of clustering around a Triad member. In the case of Japan, the regional clustering of Asian countries around Japan as a home country coincides with the building up of regional core networks by Japanese transnational corporations, geared towards gaining market share in the region itself as well as to exporting to the other two legs of the Triad. In North America, some United States transnational corporations appear to be pursuing similar, though less developed, strategies involving their Mexican affiliates.

B. The issue of governance

1. National issues

One of the trends highlighted in the present volume is the growing regionalization of the world economy. National economies are becoming increasingly linked in regional groupings, whether through initiatives at the political level, as in the case of the integration of the European Community, or through activities at the private-sector level, as in the case of regional networks of

Japanese corporations in Asia. In North America, regional integration is also a significant development, and free trade among countries is likely to be extended across the entire northern part of the continent, from Canada to Mexico, and could one day even come to include parts or all of Central and South America. As described in this report, regionalization is one of the important factors behind the recent growth of foreign direct investment and its growing role in the world economy.

Despite this trend towards integration, the individual country remains the most important arena for policy-making. International institutions have not developed to the extent that they can replace the role of national Governments in setting economic development agendas, and in structuring their policy-making frameworks accordingly. In the EC, several institutional measures, such as the development of an EC-wide competition policy and common monetary unit, represent far-reaching attempts to shift the policy arena in certain areas from the national to the regional level; however, decision-making authority over the key variables which will affect their economies in general and flows of foreign direct investment in particular still remains with national Governments.

The trend towards regionalization counterposed against the authority of individual countries to set economic policy could lead to a new set of challenges for national Governments. Regional integration implies increased competition among firms in the region, which often respond to the opening of borders by shifting their activities according to where they make the most economic sense, irrespective of national borders. It is possible that, as a result of this, economic activity in the region will eventually come to reflect the comparative advantages of member States, leading the region as a whole to be "better off" in terms of economic efficiency. The opening of regional borders to economic competition, however, may also put competitive pressures on the national policy systems that regulate economic activity in the individual countries concerned. In other words, economic competition in a region could engender competition among regulatory

regimes. For example, a country with policies of high taxation and extensive social benefits may find its fiscal base eroded, if businesses shift to neighbouring countries with lower taxes following regional integration. National policies regarding state ownership of industry are also likely to come under pressure in a regional grouping which aims to encourage free and fair competition. A whole range of policies, including industrial, environmental and social policies, may face increasing pressures to change as a result of integration with countries with different policy frameworks. Integration may thus lead not only to competition among firms, but to competition among policy systems, and national Governments are likely to find it necessary to adjust their policies to reflect the new environment.

Even where formal economic integration agreements among States are not in place, transnational corporations in many parts of the world are increasingly viewing regions, rather than individual countries, as the relevant production and market spaces; regional core networks are one expression of that emerging orientation. Whether or not they belong to a regional grouping, many Governments will increasingly need to frame their foreign-direct-investment policies in the context of not only the national, but also the regional economy. Such policies, as highlighted earlier in the present report, go beyond investment measures to include others which are likely to have a significant impact on foreign direct investment: technology and trade policies are two of the most important. Over the long term, measures taken in those areas, which can significantly affect the competitiveness of a country, are likely to have as much, if not more, impact on

the behaviour of transnational corporations than investment measures (barring, of course, measures that prohibit or severely limit inward investment altogether). Furthermore, policy frameworks will need to be more closely coordinated to reflect the interlinkages between investment, technology, trade and financial flows. In other words, a number of key policy issues and their implementation may need to be re-evaluated in light of the regional activities of transnational corporations.

2. Multilateral issues

The issues outlined above raise anew the question of governance, particularly in a multilateral context. No single country can effectively regulate the activities of transnational corporations, and the boundaries between national and international issues of governance are becoming increasingly blurred with the increasing globalization of business activities. As discussed above, the capacity of Governments to manage their economies and achieve national objectives in areas ranging from fiscal policy to environmental control is being strained by the growing importance of transnational corporations in the international economy; in fact, a number of issues can no longer be addressed through national action alone. A prime example is the depletion of the ozone layer, in which transnational corporations play a role; this is a problem which requires international action and a multilateral framework as recently adopted in the form of the Montreal Protocol. Another example arises in the area of fiscal policy, where information necessary for tax purposes often has to be obtained from abroad and may require multilateral efforts. In a period where

markets are expanding to cover regions rather than single countries, anti-trust issues and competition policies also take on an international dimension. Among developed countries, the need for policy coordination is being felt, for example, in the area of transfer pricing. Competition among countries for more foreign direct investment, if free from any rules, may lead to a "beggar-thy-neighbour" policy and detract from the bargaining power of Governments *vis-à-vis* transnational corporations. Therefore, the effective and stable governance of international economic relations requires effective international instruments to deal with the broad range of issues related to the globalization of business activity — problems that are beyond the capacity of national regimes of governance.

