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Transnational Corporations as Engines of Growth



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Chapter VIII

TRANSNATIONAL CORPORATIONS, TRADE AND GROWTH

The preceding three chapters examined the role of TNCs in economic growth through an assessment of their contribution to the supply-side determinants of growth. In addition, the rate of growth is influenced by international trade. Though trade is not a factor input such as capital and labour, it has a significant bearing on economic growth because trade provides opportunities to expand and improve the production of goods and services. Accordingly, the impact of TNCs on growth through their role in international trade is addressed in this chapter.¹ This role is crucial since the growth of international production has made TNCs influential in terms of determining the volume, direction and composition of a substantial and increasing proportion of international trade.

A. The relationship between trade and growth

The conventional view of the relationship between trade and growth suggests that trade contributes to economic growth through its beneficial impact on resource allocation resulting from specialization. Trade also helps increase such inputs to growth as natural resources, capital goods and technology by exchanging those goods and services that a country can produce efficiently (that is, at a relatively lower cost) for others which the country either cannot produce, or can do so only at a relatively high cost.

In addition to increasing specialization, expanding the efficiency-raising benefits of improved resource allocation and providing access to critical inputs, trade (and particularly exports) also induces growth, by offering greater opportunities for economies of scale owing to an enlargement of the effective market and greater capacity utilization due to the addition of external demand. Besides, the competition faced in international markets for exports and in home markets through imports provides incentives for fostering more rapid technological change and better management in both tradable and non-tradable sectors, thus raising overall productivity and growth.

Despite the association between trade and growth, the causal relationship between the two is complex. Trade has been regarded by some as an engine of growth and, by others, as a handmaiden of growth.² In the engine-of-growth argument, trade was regarded as being a major source or having a dominant role in the growth of countries in the nineteenth century, owing to favourable demand conditions. It was "the tremendous expansion of Western Europe's, and especially Great Britain's demand ... for foodstuffs and raw materials" that provided the "basic inducement that caused them [especially the United States, Canada, Argentina and Australia] to develop. Trade in the nineteenth century... was above all an engine of growth".³ However, trade as an engine of growth through external demand could not explain adequately the growth of all areas in the nineteenth century, nor differentiate between the growth of successful from that of unsuccessful countries. Those considerations gave rise to the view that trade expansion is a handmaiden of growth, rather than an autonomous engine of growth. In that view, trade and capital movements in their direct impact are supplementary to other factors that determine growth, with the mainsprings of growth being internal and based on the supply-side factors of growth: natural resources, human resources, the stock of capital goods and technology, as well as the system of social and economic organization. The same forces that stimulate a high growth of output (increasing technological capability, improving educational standards, the rise of local entrepreneurship and so on) also promote a faster growth of exports through a greater competitiveness of locally produced goods and services in world markets. Higher growth of exports, in turn, permits a higher growth of imports for such purposes as procuring raw materials and capital equipment that sustain growth. If the growth of international trade were curtailed under such circumstances, this would reduce the rate of growth of production. A slower growth of exports would reduce the growth in demand for domestically produced goods and also curtail the procurement of essential inputs to domestic production, both of which retard growth.

Whether or not it has acted as an engine or a handmaiden, it is clear that trade has played a critical role in world economic growth and integration in previous decades, particularly the 1950s and 1960s, when world trade in manufactured products grew in real terms at an annual average rate of 9 per cent, while world manufactured output rose at 7 per cent.⁴ Experiences of several individual countries also underline the association between trade and growth, particularly between trade in manufactured products and growth in manufacturing output. For instance, the Asian newly industrializing economies -- Hong Kong, Republic of Korea, Singapore and Taiwan Province of China -- increased their shares of world trade in manufactured products between 1973 and 1988 from 4 per cent to 10 per cent. This matched their faster growth of manufacturing output, rising to 10 per cent per annum, between 1970 and 1989, in comparison with 3 per cent in the United States and just 2 per cent in the European Community.⁵

Numerous other empirical studies basically came to a similar conclusion, namely, that developing countries with higher than average export growth have also tended to experience higher than average growth in their output.⁶ Exports are thus seen as a causal factor in growth. Several other studies, while broadly supporting the positive role of exports in fostering growth, have also pointed out that the direction of causality may run both ways.⁷ In that view, exports and output growth reinforce each other. Hence, in those cases, trade tends to result from—but also to reinforce—internally generated growth.

While the growth-promoting effects of trade are often associated with exports, imports, too, can contribute to growth by relieving domestic supply constraints regarding goods and services, as well as technology. Although many developing countries have successfully built a capacity to produce non-durable consumer goods and some services, the domestic production of durable consumer, intermediate and capital goods and more complex services has not always proved feasible or efficient because of, among other things, limited opportunities for economies of scale due to the small size of domestic markets, inadequate resources and information, and a paucity of local expertise. In the absence of a substantial efficient domestic capacity to produce intermediate and capital goods as well as some producer services, imports are often the primary source of the machinery, equipment, services and other items essential to investment programmes and growth in many developing countries.⁸ A number of empirical studies have, in fact, concluded that imports are a significant factor in explaining the growth performance of developing countries.⁹ The economic rationale behind such findings is, precisely, that imports of intermediate and capital goods are crucial for domestic investment and output growth.

Finally, participation in international trade generates various externalities which contribute to growth. Access to the world's commercial knowledge base is one of the most important benefits in this regard. Trade plays an important part in the international exchange of information, as trade in tangible commodities facilitates the exchange of intangible assets necessary for growth.¹⁰ A larger volume of international trade encourages contacts with foreigners leading to the exchange of information necessary to acquire novel perspectives on technical problems. Imported intermediate and capital goods enable local firms to inspect and use those goods, as well as to undertake reverse engineering, which eventually results in learning to produce some of those goods efficiently. The export of local goods may induce learning to effect improvements in manufacturing processes to meet the higher standards of foreign markets.¹¹ Similarly, competition in the domestic market from imports may act as an incentive for local enterprises to introduce technological improvements and upgrade the quality of their products, while the implementation of such improvements is facilitated by technology imports.

While, conceptually, those effects are clear, empirical evidence on the impact of trade on growth-promoting externalities is relatively scanty, in part because it is hard to measure such impact. Still, a number of studies have identified a positive correlation between export expansion and growth of factor productivity;¹² and, in the case of the Republic of Korea, it has been observed that export imperatives necessitated improvements in product standards and acquisition of greater expertise in production and marketing techniques.¹³

Overall, therefore, it is well established that for many developing countries, trade is an important element in their integration into the international economy which, in turn, helps stimulate their economic

growth process. In the light of the above discussion, the principal mechanisms through which trade promotes growth can be summed up as follows:

- The growth of exports permits economies of scale and a degree of specialization that allow levels of production that could not be sustained by a country's domestic demand, thus enabling higher growth in the economy as a whole.
- The growth of imports alleviates potential growth-retarding supply shortages, especially of goods and services used in production, and leads to a slower rate of increase in the costs of goods, raw materials, capital equipment and services, thereby permitting an increase in locally-generated reinvested profits.
- Participation in international trade generates externalities, particularly with regard to learning, that can raise the efficiency of production and stimulate aggregate economic growth.