Regrettably, such a multilateral framework is lacking, although elements are emerging in the form of various agreements in specialized subject areas. However, attempts at coordination have been episodic and often limited to the context of regional economic blocs. This, coupled with the fact that foreign direct investment is concentrated in the Triad and a small number of developing countries, raises the possibility that foreign-direct-investment policy regimes will be increasingly determined by either bilateral negotiations among Triad members and/or by regional negotiations with one of the Triad members. Overall there is the potential danger of an emerging world characterized by powerful regional economies in which all but a handful of developing countries must remain as outsiders. Some developing countries are emerging as important strategic locations for the regional and global strategies of transnational corporations; many which are not could face the

possibility of being further marginalized in terms of foreign-direct-investment inflows. Furthermore, the trend away from a multilateral framework of governance to one in which cooperation is realized only between small groups of selected countries represents a threat to the ability of developing countries to bargain effectively for policies to improve

their position *vis-à-vis* developed countries. In the absence of a multilateral framework formulated with the participation of all members of the international community, a large number of countries run the risk of not having an effective voice in the determination of the foreign-direct-investment regime governing international economic relations.

C. Policy implications for improving investment flows to developing countries

Within a broader multilateral context, special attention needs to be given to developing countries. Despite an increase in the absolute volume of investment inflows to developing countries, the decline of their share in world-wide flows continued in the late 1980s. Considering the pivotal role that foreign direct investment plays in economic development — not only in its own right, but also because of its interlinkages with trade, technology and financial flows — there is a need to reverse the marginalization of developing countries and the resultant inequity in the international division of labour. This, in turn, points to the need for coordinated public policies by host countries, home countries and international institutions in order to remedy the existing situation.

1. Policy implications of the Triad and of interlinkages

Although an increasing share of world-wide inward foreign direct investment is being concentrated in the Triad, the sources of such investment are diversifying some-

what. As a result, developing countries are competing for a relatively smaller share of inward investment from a growing array of sources. Within the Triad, the EC has increased its role as a home country, and Japan has emerged as a significant source of outward investment, while the United States, compared to the other Triad members, has declined markedly in its importance as a home country. If, as indicated earlier, linkage to a Triad member is a significant determinant of the location of foreign direct investment, then those developing countries which are not linked to a Triad member and do not participate in a regional integration effort risk becoming marginalized in the world economy. Furthermore, if the corporate strategy to become “regional insiders” in each leg of the Triad becomes widespread, then many developing countries — as “outsiders” — may become even more peripheral. Such a situation could have important negative impacts on the structure of host economies, given the fact that transnational corporations are the integrating agents for world-wide flows of investment, trade, technology and finance, as described in chapter III.

The task of policy-making regarding foreign direct investment in a world characterized by a Triad and interlinkages will become increasingly complex for developing countries. In particular, the margin for effective policy-making utilizing traditional liberalization and incentive instruments is narrowing, though the scope for further improvement in the foreign-direct-investment framework of all developing countries has not yet been exhausted. 75/ That is because the scope for further liberalization and additional incentives diminishes as more and more of such measures are being implemented by more and more countries; in addition, the effectiveness of such measures in attracting investment becomes more limited when virtually all countries have adopted them. In light of this, it may be appropriate for developing countries to review their investment incentives and to structure them on the basis of a coordinated and realistic appraisal of their effectiveness.

At the same time, developing countries must recognize the new opportunities that are presenting themselves. They stem from the emergence of a Triad in outward investment, as opposed to the domination of the United States as a home country 10 years ago; the growing number of home countries outside of the Triad, particularly among the newly industrializing countries; and the globalization strategies of transnational corporations from the Triad, implying a continued search for new markets and production locations. But the creation of an attractive foreign-direct-investment regime alone, although necessary, is not sufficient to enable a country to take advantage of those opportunities. Additionally, measures are

needed to improve domestic economic performance in general, and, in particular, to increase demand growth and to improve infrastructure and human resources. Thus, measures to attract foreign investment will increasingly have to encompass policies beyond traditional regulatory and promotional instruments. Incentives provided on a multi-country level are also likely to prove more effective particularly if the pattern of regional investment clusters described above, and the strategies of transnational corporations to form regional core networks of affiliates, prove to be important developments in the 1990s.