B. The impact of transnational corporations

International trade and FDI have become closely inter-linked, as shown by the increasing involvement of TNCs in international trade, a significant portion of which consists of intra-firm transactions. United States data are indicative for this: some 80 per cent of the country's external trade (exports plus imports) was undertaken by TNCs in 1989, including parent companies in the United States, foreign affiliates of United States TNCs and United States affiliates of foreign TNCs; one third of exports and over two fifths of imports were intra-firm transactions. In the case of Japan and the United Kingdom, intra-firm trade accounted for one third of the total value of their international trade in the early 1980s.¹⁴ It is partly owing to the important interrelationships between FDI and trade, through both arm's-length and intra-firm transactions, that a close similarity has been found to exist between world-wide patterns in trade and FDI.¹⁵ Given the important role of TNCs in international trade, they are able to exert a significant impact on the growth of developing countries, whether through exports, imports or externalities. These are analysed in the subsequent sections.

1. Exports

The expansion of the activities of TNCs, involving the establishment of world-wide affiliate networks, has created a considerable potential for those firms to contribute to the growth of exports from developing countries. The role of TNCs in growth through exports is examined here in terms of the share of foreign affiliates in total manufactured exports from developing countries, as well as their contribution to a change in composition in favour of those goods and services that offer greater potential for growth. Also examined are the contributions of TNCs in the growth of exports through non-equity links (which have been increasingly relevant in the case of South-East Asian countries) and the role of transnational trading companies. Finally, the role of TNCs in the export of services is discussed.

(a) Relative importance in exports of developing countries

The combined relative importance of the foreign affiliates of TNCs from the United States and Japan in the export of manufactured products from developing countries declined from 12 per cent in 1982 to 9 per cent in 1989 (table VIII.1),¹⁶ despite the fact that the absolute value of their manufactured exports increased considerably. For Latin America and Africa, however, the export shares of United States affiliates increased from 11 per cent to 14 per cent in the former and from less than 2 per cent to more than 3 per cent in the latter, indicating that United States TNCs have been a positive element in the growth of exports of manufactured products from those regions. In contrast, the combined export share of United States and Japanese affiliates in Asia declined from, collectively, 13 per cent to 8 per cent over the same period. That decline is explained by the relatively faster growth of exports by domestic firms operating under national policies that place emphasis on greater outward orientation and economic growth

Table VIII.1. Manufactured exports by United States majority-owned and Japanese foreign affiliates in developing countries, 1982 and 1989

Country group	Total manufactured exports by developing countries (Millions of dollars)	United States affiliates (Percentage)		Japanese affiliates ^a (Percentage)	
		Share	Export propensity ^b	Share	Export propensity ^b
All developing countries					
1982	166 581	6.7	22.0	4.8	32.8
1989	451 986	5.7	33.1	2.9	39.2
Africa					
1982	10 579	1.6 ^c	..	0.2	8.2
1989	16 809	3.4	..	0.2	15.2
Asia and the Pacific					
1982	94 314	6.3 ^c	60.3	6.3	33.6
1989	332 120	4.2	56.2	3.5	40.2
Latin America and the Caribbean					
1982	44 814	10.5	11.9	2.2	18.6
1989	71 315	14.3	21.4	1.1	23.9

Source: Transnational Corporations and Management Division, based on data reported in United Nations, Statistical Office, *Monthly Bulletin of Statistics*, various issues; United States, Department of Commerce, *U.S. Direct Investment Abroad: 1982 Benchmark Survey Data* (Washington, D.C., United States Government Printing Office, 1985); *U.S. Direct Investment Abroad: 1989 Benchmark Survey, Preliminary Results* (Washington, D.C., United States Government Printing Office, 1991); Japan, Ministry of International Trade and Industry, *Wagakuni Kigyo no Kaigai Jigyo Katsudo (Survey of the Overseas Activities of Japanese Companies) 18th and 19th Surveys* (Tokyo, Okurasho Insatsu-kyoku, March 1990), and *12th and 13th Surveys* (Tokyo, Toyo Hoki Shuppan, September 1984).

a Figures cover April 1982 - March 1983 and April 1988-March 1989, and represent only a sample of affiliates in developing countries and hence may understate total exports by all Japanese affiliates.

b Export propensity is defined as the proportion of export sales in total sales by affiliates.

c Part of the data are suppressed by the source to avoid disclosure.

through export expansion; indeed, total manufactured exports of this region grew by more than threefold, much above the growth achieved by the other regions. Nevertheless, the role of TNCs through non-equity links may still be partly responsible for the faster growth of exports of domestic firms, as discussed later. Furthermore, it should be noted that the export propensity of TNCs has been generally increasing over the decade of 1980s, and has reached particularly high levels in Asia. In that region, United States TNCs had already reached a very high level of exports by the early 1980s (with over half of their sales being exported); they did not expand their share during that decade, partly because of strong domestic demand. In contrast, Japanese foreign affiliates in Asia rapidly increased their export orientation to about 40 per cent of their sales.

Data from individual host developing countries (annex table 9) confirm that, by the mid- and late 1980s, foreign affiliates have come to account for a significant proportion of exports, particularly in the manufacturing sector. Although the growth of exports by domestic firms in Asia has been significant, the role of foreign affiliates in exports is particularly important in some Asian countries. In Malaysia, the Philippines and Sri Lanka, for example, foreign affiliates accounted for over 50 per cent of manufactured exports over the past decade; in Singapore, their share was almost 90 per cent.¹⁷ In addition, a recent survey of 777 firms in Thailand (which accounted for nearly one third of the country's total manufactured exports in 1990) found that nearly three fourths of their exports were undertaken by foreign affiliates and joint ventures.¹⁸ Similarly, in Mexico and Paraguay, foreign affiliates accounted for 58 per cent and 46 per cent of total manufactured exports, respectively, in the late 1980s. For many developing countries, furthermore, the data show that the role of foreign affiliates in exports has not only been significant, but has also been increasing in importance since the late 1970s and early 1980s. This may be attributed to the fact that, in those countries, foreign firms have had higher export propensities than local firms, even controlling for industry-specific characteristics.¹⁹

(b) Structural change

The extraction and export of natural resources were the traditional areas of FDI in developing countries. They remain important in a number of resource-rich developing countries; in some cases, furthermore, TNCs played an active role in building processing facilities in host countries, especially where host country policies required that foreign firms engage in more local value-added activities. However, the relative importance of the role of TNCs in resource-extractive and resource-processing industries in developing countries has declined over the past two decades. Several reasons account for this: nationalisations leading to the withdrawal of TNCs from directly-owned production activities; tariffs on processed products in export markets; the often incremental nature of investment in processing operations that favour existing sites; lack of appropriate infrastructure; and the growth of local entrepreneurial capabilities.²⁰ Nevertheless, the role of TNCs in exports of natural resources or other primary commodities remains important, with their control of distribution systems and product branding; such is the case, for example, in the banana industry.²¹

The participation of TNCs in manufactured exports from developing countries, however, has become much more significant; in some cases, their activities have accelerated the pace at which shifts in competitive advantage have led to a changing pattern of exports. In particular, foreign affiliates have been in the forefront of generating shifts in the export composition of host countries towards technologically advanced products. Thus, developing-country locations account for a substantial share of the world exports of manufactured products by United States majority-owned foreign affiliates in such dynamic and technologically complex industries as electrical and electronic equipment and, to a lesser extent, non-electrical machinery, chemicals and other transport equipment (table VIII.2). Production by affiliates in some of these industries is often vertically integrated across countries, and there is wide scope for the relocation of many labour-intensive processes and components to developing countries. That has been the case in the production of automobile parts, electrical appliances and components and some machine tools and parts.