In framing their foreign-direct-investment policies, developing countries need to pay special attention to the interlinkages described in chapter III. Specifically, regulatory regimes covering foreign direct investment need to be integrated, or at least coordinated, with policies that govern technology transfer, trade, and international finance, in light of the role of transnational corporations as the integrating agents for those functions (developed countries, unlike developing ones, tend not to have explicit foreign-direct-investment regimes, although the need to coordinate interrelated policies remains important). Such a change in the policy framework of developing countries implies a change not only in the regulatory environment, but also in the institutional mechanisms and organizations which develop and implement policy in the above-mentioned areas.

Given that an increasing share of global foreign direct investment is being directed to the Triad and that additional competition has emerged for investment from host countries

in Central and Eastern Europe, policy makers in developing countries should make efforts to diversify sources of inward investment. Such sources might include non-Triad developed countries, emerging home countries among the newly industrializing countries, as well as small and medium-size companies from both developed and developing countries.

While increasing investment flows is important, policy-making should not be solely focused on the quantitative aspect. Developing host countries would be well advised to undertake systematic assessments of the foreign direct investment they receive and where it can make a significant qualitative contribution and explore ways and means to enhance that contribution.

The emergence of regional networks of affiliates with a Triad member at the core of the networks appears to be accompanied by a significant amount of trade between developing-country affiliates in the networks. Intra-firm trade within those networks has been instrumental in promoting exports from host countries, particularly those which are incorporated into the networks of Japanese transnational corporations. Those networks can also strengthen regional integration among developing and developed countries, and often serve to lay the groundwork for successful initiatives in the policy sphere. In so far as foreign direct investment is driven by regional core network strategies of transnational corporations, regional integration schemes which do not include a Triad member do not seem to have succeeded in accelerating foreign-direct-investment in-

flows.^{76/} Hence Triad members as well as other developed countries, should assist developing countries in structuring regional integration arrangements in a manner that can boost investment inflows, including inflows from non-Triad home countries.

Home countries could also assist by strengthening incentives to their transnational corporations for investment in developing countries. Those incentives can take the forms of providing guarantees, risk insurance, preferential tax treatment of profits and dividends earned in developing countries, financial support for market investigations and feasibility studies and preferential market access to exports from developing countries. Many developed countries already have some schemes in those areas.^{77/} What is required is a fresh examination of the existing measures and the determined will to improve and supplement them to increase their effectiveness.

There is also a role for multilateral institutions. They can contribute towards increasing the locational advantages of developing countries by providing financial and technical assistance in such areas as improvement of infrastructure, the development of human resources and the design of promotional services. Perhaps more importantly, they can help developing countries to improve the quality of foreign direct investment obtained and to increase the gains therefrom through technical assistance in a variety of areas. A number of multilateral organizations already have programmes in those areas which need to be further supported and augmented.

2. Measures to strengthen the contribution of transnational corporations to least developed countries

In discussing policy measures to improve flows of foreign direct investment to developing countries, special attention needs to be paid to least developed countries, which receive extremely low volumes of foreign direct investment. A number of them will continue to receive marginal amounts of such investments until basic problems of human and infrastructural development are resolved. Still, there are opportunities for transnational corporations to act as catalytic agents in the development of those countries. But the realization of the full potential of those opportunities requires coordinated action by the international community at large. Some of the major elements of such a coordinated action plan are indicated below. 78/

(a) Host countries

As host countries, it is the primary responsibility of least developed countries to make their investment climate congenial to transnational corporations. Their recent efforts in that direction should be further strengthened along the following lines:

- Least developed countries should keep their foreign-direct-investment policy regimes under continuous review. Despite some major changes, there are instances of exclusion of certain sectors from foreign direct investment, restrictions on local borrowing, on purchase of shares in local companies and on remittances by transnational corporations. Each least developed country should, therefore, keep reviewing these and other
- restrictions in the light of its own economic circumstances and remove or relax them to the extent practicable and desirable. Once a suitably structured regime is put in place, frequent changes should be avoided, since the stability of the policy environment is an important consideration for transnational corporations.
- Often, although official government policies towards transnational corporations have changed, their administrative structure and practices have not. For example, 100 per cent foreign ownership may be allowed under foreign-direct-investment laws and yet minority joint ventures are preferred in practice. Such disparity between official policies and actual practices fosters confusion among prospective investors and should be avoided.
 - Transnational corporations attach a great deal of importance to an honest and efficient public administration in matters dealing with approval of investment proposals, import and export licences, provision of complementary inputs or services, such as electricity, water supply and transportation and assessment of taxes. There is scope for improvement in those areas to which least developed countries should pay greater attention.
 - Least developed countries need to adopt a more targeted and promotional approach to foreign direct investment. The existing administrative structures dealing with foreign direct investment in most least developed countries have evolved essentially out of a regulatory approach. In the present climate, least developed countries need to search out actively transnational