The share of developing countries has been most significant in electrical and electronic equipment, accounting for over one third of world exports of manufactured products by those affiliates in 1989. The Asian newly industrializing economies, in particular, have been important sites for the relocation of branches of the electrical and electronic equipment industry from the United States since the early 1970s. By the late 1980s, however, the relative share of Asia in world exports of electrical and electronic equipment by United States majority-owned foreign affiliates declined, and that of Latin America rose.

Similarly, limited evidence on exports of foreign affiliates of Japanese TNCs operating in Asia and Latin America during the past decade shows that those firms also play an important role in contributing to the growth of exports of machinery and transport equipment from these countries (table VIII.3). In both of those regions, the share of textile products in their total manufactured exports has dramatically declined; while the share of electrical and electronic products, particularly in Asia, increased significantly in importance from 39 per cent in 1980 to over 60 per cent in 1989. As with United States TNCs, this reflects, among other things, the strategies of Japanese TNCs to relocate to developing countries labour intensive processes and components in which Japan has no longer a comparative advantage.

Those data suggest that, under certain circumstances, foreign affiliates can contribute to a change in the composition of exports in favour of more capital- and technology-intensive products. Data on the composition of manufactured exports and inward FDI for six developing countries lend further support to that relationship (table VIII.4). In most of those countries, the increasing share of capital- and technology-intensive manufactured products in total manufactured exports between 1970 and the late 1980s has been accompanied by a rising share of inward FDI in those industries.

(c) *Non-equity links*

Apart from the role played by affiliates, TNCs also contribute to the growth of exports from developing countries through a variety of non-equity arrangements between them and producers in developing countries. By providing vital links to final buyers, those arrangements with local suppliers have been influential in expanding the volume of manufactured exports of a number of developing

Table VIII.2. Share of developing economies in world exports of manufactures of United States majority-owned foreign affiliates 1977, 1982 and 1989 (Percentage)

Year	Total manufacturing	Foods	Chemicals	Metals	Machinery		Transport equipment	Other manufacturing
					Non-electrical	Electrical		
All developing economies								
1977	9.2	21.5	5.5	14.6	4.1	37.7	2.2	7.1
1982	12.2	16.8	7.5	15.4	7.4	49.9	3.7	8.2
1989	5.2	..	..	..	..	36.3	..	..
Africa								
1977	..	1.1	0.14	..	0	0.08	0	0.05
1982	..	..	0.02	..	0	..	0	..
1989	..	..	..	..	..	0.2	0	..
Asia and Pacific								
1977	..	5.5	..	..	1.6	..	..	3.6
1982	..	..	1.1	..	..	43.6	0.95	2.3
1989	5.0	..	..	..	..	23.5	..	..
Asian newly-industrializing economies^a								
1977	2.5 ^b	..	..	..	..	24.0 ^c	..	..
1982	4.1 ^c	0.2	0.7	0.2 ^d	3.2 ^e	24.7 ^c	0.8 ^e	0.8 ^d
1989	3.4 ^c	..	..	..	5.9 ^c	13.9 ^c	..	..
Latin America and the Caribbean								
1977	3.9	14.9	3.5	9.0	2.4	5.4	..	..
1982	5.1	13.8	5.9	9.2	3.7	5.9	2.7	5.2
1989	11.3	..	..	14.2	6.6	12.0	10.6	11.7

Source: Transnational Corporations and Management Division, based on data provided in United States, Department of Commerce, *U.S. Direct Investment Abroad, 1977* (Washington, D.C., United States Government Printing Office, 1981); *U.S. Direct Investment Abroad: 1982 Benchmark Survey Data* (Washington, D.C., United States Government Printing Office, 1985); *U.S. Direct Investment Abroad: 1989 Benchmark Survey, Preliminary Results* (Washington, D.C., United States Government Printing Office, 1991).

a Hong Kong, the Republic of Korea, Singapore and Taiwan Province of China.

b Excluding Hong Kong.

c Excluding some data on the Republic of Korea.

d Excluding some data on Taiwan Province of China and Hong Kong.

e Excluding some data on Taiwan Province of China.

countries, particularly in South-East Asia. The importance of non-equity modalities in fostering export growth may increase as domestic manufacturers in developing countries acquire greater capabilities and can be relied upon to meet export specifications of foreign-based TNCs. However, no systematic data are available to assess the role of TNCs in the promotion of exports from developing countries through non-equity links. The following discussion draws, therefore, on selected case studies.

A major form of non-equity relationship is subcontracting. Several studies have shown that subcontracting arrangements with TNCs have been significant in the exports of garments from Hong Kong, Singapore, Thailand and Taiwan Province of China; and of bicycles and footwear from Taiwan Province of China and the Republic of Korea.²² By contrast, until recently, TNC-related subcontracting arrangements have been less significant in the Latin American

region, whose trade and investment policies were more inward-looking. However, the *maquiladora* (in-bond assembly plants) programme that was established by Mexico in 1985 has fostered subcontracting arrangements, particularly in the apparel industry.²³ Subcontracting arrangements also played a significant role in exports from Colombia where, during the period 1986-1990, the most rapid growth of exports was in such industries as apparel (53 per cent), footwear (34 per cent) and other leather products (25 per cent)—precisely the industries in which subcontracting was most prevalent.²⁴ In Morocco, subcontracting constitutes about 20 to 25 per cent of total exports.²⁵ The initial stages of subcontracting arrangements usually concentrate on low value-added components of export products. That changes, however, in many cases over time. For instance, in the shoe industry of Croatia and Slovenia, domestic firms have been able to increase the local material and value-added content of their subcontracting exports to such firms as Puma, Adidas, Bally and Salamander.²⁶

Several developing countries have also been able to export relatively more sophisticated products through subcontracting. For example, several local firms in the Philippines and the Republic of Korea undertake subcontracting work for TNCs in the semi-conductor industry.²⁷ A large domestic firm in Thailand is supplying computer parts and is assembling hard disks for IBM. China has also been able to

Table VIII.3. Manufactured exports of Japanese affiliates in Asia and Latin America^a
(Percentage of total manufacturing)

Area and year	Textiles	Machinery		Transport equipment
		Non-electrical	Electrical	
Asia and the Pacific				
1980	18.6	5.0	39.1	2.7
1989	4.6	5.6	61.0	4.4
Latin America and the Caribbean				
1980	13.4	1.4	3.3	0.2
1989	6.7	1.0	4.1	0.9

Source: Transnational Corporations and Management Division, based on Japan, Ministry of International Trade and Industry, *Wagakuni Kigyo no Kaigai Jigyo Katsudo (Survey of the Overseas Activities of Japanese Companies) 18th and 19th Surveys* (Tokyo, Okurasho Insatsu-kyoku, March 1990), and *10th and 11th Surveys* (Tokyo, Toyo Hoki Shuppan, 1983).

^a Figures cover April 1979 - March 1980 and April 1988 - March 1989, and represent only a sample of foreign affiliates of Japanese TNCs that responded to the survey. In 1980, 32 per cent of the number of firms included in the survey responded, and in 1989, 47 per cent.

export some aircraft components under subcontracting arrangements with such companies as Boeing, McDonnell Douglas and Short Brothers;²⁸ and, for quite some time, the Republic of Korea has supplied high quality aircraft components to TNCs in the aviation industry.²⁹

In sum, the evidence suggests that non-equity links between TNCs and local enterprises, especially in Asia, play a significant role in the growth of exports and, hence, economic growth. The key assets that TNCs provide in this case are access to markets, product specifications and quality standards.

(d) The role of trading companies

Subcontracting and other forms of non-equity arrangements are of particular importance for trading companies which, given their role in world trade, deserve special attention. Trading TNCs can help exports of developing countries by providing marketing services and access to international distribution networks. In this function, trading affiliates typically do not directly produce goods and services, but rather organize a part of the exports of host economies. The importance of this function stems from the fact that many developing countries may have a comparative advantage in manufacturing certain products, but lack a comparative advantage in marketing those products abroad. Trading TNCs can enable developing countries to overcome marketing barriers in the form of product design, quality standards, packaging, presentation and access to consumers. They may also directly distribute goods purchased from developing countries manufacturers through their wholesaling or retailing networks and provide after-sales service and brand-name promotion.³⁰

The trading function of TNCs in host developing countries has undergone a significant transformation. The activities of many TNCs, including their trading affiliates, in the primary sector of developing countries were phased out as a result of host Government intervention and the increasing competitiveness of private indigenous commodity traders in more advanced developing countries. As a result, the role of TNCs, including trading affiliates in the primary sector, declined, and shifted largely to the manufacturing sector where they perform a variety of functions, particularly in the initial stages of export-oriented manufacturing industries in developing countries.³¹ Data for the United States show this shift (table VIII.5). The role of trading affiliates in total non-petroleum affiliates' exports from developing

Table VIII.4. Share of capital-and technology-intensive manufacturing industries^a in total manufacturing in selected developing countries, 1970, 1980 and 1988
(Percentage)

	1970		1980		1988	
	Exports	Inward FDI	Exports	Inward FDI	Exports	Inward FDI
Brazil	13.7	36.0	28.1	45.4	23.9	44.9
Korea,						
Republic of	26.4	36.0	32.4	38.8	47.4	57.9
Malaysia	6.9	--	27.8	--	47.3	20.8
Mexico	24.4	36.5	33.1	37.5	52.2	--
Thailand	8.9	16.2	18.3	36.2	25.7	48.4
Singapore	26.8	28.0	43.9	47.6	58.9	51.4

Source: Transnational Corporations and Management Division, based on data provided in UNCTC, *World Investment Directory* (New York, United Nations, 1992), and United Nations trade tapes.

a Defined as comprising mechanical equipment, electrical and electronic equipment, motor vehicles and other transport equipment.

countries diminished between 1977 and 1988, but remained quite significant; they accounted for almost one quarter of total exports of United States majority-owned affiliates from developing countries in 1989. In contrast, about 90 per cent (\$89 billion) of exports by affiliates of Japanese TNCs in developed countries and 54 per cent (\$25 billion) in developing countries were handled by Japanese trading affiliates in fiscal year 1989.³² To a certain extent, that reflects the different pattern of industrial organization in Japan, where trading firms in general play a more important role.

Not all trading affiliates are established by trading TNCs. Indeed, on a global basis, the majority of them are probably affiliates of industrial firms. This is certainly the case for the United States. Of the 3,986 trading affiliates of United States TNCs world-wide in 1989, only 691 were established by 191 parent trading companies. In terms of assets, non-trading parent firms owned about 80 per cent of trading affiliates; for developing countries, that percentage was 65 per cent.³³ In terms of absolute numbers, Japanese manufacturing TNCs established more trading affiliates (1,058) than trading TNCs (910) by March 1990, making the imbalance considerably less striking than in the case of the United States;³⁴ in developing countries, in fact, Japanese trading TNCs established more trading affiliates (381) than did manufacturing TNCs (248), indicating a more important role of Japanese trading TNCs in those countries.

The most remarkable among the Japanese trading companies are the *sogo shosha*. Those firms are not only large in size (as indicated by the fact that the world's five largest companies in terms of sales in 1991 were all *sogo shosha*³⁵), but they are also highly sophis-

Table VIII.5. The role of trading affiliates of United States transnational corporations in exports of United States majority-owned foreign affiliates from host countries, 1977, 1982, 1988 and 1989

Origin of exports and year	Total exports by all affiliates (Billions of dollars)	Share of trading affiliates in total exports			Share of other trading affiliates in non-petroleum exports
		All trading affiliates	Petroleum trading affiliates ^a	Other trading affiliates	
All host countries					
1977	194	33	19	14	28
1982	252	39	20	19	30
1988	322	28	9	19	23
1989	318	25	6	19	22
Host developing countries					
1977	92	...	...	5	35
1982	84	...	...	7	24
1988	65	...	...	15 ^b	23
1989	68	...	...	17 ^b	24

Source: Transnational Corporations and Management Division, based on data contained in United States, Department of Commerce, *U.S. Direct Investment Abroad, 1977* (Washington, D.C., United States Government Printing Office, 1981); *U.S. Direct Investment Abroad: 1982 Benchmark Survey Data* (Washington, D.C., United States Government Printing Office, 1985); *U.S. Direct Investment Abroad: Operations of U.S. Parents and their Foreign Affiliates* (Washington, D.C., United States Government Printing Office, 1991).

a In the case of the United States, petroleum trading affiliates account for the overwhelming share of exports by trading affiliates in the primary sector.

b Including Israel.

ticated organizations involved in a broad spectrum of commercial activities world-wide. Through their large-scale communications networks, *sogo shosha* have access to and provide a wealth of information, expertise and contacts to their clients. In addition to assisting in marketing and distribution, those firms extend financial support by way of providing low interest-rate loans required for trade expansion, sometimes linking loan payment schedules to a plant's exports. The nine largest *sogo shosha* had, in 1990, more than 3,000 foreign affiliates, of which 55 per cent were located in developing countries. By March 1991, FDI by those firms amounted to \$19 billion,³⁶ accounting for 6 per cent of Japanese FDI stock, of which a large part is export-oriented in nature. Some examples of the role of those firms in the promotion of exports from developing countries are provided below:³⁷

- In Indonesia, a *sogo shosha* entered into the world's largest liquid natural gas (LNG) project with Pertamina and two United States oil and gas companies. This project involves a trading agreement to export nine million tons of LNG to Japan every year. The *sogo shosha* arranged financing of \$4 billion and organized a team of engineering, construction and equipment companies to complete the project. In China, another *sogo shosha* was involved in the development of a state farm, Hong He, a part of whose products are exported to Japan.
- There are also examples of FDI by *sogo shosha* in the manufacturing sector that facilitates exports not only to Japan, but also to third countries. Marubeni Corporation and Nissho Iwai Corporation both financed the establishment of a \$150 million methanol plant in Chile in 1985, whose products are solely exported to the United States. P.T. Kanebo Tomen Sandang Synthetic Mills, established in Indonesia by Tomen Corporation and Kanebo, Ltd., is increasing exports of synthetic fibre to the United States and Hong Kong. CPC-Cia. Petroquimica Camacari, a vinyl chloride maker, set up by Nissho Iwai Corporation in Brazil, began to export to third countries products amounting to \$14 million in 1987. Similarly, Mados-Citoh-Daiken Sdn. Bhd., an affiliate of C. Itoh & Co. Ltd. in Malaysia, is exporting wood products to Japan through the network of the *sogo shosha*.

Since third-country transactions by *sogo shosha* amounted to \$144 billion in 1988 (or 5-6 per cent of world trade),³⁸ developing countries need to pay special attention to the role of foreign affiliates of *sogo shosha* in their economies as promoters of exports world-wide.