corporations that would have potential interest in particular countries because of their unique endowments and target promotional efforts to translate such potential interest into actual investment. For example, despite low per capita income, some least developed countries have fairly sizeable domestic markets because of large populations. Some have significant endowments of such natural resources as minerals, timber or fisheries, whereas others may be an attractive base for export of labour-intensive products and yet others may have a comparative advantage in the development of tourism. Similarly, targeted efforts should also be directed towards small and medium-size transnational corporations, as well as transnational corporations from other developing countries. An exclusive focus on large transnational corporations from developed countries may not be very fruitful.

- In an increasingly competitive environment for foreign investment capital, least developed countries should pay greater attention to the development of infrastructure, human resources and entrepreneurship which have a significant bearing on the locational choice of transnational corporations.

(b) Home countries

In view of the many constraints faced by least developed countries, the measures taken by them to attract foreign direct investment will have to be reinforced by complementary actions on the part of home countries.

- There are some disincentives for outward investment in some countries in the form of requiring prior authorization, limits on the export of investment capital to countries outside certain regions, or the requirement of deposit of a portion of the investment in non-interest bearing accounts. Where any form of restriction on outward investment exists, special relaxations should be granted for least developed countries. For instance, it can be provided that no prior authorization would be needed for investment of any size in a least developed country.
- Fiscal incentives for outward investment should also be focused on least developed countries. In particular, home countries could unilaterally offer tax credit for taxes paid by their transnational corporations in least developed countries and grant higher tax concessions for dividends and profits remitted from least developed countries.
- Financial assistance for investment is generally provided through public development finance corporations. A proportion of the resources of those organizations should be earmarked to support investment activities in least developed countries, including feasibility studies and co-financing of joint ventures.
- Home countries should strengthen measures to increase the flow of information on viable projects in least developed countries that could be of potential interest to their transnational corporations. Embassies of home countries can play a useful role in this regard.
- With regard to preferential access for exports from least developed countries,

home countries should widen product coverage, relax rules of origin and simplify documentation procedures under existing arrangements such as the generalized system of preferences, the Lomé Convention and the Caribbean Basin Initiative of the United States. Such measures could ignite transnational corporations' interest in least developed countries as an export base.

(c) Multilateral agencies

The climate for foreign direct investment depends on many factors beyond the control of national policies of least developed countries. In order to overcome the many structural bottlenecks, measures adopted by host least developed countries and home countries have to be complemented by multilateral actions.

- Least developed countries have initiated a number of reforms to attract transnational corporations. However, there is a need for a simultaneous change of perceptions on the part of transnational corporations, which have not traditionally viewed least developed countries as attractive investment sites. Multilateral institutions should play a vigorous role in changing these perceptions by organizing round tables between government officials of least developed countries, their private enterprises and executives of transnational corporations.
- A number of least developed countries are actively pursuing efforts to privatize their state-owned enterprises. International organizations should assist least developed countries in securing participation of transnational corporations within the framework of such privatization programmes and could provide co-financing for that purpose.
- International financial institutions can facilitate the participation of transnational corporations in least developed countries by designing innovative investment packages, as has been done in some African countries by such institutions as the International Finance Corporation, the Commonwealth Development Corporation and the European Investment Bank.
- The search for transnational corporations interested in investment in least developed countries is a time-consuming process and may turn out to be quite expensive. International organizations could effectively reduce the cost of the search by acting as intermediaries between least developed countries and transnational corporations.
- International organizations could assist least developed countries to set up data banks which could serve multiple purposes such as the provision of macro-economic and sectoral information of interest to transnational corporations and the collection of data on variables required by national authorities for screening and approval of investment proposals.
- Regional cooperation can help promote foreign direct investment in least developed countries by enlarging market size. International organizations could assist in strengthening existing regional arrangements or in the formation of new ones which are considered appropriate.
- Some serious thought should be given to the establishment of regional investment

centres — perhaps one in Asia and the Pacific and one in Africa. These regional centres could act as vehicles for the dissemination of information on investment opportunities in least developed countries, the establishment of contacts with interested transnational corporations, assistance to least developed countries in conducting negotiations with transnational corporations, as well as for the provision of training to least developed countries' government officials and private sector executives in basic business skills, such as accounting, management and financial administration.

- Recognizing that the benefits of foreign direct investment to host countries are significantly determined by the terms of specific agreements and that many of the least developed countries do not possess strong negotiating skills to secure the best possible terms, multilateral organizations could assist least developed countries in structuring foreign direct investment agreements, joint ventures and non-equity arrangements in various sectors.

A number of international organizations already have programmes in those areas. But the programmes should be more focused on least developed countries.

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The growing importance of foreign direct investment in the world economy, not only in its own right, but also because of its close linkages with trade, technology transfers and financial flows, is by now well established. With that perspective in mind, the international community may wish to give consideration to achieving a consensus on ways and means to attract a greater flow of foreign direct investment to developing countries and to improve its qualitative content. Since, as indicated earlier, the scope for action by individual host countries has become rather limited, the need for coordinated multilateral action by all concerned — host countries, home countries, international institutions

and transnational corporations — is all the more important.

Such action needs to take into account the interlinkages between improving foreign-direct-investment flows to developing countries and improving flows of technology, trade and finance. In fact, given the nature of those interlinkages, foreign-direct-investment policies today can no longer be formulated and implemented separately from those concerning trade and technology transfer. Initiatives being taken in those areas should therefore be increasingly coordinated with a view to maximizing the effectiveness of actions which seek to encourage the development and growth of developing countries.

Footnotes

1/ UNCTAD, *Trade and Development Report, 1989* (United Nations publication, Sales No. E.89.II.D.14), pp. 71-72; and GATT, *International Trade 89-90*, vol. I (Geneva, GATT, 1990).

2/ UNCTAD, *Trade and Development Report, 1990* (United Nations publication, Sales No. E.90.II.D.6), pp. 91-95.

3/ Foreign direct investment measures the overseas investments of transnational corporations ("parents") in foreign companies ("affiliates") which may or may not be wholly-owned by the parent. Foreign direct investment stock is the parent company's total investment in its overseas affiliates, and includes equity in the affiliate and net outstanding debts owed by the affiliate to the parent. Foreign direct investment flows are all capital transactions which take place between a parent company and its foreign affiliates in a given time period, usually a year. As such, stock is a measure of the volume of foreign direct investment at a single point of time, while flows are a measure of foreign direct investment activities which occur over a period of time. Flows may be negative due to disinvestment by the parent company.

The figure of \$1.5 trillion represents the minimum estimate by UNCTAD of the stock of world-wide foreign direct investment at book value. The figure has been derived based on an earlier estimate of the world-wide stock at book value made for 1985, to which was added cumulative flows of foreign direct investment for the years 1986 through 1989, with some valuation adjustments. Those adjustments arise mainly from the exclusion of reinvested earnings in the foreign-direct-investment statistics of some countries.

Recalculating the value of world-wide foreign-direct-investment stock at current replacement costs or market value would result in a considerably higher value. For example, the value of United States direct investment abroad in 1989 was \$373.4 billion at book value and \$804.5 billion at market value. The comparable figures for foreign direct investment in the United States in 1989 were \$400.8 billion and \$543.7 billion.

4/ DeAnne Julius, *Global Companies and Public Policy: The Growing Challenge of Foreign Direct Invest-*

ment (London, Royal Institute of International Affairs/Pinter Publishers, 1990), p. 36.

5/ United Nations, Projections and Prospective Studies Branch data base. Data for developing countries are for 1985-1988. Data for developed countries are for 1985-1989.

6/ Joint Ministerial Committee of the Boards of Governors of the Bank and the Fund on the Transfer of Real Resources to Developing Countries (Development Committee), "Role of foreign direct investment in development", 4 April 1991, mimeo.

7/ Estimates of world-wide foreign-direct-investment inflows to developing countries by the United Nations Centre on Transnational Corporations differ from those reported by the International Monetary Fund in the *Balance of Payments Statistics, Yearbook*, vol. 41, Part 2 (1990) due to: (i) inclusion of data obtained from the Organisation for Economic Co-operation and Development (OECD) for countries and territories which are not members of IMF, for example, Bermuda and Hong Kong (IMF uses its own estimates of FDI for Hong Kong, which differ from those reported by OECD). OECD data are also used to supplement IMF data for some "tax havens" and least developed countries and to replace the data reported to IMF by Saudi Arabia, which in the past had included some non-FDI flows. Data reported by OECD reflect foreign-direct-investment outflows to individual countries reported by the members of the Development Assistance Committee; (ii) inclusion of estimates for countries which report to IMF, but for which data are not available for the latest year(s). Those estimates are derived by using average annual inflows over a specified period, usually the three preceding years; (iii) inclusion of inward flows for Taiwan Province of China reported by national sources (IMF includes FDI in Taiwan Province of China in its total figure for Asia, as reported by national sources and measured as the difference between inward and outward flows. Since outward flows have greatly exceeded inward flows in recent years, the reported inward flow figure is negative.)