In conclusion, the important role of TNCs in the exports from developing countries is not only reflected in the production, distribution and marketing activities of manufacturing affiliates and their parents (discussed earlier), but also in the activities of independent transnational trading companies, which include, in addition to the Japanese trading companies, agency houses, commodity traders, retailers and buying agents. During the mid-1980s, those independent trading companies handled approximately 20 per cent of global exports and imports.³⁹ While the role of trading TNCs dealing with natural resources (particularly petroleum) has become less important, that of trading affiliates dealing with manufactured products remains important.⁴⁰

(e) The export of services

Since most services are non-tradable by nature, total world trade in services is much smaller than trade in goods, amounting to only one-quarter of the latter.⁴¹ Foreign direct investment is, therefore, the predominant mode of delivering services to foreign markets. Accordingly, the role of TNCs in host country services trade is less significant in absolute terms than in the trade of goods; in addition, FDI in a number of easily tradable services is typically not permitted (for example, air transportation and telecommunications) and, hence, cannot create trade. Still, TNC exports from host countries, mainly in the form of sales of services to foreigners by TNC affiliates (classified as exports for balance-of-payments purposes), are quite important in a number of developing countries. Those include mainly tourism-related services, such as hotel accommodations and car rentals. In addition to direct exports of services, transnational service corporations may also exert an indirect impact on exports of goods by undertaking FDI in producer services, such as financial or market-research services supporting exports of goods from host developing countries.

The volume and range of services exported and the contribution of TNCs to service exports may, however, increase considerably in the near future, because of breakthroughs in data and communications technologies that render more services more transportable. The result is that it is becoming increasingly possible to relocate parts of the production process of services in a manner similar to that in export-oriented manufacturing. Many operations of this kind are already in place in developing as well as developed countries. A translation of potential export opportunities into realized competitiveness in exports of services from developing countries may initially be based on labour intensity, and many of these countries stand to benefit because of their ready supply of low-cost personnel.⁴² When this occurs, the role of TNCs in the growth of host developing countries through the export of services may become more important in such service industries as engineering, financial services, various business services and data input and software production. Over the longer term, however, technological progress alters the relative importance of labour and capital inputs or directly reduces the labour intensity of particular tasks, thereby imposing limits on sustaining competitiveness fostered by TNC-related trade in labour-intensive services.⁴³

2. Imports

As mentioned earlier, imports can facilitate economic growth by relieving domestic supply constraints, particularly of intermediate and capital goods. Transnational corporations play a role in that process in host developing countries through direct intra-firm imports and other channels. During the initial establishment of foreign affiliates, their imports may be more significant than at later stages of their operations. The reason is that foreign firms often have limited knowledge of market conditions in host countries and locally available inputs. Over time, as operations mature, foreign affiliates may switch to a greater use of domestic goods and services, assuming that these are available locally. However, a TNC may often favour foreign sources of supply over domestic ones, in order, among other things, to

take advantage of bulk purchases for the firm as a whole, maintain greater control over quality and ensure the reliability of supply channels. Since little is known about the extent to which imports of capital goods by TNCs in host developing countries are constraint-relieving in nature, and the extent to which such imports are substitutes of domestic equivalents, any definitive conclusion regarding the role of TNCs in promoting growth through imports is difficult to draw. Nevertheless, the role of TNCs in imports of capital and intermediate goods is an important issue, particularly because the scope for the domestic availability of those goods in most developing countries is often limited.

(a) Imports of capital and intermediate goods

As noted in chapter VI, disaggregated data on the role of TNCs in the import of capital goods by developing countries are not available. However, data on imports of capital goods by affiliates of United States TNCs in developing countries provide some evidence of this role. Such imports have accounted for between 5 per cent and 6 per cent of total capital goods imports by developing countries between 1982 and 1989 (table VIII.6). Of all developing regions, the relative significance of United States affiliates as importers of capital goods is most evident in Latin America, where their share was 9 per cent in 1982 and 11 per cent by 1989. Asia is the second most important region in relative importance in terms of the role of United States affiliates as importers of capital goods; during the decade of the 1980s, those affiliates accounted for at least 5 per cent of total imports of capital goods in those countries.

The growing value of imports of intermediate products by United States affiliates in developing countries provides another indication of the role played by TNCs in the imports of those goods to

Table VIII.6. Imports of capital goods by United States affiliates in developing countries

Region	Imports of capital goods ^a by United States affiliates (Billions of dollars)	Share of United States affiliates in total capital goods imports ^b into developing countries ^c (Percentage)
All developing countries		
1982	6.3	5.2
1989	9.1	6.3
Africa		
1982	0.147	0.6
1989	0.008 ^d	0.04 ^d
Asia and the Pacific		
1982	3.1 ^e	4.7 ^e
1989	4.8	5.0
Latin America and the Caribbean		
1982	2.6	9.0
1989	4.0	11.1

Source: Transnational Corporations and Management Division, based on data contained in table VI.6 and United States, Department of Commerce, *U.S. Direct Investment Abroad: 1982 Benchmark Survey Data* (Washington, D.C., United States Government Printing Office, 1985); *U.S. Direct Investment Abroad: 1989 Benchmark Survey, Preliminary Results* (Washington, D.C., United States Government Printing Office, 1991).

a Includes machinery and other transport equipment, but excludes road vehicles and parts.

b Items included are mentioned in table VI.6.

c The share of United States foreign affiliates in total imports of capital goods into developing countries may be over-estimated owing to the inclusion in the data of non-electric and electric consumer machinery.

d Does not include machinery; hence the share of United States affiliates may be under-estimated.

e Does not include other transport equipment; hence the share of United States affiliates may be under-estimated.

meet local production requirements. Between 1982 and 1989, the level of imports of those products by United States affiliates in developing countries increased from \$4.3 billion to \$7.8 billion. Almost three quarters of those imports were accounted for by affiliates in Latin America and the Caribbean.⁴⁴

Individual country experiences also tend to suggest that TNCs play an important role in growth through imports, a major example of which is Brazil.⁴⁵ A sizeable proportion of Brazilian imports are capital goods, despite the impressive growth of the Brazilian capital-goods industry. Domestic production bottlenecks and a backlog of orders have often forced both foreign and domestic firms to look abroad for equipment. Foreign affiliates generally operate in capital- and technology-intensive industries, in which substitutes for imports for intermediate and capital goods required in production are often not available locally. Those affiliates fulfil a significant part of their production requirements through imports from parent firms. Hence, TNCs have relieved supply constraints in Brazil and expanded their local production by importing, in some cases through intra-firm transactions, needed intermediate and capital goods.

There are also examples of the contribution of TNCs to growth through imports at the industry level. For instance, the growth of the local textile industry in Hong Kong was spurred by imports of new machinery from foreign-based TNCs.⁴⁶ More recently, the imports that Hong Kong firms have sourced from foreign TNCs in the form of components, parts and intermediate products have helped to build their technological competitiveness. Other examples are found in the growth of firms in Taiwan Province of China, engaged in synthetic fibre production that has been sustained through the purchase of equipment from TNCs in developed countries.⁴⁷

Apart from manufacturing affiliates, marketing affiliates of TNCs also import capital and intermediate goods. In the case of the United States, approximately 17 per cent of the total value of merchandise imports by affiliates of United States firms in 1982 and 1989 were directed to marketing affiliates located in developing countries. A considerable proportion (86 per cent in 1989) of those merchandise imports by marketing affiliates of United States TNCs in developed and developing countries consisted of intermediate and capital goods that are important for the growth of production in host countries, especially in developing countries.⁴⁸ Some of these imports represent either intra-firm trade or resale to domestically-owned firms in host countries. In both cases, marketing affiliates relieve growth-retarding supply shortages in production while, at the same time, increasing the range of products available in the host economy. They also fulfil an important function in the after-sale servicing of goods that they sell; this also puts them in a good position to communicate to their own suppliers changing requirements for product adaptation and development.

It should also be noted that TNCs can contribute to the growth of home countries, both developed and developing, through the integration of outward FDI and imports. That role is discussed briefly in box VIII.1.

(b) Imports of services

Transnational corporations also have an important role to play in relieving supply-bottlenecks in the services sector. This is especially the case where TNCs are the sole providers in developing countries of certain sophisticated business services that are not available locally but are necessary for efficient domestic production by both foreign affiliates and local firms. The provision of such unique services through imports is one of the most significant contributions that transnational service corporations can make to growth in host developing countries.⁴⁹ Such is the case, for example, in the provision of certain international banking services to domestic trading companies; the provision of certain insurance and

Box VIII.1. The impact of imports on growth in home countries and the role of transnational corporations

The growth of trade often reduces, or results in a slower increase in, the cost of imported materials, thereby enhancing and reinforcing the growth of importing nations. In the case of resource-scarce countries, whose growth is constrained by a lack of local natural resources, for example, imports of resource-related products provide a supply of raw-material inputs to sustain domestic industrial expansion. Similar advantages apply to the imports of intermediate or final products, even if, in principle, these could be produced domestically. Though these imports can be acquired through arm's-length transactions, TNCs play a major role in their acquisition, be it through equity or non-equity linkages. The phenomenon of international sourcing of labour-intensive intermediate and final products from developing countries by TNCs has also been increasingly associated with the rationalization of production by TNCs.

Evidence of the role of TNCs in growth through this import linkage can be found in the activities of United States and Japanese companies which established production facilities in ASEAN countries in 1970s to make use of the local availability of raw materials and cheap qualified labour.¹ A substantial part of United States and Japanese FDI in those countries had been geared to the production of labour-intensive components at the more competitive lower labour cost of ASEAN countries. The components were then imported by the respective home countries. The concurrent growth of FDI and trade ensured a slower rate of increase in the costs of production in Japan and the United States and led to a greater competitiveness of their products in world markets.

The case of the semiconductor industry provides an important example whereby the location of routine assembly operations in low-labour-cost locations became an important means in the 1960s and 1970s to reduce production costs of final outputs produced or consumed in home countries.² Transnational corporations are increasingly pursuing regionally integrated strategies in the production of semiconductors such that "integrated circuits may be fabricated in Japan, packed in Malaysia, tested in Singapore and assembled in Hong Kong and then finally exported to a consumer electronics company in the United States".³ Similar strategies are also being pursued in other industries, for example, the automobile industry.⁴

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re-insurance services to a wide range of local firms; in air transport and shipping, and in advanced data-processing and telecommunication services, where TNC-related imports can enable domestic firms to reduce costs and gain access to world-wide networks of TNCs.

The trend towards a greater tradability of many services, particularly information-intensive services, implies that host countries may increasingly be able to use imports, in addition to inward FDI, to obtain services that are required for efficient domestic production.⁵⁰ Increased tradability is likely to lead to a rise in the number of distribution affiliates that are service-specific and whose function is to act as a conduit through which services produced elsewhere, but needed for the growth of host countries, are distributed in those countries. As tradability increases, the cross-border import of services by and

(Box VIII.1, cont'd.)

Similar considerations apply to foreign production aimed at extracting and importing natural resources. The importance of resource-based outward investments for resource-scarce countries has always been particularly high. The problem of resources required for domestic industrial development became apparent in the second half of the nineteenth century for Japan, the United Kingdom, France and Germany. Those countries were unable to compete commercially with others that availed themselves of cheaper resources outside their own borders.⁵ In the case of Japan, the rapid development of heavy industries made resource-scarce Japan the most resource-consuming nation (relative to its GNP) among the industrialized countries. Foreign direct investment related to the import of natural resources from elsewhere in Asia helped to alleviate supply shortages that might otherwise have arisen in the course of growth of Japan's resource-consuming industries.⁶

Extractive investments to gain access to raw materials and natural resources have also been important to the Republic of Korea. That country is similar to Japan in terms of insufficient supplies of indigenous natural resources. Until recently, therefore, outward FDI by the Republic of Korea was concentrated in mining and natural resource-based activities. Similar objectives apply to FDI in resource-based activities by firms from Taiwan Province of China.⁷

1 Ulrich Hiemenz, "Expansion of ASEAN-EC trade in manufactures: pertinent issues and recent developments", *The Developing Economies*, vol. 26, No. 4 (December 1988), pp. 341-366.

2 David B. Yoffie, "Foreign direct investment in semiconductors". Paper prepared for the National Bureau of Economic Research conference on Foreign Direct Investment Today, Boston, Massachusetts, 15-16 May 1992.

3 Peter Dicken, *Global Shift: The Internationalization of Economic Activity* (London, Paul Chapman, 1991).

4 See UNCTC, *World Investment Report 1991: The Triad in Foreign Direct Investment* (United Nations publication, Sales No. E.91.II.A.12).

5 C. Fred Bergsten, Thomas Horst and Theodore H. Moran, *American Multinationals and American Interests* (Washington, Brookings Institution, 1978).

6 Terutomo Ozawa, "A newer type of foreign investment in third world resource development", *Rivista Internazionale di Scienze Economiche e Commerciali*, vol. 29, No. 12 (December 1982), pp. 1133-1151; "New forms of investment by Japanese firms", paper prepared for the OECD research project on new forms of foreign investment in developing countries, April 1984.

7 Paz Estrella E. Tolentino, *Technological Innovation and Third World Multinationals* (London, Routledge, 1992).

from TNCs is likely to become a more important contribution that transnational service corporations can make to growth.⁵¹

However, for the time being, most services necessary for growth remain non-tradable and can only be obtained through FDI rather than trade. Thus, developing countries that had previously imposed restrictive policies towards FDI in services have more recently liberalized such policies in selected services industries precisely to relieve bottlenecks and increase the overall efficiency of their development efforts.

3. Externalities

The activities of a TNC may have effects on the economy that are not reflected in its own costs or revenues and are therefore called external. Those may be negative, as when a polluting industry is not obliged to pay for the damage it inflicts on the environment, or positive, as when a producer undertakes the training of employees who later move to other firms or start their own. One important kind of such

Box VIII.2. Acquisition of export marketing skill from transnational corporations: the case of garments exports from Bangladesh

The phenomenal success of garments exports from Bangladesh vividly illustrates the positive impact of learning through trade in association with TNCs. Starting from virtually zero in 1978, export earnings from garments reached \$560 million in the fiscal year 1989-1990 and may have been higher still in the fiscal year 1990-91 (data for the whole year are not available). The average growth rate in garment export-value was over 120 per cent in the 1980s; during that period, the absolute value of exports of garments surpassed that of jute manufactures, traditionally the highest foreign exchange-earning item of the country. The contribution of garment exports to foreign exchange earnings, a vital but scarce resource for the economic development of Bangladesh, was enormous, amounting to 40 per cent of the total by the fiscal year 1989-1990.