8/ United Nations, *World Economic Survey* (United Nations publication, Sales No. E.90.II.C.1), table I.2, p. 3.

9/ Excluded tax havens are the Bahamas, Bermuda, the Cayman Islands, the Netherlands Antilles and Panama.

10/ UNCTC estimates use data from 96 capital-importing developing countries. Net resource transfers are defined as inflows of foreign direct investment (including reinvested earnings) minus remittances on account of such investment (for example, profits, royalties and technology payments etc.).

11/ United Nations Economic Commission for Europe, *East-West Joint Ventures News*, No. 7 (February 1991).

12/ Data as of October 1990. Carl McMillan, "Foreign direct investment flows to Eastern Europe and their implications for developing countries". Paper prepared for the United Nations Committee for Development Planning (April 1991).

13/ Keith A. Rosten, "Soviet joint ventures riding on troubled waters", *The Wall Street Journal*, 7 May 1990.

14/ United Nations Economic Commission for Europe, *East-West Joint Ventures News*, No. 7 (February 1991), table 3, p. 19. Data are for 2,050 joint ventures.

15/ Results of a survey conducted by DRT International as reported by *Business Eastern Europe* (8 October 1990).

16/ UNCTC, *Foreign Direct Investment and Transnational Corporations in Services* (United Nations publication, Sales No. E.89.II.A.1), p. 30.

17/ UNCTC, *Transnational Corporations in World Development: Third Survey* (United Nations publication, Sales No. E.83.II.A.14), p. 8.

18/ The systems of industrial classification used in national accounts are based on a traditional distinction between "goods" and "services" or "manufacturing" and "service industry" and do not reflect these changes. As it turns out, however, steelmaking and other manufacturing industries are becoming service businesses. "When a new alloy is molded to a specific weight and tolerance, services account for a significant part of the value of the resulting product. Steel service centers help customers choose the steels and alloys they need, and then inspect, slit, coat, store and deliver the materials. Computer manufacturers are likewise in the service business, where a larger and larger portion of every consumer dollar goes toward customizing software and then integrating and installing systems around it ... In 1990 more than one third of [IBM's] profits came from designing software, up from 18 per cent in the mid-1980s, and more than 20 per cent came from integrating computer systems. Much of the rest was related to what it calls 'sales and support', which involves helping cus-

tomers define their data-processing needs, choose appropriate hardware and software, get it up and running, and then working out the bugs. Less than 20,000 of IBM's 400,000 employees were classified as production workers engaged in traditional manufacturing. The immensely successful IBM personal computer itself comprises a collection of services — research, design, engineering, sales, service; only 10 per cent of its purchase price is for the physical manufacture of the machine ... The pharmaceutical industry is classified under 'manufacturing', although a drug's production costs actually represent only a tiny fraction of the total costs, which mostly involve services like research and development, clinical trials, patent applications and regulatory clearances, drug detailing, and distribution". Robert R. Reich, *The Work of the Nations, Preparing Ourselves for 21st-Century Capitalism* (New York, Alfred A. Knopf, 1991), pp. 85-86.

19/ John H. Dunning, *Transnational Corporations and the Growth of Services: Some Conceptual and Theoretical Issues*, (United Nations publication, Sales No. E.89.II.A.5), p. 37.

20/ United Nations, "Impact of transnational service corporations on developing countries", Report of the Secretary-General (E/C.10/1991/6, 20 February 1991), pp. 5-6.

21/ UNCTC, *Foreign Direct Investment and Transnational Corporations in Services*, pp. 8, 20-27.

22/ Dunning, op. cit., pp. 38-39.

23/ Data for the European Community used in this comparison exclude reinvested earnings; therefore, the proportion is probably much higher.

24/ Eurostat, "Les investissements directs de la Communauté Européenne. Années 1984 à 1988" (Luxembourg, August 1990), pp. 83-90.

25/ Dunning, op. cit., p. 47.

26/ UNCTC, "Impact of...", pp. 6-7.