The process started in 1979 with a non-equity arrangement with a developing country TNC, the Daewoo Corporation of the Republic of Korea.¹ That company signed a five-year collaboration agreement with the Desh Garment Company of Bangladesh, under which Daewoo provided: six months of training for Desh workers in the Republic of Korea (later extended to seven months); assistance in start-up activities, including the installation of machinery purchased from Daewoo; supervision of production managed by Desh; and marketing services. In December 1979, 130 Desh workers trained by Daewoo in the Republic of Korea returned to Bangladesh, along with three Daewoo engineers assigned to assist start-up activities. In April 1980, production of garments began with 500 employees and 450 machines. Desh exported its first products in 1979-1980, amounting to about \$56,000.

It was initially impossible for Desh to sell garments in the international market without Daewoo's expertise. A so-called "triangular trade" arrangement was established: first, Daewoo received a letter of credit from an overseas buyer; second, it opened a back-to-back letter of credit addressed to Desh; and, finally, Desh

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externalities occurs in the case of an expanding industry, which induces the emergence of specialized suppliers of inputs, spare parts, maintenance and financial services, lowering costs and spreading skills and technical knowledge. Such processes have characterized the historical rise of industrial regions and economies. They imply that the social returns to investment in a core industry may exceed those received by companies. The effects involved, however, are difficult or impossible to measure.

Exports are often the basis of the initial growth that spurs positive externalities. As noted earlier, subcontracting arrangements typically involve product specifications and technical assistance to ensure that export requirements are met by host country enterprises. In such cases, TNCs contribute to the growth of exports which, in turn, often necessitates the transfer of hard and soft technologies. Transnational corporations can also impart valuable marketing skills to domestic enterprises by way of assisting them in breaking into new export markets (see box VIII.2).

On the import side, a large portion of imports by foreign affiliates consists of technology imports, embodied in intermediate and capital goods. To the extent, therefore, that local enterprises derive spill-over benefits from the presence of TNCs in their own technological development (see chapter VI), such benefits can be largely attributed to technology imports by TNCs. There are several case studies

(Box VIII.2, cont'd.)

shipped its garments under the Daewoo brandname directly to the overseas buyer, while it received payment from Daewoo. In this triangular trade, Daewoo assured product quality through production line supervision and quality inspection, while Desh could fully utilize the established marketing networks of Daewoo and learn the necessary marketing techniques.

The speed of learning was so rapid that Desh cancelled its collaboration agreement in June 1981, after only about one-and-a-half years of factory operation, long before the expiration of the agreement. Export performance following the cancellation was impressive, as Desh acquired the ability to handle all its export marketing and to purchase all its inputs from abroad, including from non-Daewoo sources. Its exports reached \$10 million in 1987-1988.

Meanwhile, 115 of the 130 Daewoo-trained workers left Desh to set up their own, or to join other newly established, garment companies. Those workers were major agents for imparting export skills throughout the whole garment industry, leading to its dramatic success in foreign exchange earnings. Indeed, many new garment companies did not need the expertise of foreign companies because of the existence of those workers. The remarkable speed with which the ex-Desh workers transmitted their production, marketing and management know-how to hundreds of other factories demonstrates the potential for learning through initial exposure to trade in association with a TNC. It should also be noted that the spread of learning was facilitated by government policies that permitted automatic access to inputs at world prices, provided adequate trade financing at reasonable costs and exempted the industry from investment licensing.

¹ Yung Whee Rhee, "The catalyst model of development: lessons from Bangladesh's success with garment exports", *World Development*, vol. 18, No. 2 (February 1990), pp. 333-346.

that provide evidence concerning such beneficial externalities. For example, a study of United States TNCs concluded that technology imports by affiliates induced, in some cases, local competitor firms to imitate the behaviour of affiliates.⁵² Similarly, imports of new production techniques by foreign affiliates forced domestic competitors to improve their technologies in some industries in Kenya.⁵³

It must, of course, also be expected that in some cases domestic firms are forced out of business, which results in increased average productivity. There is also the risk that a TNC or a large domestic firm acquires an excessively dominant position in the domestic markets of host countries which may thwart the process of dynamic externalities. Despite such caveats, it seems clear that learning through trade has been an essential feature of industrial catching-up and the transfer of technology, and that TNCs have had and continue to have an important role in that process.

C. Assessment

The preceding analysis shows that TNCs are important agents in fostering developing countries' growth through trade. They play this role through their direct organization of the international division of labour and their participation in a substantial proportion of the trade of those countries.

The impact of TNCs on the linkages between trade and the growth of production can be conceptualized at the macroeconomic level, the industry level and the company level. On the macroeconomic level, the trade promoted by TNCs helps facilitate a higher growth rate by raising the demand for domestically produced goods through host-country exports, by easing supply constraints of both host and home economies through imports, and by facilitating a dynamic learning process. At the industry level, TNCs facilitate trade by fostering a deeper international division of labour which involves the location of production of components and final products across different countries. That, in turn, facilitates a more efficient utilization of each country's resource and skill endowments, thus lowering production costs and promoting growth. At the company level, the organization of international networks of TNCs, including those of trading affiliates, can increase world trade and, in this manner, influence the growth and development of trading nations.

It should be stressed that the analysis in the present chapter has focused on the principal trade linkages in isolation from one another for the sake of analytical convenience. In theory and practice, however, TNC activities have multiple effects that permeate two or three of the trade linkages in interaction with one another. For example, labour-intensive investments in resource-rich countries or low labour-cost countries contribute to the growth of host countries through increased exports, while helping to sustain industrial expansion, fulfilling a tutorial role for local firms in host countries and maintaining the international competitiveness of home countries through cheaper imports. Clearly, the potential role of TNCs as an agent of growth through trade can only be fully appreciated in terms of their impact on the principal linkages and mechanisms acting in isolation as well as in interaction with one another.

D. Some policy implications

The role of TNCs in trade has major implications for both FDI and trade policies. If there are restrictions on inward investment in conjunction with an emphasis on exports, the influence of TNCs on the relationship between trade and growth would be more indirect, taking the form of licensing and contractual agreements in place of investment. That has been the case of Japan and the Republic of Korea, where the role of TNCs in fostering trade and growth has been significant, but not as much through FDI *per se*, as through licensing and other contractual forms. On the other hand, economies such as Hong Kong and Singapore and, recently, Mexico, have grown with open policies towards FDI as well as emphasis on exports. Such contrasting experiences suggest that different approaches may be pursued by different countries in relation to TNCs, trade and growth. It should be noted, however, that a high degree of cooperation between Government and the domestic private sector, the level of entrepreneurial and human resources development and the overall macroeconomic policy framework, which provided a strong stimulus to domestic growth, are among the unique features of the experiences of Japan and Republic of Korea that may not be easily replicable in other developing countries; in addition, the economic growth of those countries took place when world trade was expanding rapidly, a performance that may not necessarily be sustained. Besides, as noted in chapter VI, the trend towards an internalization of technologies by TNCs, particularly in high-technology industries with greater trade and growth potential, would limit the scope for restrictive policies towards FDI, while simultaneously pursuing an export-oriented growth strategy. This underscores the need for attention to improved co-ordination between trade and FDI policies.