27/ Karl P. Sauvant, "The tradability of services", in World Bank and UNCTC, *The Uruguay Round: Services in the World Economy* (Washington, D.C. 1990), pp. 114-122; see also "Transnational corporations in services other than banking", Report of the Secretary-General (E/C.10/1989/14, 17 February 1989), pp. 38-40.

28/ For details, as well as a discussion of intellectual property rights, see UNCTC, *New Issues in the Uruguay Round of Multilateral Trade Negotiations* (United Nations publication, Sales No. E.90.II.A.15).

29/ UNCTC, *Foreign Direct Investment and Transnational Corporations in Services*, op. cit.

- 30/ "Survey of world trade", *The Economist* (22 September 1990).
- 31/ The statistics apply only to local content and export performance TRIMs. UNCTC and UNCTAD, *The Impact of Trade-related Investment Measures on Trade and Development: Theory, Evidence and Policy Implications* (New York, UNCTC and UNCTAD, 1991).
- 32/ UNCTC, "Transnational banks and debt-equity conversions" (E/C.10/1991/5).
- 33/ UNCTC, *Do Government Policies Towards Foreign Direct Investment Matter?*, UNCTC Current Studies, Series A, 1991 (forthcoming).
- 34/ The concept of a Triad in the world economy has become widespread in discussions of international corporate strategy and in descriptions of patterns of economic growth and world trade. See, for instance, Keniche Ohmae, "The Triad world view", *Journal of Business Strategy*, 7 (Spring 1987), pp. 8-19; and Sylvia Ostry, "The implications of developing trends in trade policy", *Business Economics* (January 1990) pp. 23-27.
- 35/ In 1980, the EC accounted for the dominant share of foreign-direct-investment stock in France; by 1987, the EC was dominant in France, Belgium, Italy, Portugal and Spain, and was the single largest foreign investor in the Netherlands. In terms of inward flows, the EC is the dominant investor in Germany and the Netherlands, and holds an equal share with the United States in the United Kingdom.
- 36/ Guy de Jonquieres, "Limited scope in cross-border mergers", *Financial Times*, 24 September 1990; "Supermarket Darwinism: the survival of the fittest", *Business Week* (9 July 1990).
- 37/ KPMG, *Dealwatch* (Third Quarter, 1990).
- 38/ United Nations, *National Accounts Statistics: Analysis of Main Aggregates, 1987* (United Nations publication, Sales No. 1990.XVII.2).
- 39/ "Nice view from up here", *The Economist* (24 November 1990); "US exporters that aren't American", *Business Week* (29 February 1988).
- 40/ United States, Department of Commerce, Bureau of Economic Analysis, *U.S. Direct Investment Abroad: 1982 Benchmark Survey Data* (Washington, D.C., 1985).
- 41/ Japan, Ministry of Finance.
- 42/ For a detailed analysis of shifts in Japanese foreign-direct-investment strategies in the Triad, see Michelle Gittelman and John H. Dunning, "Japanese multinationals in Europe and the United States: some comparisons and contrasts", in Michael W. Klein and Paul J. J. Welfens, eds., *Multinational Enterprises in the New Europe and Global Trade* (New York, Springer, 1991).
- 43/ Figures are for 1986. Industrial Bank of Japan, *Quarterly Survey of Japanese Finance and Industry*, 80 (Fourth Quarter, 1989).
- 44/ "World industrial review" (Special Survey), *Financial Times*, 8 January 1990.
- 45/ Industrial Bank of Japan, op. cit.
- 46/ Carl Goldstein, "Steering committee", *Far Eastern Economic Review* (15 February 1990), p. 67.
- 47/ Raymond J. Mataloni, "U.S. multinational companies: operations in 1988", *Survey of Current Business*, 70 (June 1990), pp. 31-44.
- 48/ "Japan in East Asia: a boom pays off", *International Herald Tribune*, 30 May 1990.
- 49/ Rob Steven, "Japan's MNCs: the new power in South-East Asia", *Multinational Monitor* (November 1989).
- 50/ Goldstein, op. cit., p. 67.
- 51/ "Thai economy booming, thanks to the Japanese", *The New York Times*, 10 May 1990.
- 52/ Carl McMillan, "Foreign direct investment flows to Eastern Europe and their implications for developing countries", paper prepared for the United Nations Committee for Development Planning (April 1991), mimeo, table 4, p. 13. Data for Czechoslovakia and the USSR are as of October 1990; for Hungary and Poland as of January 1990.
- 53/ "Hong Kong: Asia its oyster", *The Economist* (8 December 1990).
- 54/ This concept is explored further in GATT, *International Trade, 89-90*, op. cit.
- 55/ UNCTC, *Transnational Corporations in World Development: Trends and Prospects* (United Nations publication, Sales No. E.88.II.A.7), p. 97.
- 56/ If transactions between United States affiliates of foreign transnational corporations and affiliates of the same corporations operating in third countries were included, the percentage of United States imports accounted for by intra-firm transactions would rise by approximately 1.5 percentage points, and the percentage of United States exports accounted for by intra-firm transactions would rise by approximately 1 percentage point. This is based upon data for 1987 and 1988, which are not available for earlier years.
- 57/ UNCTC, *Transnational Corporations in World Development: Trends and Prospects*, table VI.3.
- 58/ UNCTAD, *Trade and Development Report, 1990*, p. 95.

59/ Magnus Blomström, *Transnational Corporations and Manufacturing Exports from Developing Countries* (United Nations publication, Sales No. E.90.II.A.21). See also UNCTAD, *Trade and Development Report, 1990*, pp. 91-96.

60/ Raymond J. Mataloni, "U.S. multinational companies: operations in 1988", *Survey of Current Business*, table 12; Obie G. Wichard, "U.S. multinational companies: operations in 1987", *Survey of Current Business*, 69 (June 1989), table 12.

61/ GATT, *International Trade 89-90*, p. 28.

62/ See, for example, United Nations Centre on Transnational Corporations, *Transnational Corporations in the Transfer of New and Emerging Technologies to Developing Countries*, (United Nations publication, Sales No. E.90.II.A.20).

63/ For a general discussion of strategic alliances, see John H. Dunning, "The new style multinationals — circa the late 1980s and early 1990s", in *Explaining International Production* (London, Unwyn Hyman, 1988). See also, UNCTC, *Transnational Corporations in World Development: Trends and Prospects*, chap. IV.

64/ Kan H. Young and Charles E. Steigerwald, "Is foreign investment in the U. S. transferring U. S. technology abroad?" *Business Economics*, 25 (October 1990), table 2. See also, Kan H. Young and Charles E. Steigerwald, "Technology transfer and foreign direct investment in the United States", Office of Business Analysis, U. S. Department of Commerce, 15 November 1989, mimeo.

65/ OECD, *Science and Technology Indicators Report No. 3: R&D, Production and Diffusion of Technology* (Paris, Organisation for Economic Co-operation and Development, 1989), p. 37.

66/ UNCTC, *Transnational Corporations in World Development: Trends and Prospects*, table XI.1.

67/ United Nations Conference on Trade and Development, "Transfer and development of technology in a changing world environment: the challenges of the 1990s", TD/B/C.6/153, 25 January 1991, table 1.

68/ Magnus Blomström, "Host country benefits of foreign investment", Cambridge, Mass., National Bureau of Economic Research, Working Paper No. 3615, February 1991, mimeo.

69/ UNCTAD, "Transfer and development ...", table 2.

70/ UNCTC estimate for 96 capital-importing developing countries based on world-debt-tables tape and International Monetary Fund balance-of-payments tape.

71/ UNCTAD, "Transfer and development ...", p. 5.

72/ Shafiqul Islam, ed., *Yen for Development: Japanese Foreign Aid and the Politics of Burden-Sharing* (New York, Council on Foreign Relations, 1991); Edward J. Lincoln, "Japan's role in Asia-Pacific cooperation: dimensions, prospects, and problems", *Journal of Northeast Asian Studies*, 4 (1989), pp. 5-23; Bernard Wysocki Jr., "Japan plots development of other economies in Asia through aid, investment programs", *Asian Wall Street Journal* (27 August 1990).

73/ Kenneth P. Jameson, "Dollar bloc dependency in Latin America: beyond Bretton Woods", *International Studies Quarterly*, 34 (December 1990), pp. 519-541.

74/ See, for example, "The increasing international role of the Japanese yen", *IMF Survey* (1 April 1991).

75/ For an elaboration of this point, see "Ongoing and future research: the determinants of foreign direct investment and their policy implications", E/C.10/1991/7, 20 February 1991.

76/ See UNCTC, *Regional Economic Integration and Transnational Corporations in the 1990s: Europe 1992, North America, and Developing Countries* (United Nations publication, Sales No. E.90.II.A.14), pp. 34-41.

77/ UNCTC, *Foreign Direct Investment, Debt and Home Country Policies* (United Nations publication, Sales No. E.90.II.A.16), pp. 26-36.

78/ For more details, see UNCTC, "Role of transnational corporations in the least developed countries", presented at the Second United Nations Conference on Least Developed Countries held in Paris in September 1990.

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