A central concern of trade policies in developing countries is to increase exports. Apart from the structural benefits that are generated by new exports, prospects for a significant acceleration in other sources of foreign exchange (for example, official development assistance and bank credit) are currently not bright. Transnational corporations can contribute to those efforts by increasing their export propensity which, in turn, is significantly influenced by the structure of incentives of the host countries' trade regime, in addition to such other macroeconomic variables as inflation and exchange rates. Where the enabling framework is favourable, TNCs are clearly at an advantageous position to promote exports along the lines discussed earlier. The significant improvement of the export performance of foreign affiliates in Mexico in recent years illustrates this potential role of TNCs and suggests the need for a regime that has the proper mix of FDI, trade and macroeconomic policies. It is, of course, also crucially important to ensure that developing countries do not face protectionist barriers in their export markets in both developed and other developing countries.

Another concern of special importance for developing countries that currently specialize in labour-intensive processes and component production is that further export growth of those products may be threatened by shifts of production by TNCs to more competitive foreign locations or to alternative subcontractors. In such cases, trade and FDI policies should be aimed at increasing the competitiveness of existing exports to the extent possible and at providing incentives to both domestic and foreign firms to develop new areas of comparative advantage.

The role of TNCs in relieving domestic supply constraints of intermediate and capital goods could be enhanced if TNC imports were complemented by competitive domestic production, either by foreign affiliates or local firms. In so far as the import propensities of TNCs are driven by cost and quality considerations, government policies need to encourage linkages between foreign affiliates and domestic firms, with a view to developing efficient local industries. A country's stage of industrial development and the success of its policies to promote efficient industrialization would, therefore, have an important influence on the role of TNCs in growth through trade. This requires support to domestic enterprises, such that they can become competitive producers and suppliers without requiring prolonged protection from competing imports.

As to the beneficial externalities resulting from TNC participation in the trade of host countries, those can be enhanced and spread to the extent that the capacity of domestic enterprises to learn, imitate and adapt TNC practices can be increased. Domestic policies, including trade and FDI policies, that foster the growth of entrepreneurship and competitive spirit play a crucial role in this process. A policy regime that offers prolonged protection against imports or subsidy to exports would reduce incentives to compete and, therefore, the potential externalities of TNC activities.

Finally, an overarching policy question concerns the role of TNCs in a country's use of strategic trade and FDI policies to foster growth. More specifically, the issue is whether TNCs can make a contribution to selective import substitution and export augmentation, particularly through a combination of incentives and performance requirements. This is a difficult option, even for those developing countries with large domestic markets and other specific locational advantages (such as availability of low-cost skilled labour relative to productivity and high-quality infrastructure) that confer strong bargaining leverage (see chapter XI). Broadly speaking, there may be a justification for highly selective use of a combination of investment incentives and performance requirements in a limited number of activities which promise strong positive externalities, for example, by opening new markets or introducing new technologies.

Notes

¹The relationship between international trade and transnational corporations is examined in detail in H. P. Gray, ed., *Transnational Corporations and International Trade and Payments. United Nations Library on Transnational Corporations* (London, Routledge, forthcoming).

²Trade as an engine of growth has been discussed, among others, by Ragnar Nurkse, in G. Haberler and R.N. Stern, eds., *Equilibrium and Growth in the World Economy* (Cambridge, Massachusetts, Harvard University Press, 1961). Trade as a handmaiden of growth has been discussed by Irving B. Kravis, "Trade as a handmaiden of growth: similarities between the nineteenth and twentieth centuries", *The Economic Journal*, vol. LXXX, No. 320 (December 1970), pp. 850-872.

³Nurkse, op. cit., pp. 242-243.

⁴Based on P. Armstrong, A. Glyn and J. Harrison, *Capitalism Since 1945* (Oxford, Blackwell, 1991).

⁵GATT, *International Trade, 1988-89*, vol. II (Geneva, GATT, 1989), table 4.3; and United Nations, *National Accounts Statistics, 1989* (New York, United Nations, 1992).

⁶See, for example, Anne O. Krueger, *Foreign Trade Regimes and Economic Development: Liberalization Attempts and Consequences* (Cambridge, Massachusetts, Ballinger Publishing Company, 1978); Bela Balassa, "Export and economic growth: further evidence", *Journal of Development Economics*, vol. 5, No. 2 (June 1978), pp. 181-189; Bela Balassa, "Exports, policy choices, and economic growth in developing countries after the 1973 oil shock", *Journal of Development Economics*, vol. 18, No. 1 (May/June 1985), pp. 23-35; Gershon Feder, "On exports and economic growth", *Journal of Development Economics*, vol. 12, Nos. 1/2 (February/April 1982), pp. 59-73; Jong H. Park, "Export performance and economic growth in Latin America", paper presented at the annual meeting of the International Trade and Finance Association, 3-5 January 1992; Tain-Jy Chen and De-piao Tang, "Export performance and productivity growth: the case of Taiwan", *Economic Development and Cultural Change*, vol. 38, No. 3 (April 1990), pp. 577-585; C. Michalopoulos and K. Jay, "Growth of exports and income in the developing world: a neoclassical view", AID Division Paper 28, United States Agency for International Development, Washington, D.C., 1973.

⁷See, for example, Woo S. Jung and Peyton J. Marshall, "Exports, growth and causality in developing countries", *Journal of Development Economics*, vol. 18, No. 1 (May/June), pp. 1-12; Y. Chow, "Causality between export growth and industrial development: empirical evidence from the NICs", *Journal of Development Economics*, vol. 26, No. 1 (June 1987), pp. 53-63; Dominick Salvatore, "A simultaneous equations model of trade and development with dynamic policy simulations", *Kyklos*, vol. 36, No. 1 (1983), pp. 66-90; Park, op. cit.; and Krueger, op. cit. These studies on the causal relation between exports and output growth in developing countries also show that the results are sensitive to the choice of sample size and composition, time-periods, estimation techniques and proxy variables included in the study.

⁸James Love, "Export instability, imports and investment in developing countries", *The Journal of Development Studies*, vol. 25, No. 2 (January 1989), pp. 183-191; Magnus Blomström, *Transnational Corporations and Manufacturing Exports from Developing Countries* (United Nations publication, Sales No. E.90.II.A.21).

⁹See, for example, Manuel Agosin, "Trade policy reform and economic performance: a review of the issues and some empirical evidence" (Geneva, UNCTAD, 1991), mimeo; Hadji S. Esfahani, "Exports, imports and economic growth in semi-industrialized countries", *Journal of Development Economics*, vol. 35, No. 1 (January 1991), pp. 93-116.

¹⁰Gene M. Grossman and Elhanan Helpman, "Trade, knowledge spillovers and growth", *European Economic Review*, vol. 35, Nos. 2/3 (April 1991), pp. 517-526.

¹¹Gene M. Grossman and Elhanan Helpman, *Innovation and Growth in the Global Economy* (Cambridge, Massachusetts, MIT Press, 1991).

¹²See for example, Miekko Nishimizu and Sherman Robinson, "Trade policies and productivity change in semi-industrialized countries", *Journal of Development Economics*, vol. 16, Nos. 1/2 (September-October 1984), pp. 177-206; David Dollar and Kenneth Solzloff, "Patterns of productivity growth in Korean manufacturing industries", *Journal of Development Economics*, vol. 33, No. 2 (October 1990), pp. 309-327.

¹³Yung Whee Rhee, Bruce Ross-Larson and Garry Pursell, *Korea's Competitive Edge: Managing the Entry into World Markets* (Baltimore, Maryland, Johns Hopkins University Press, 1984).

¹⁴See UNCTC, *World Investment Report 1991: The Triad in Foreign Direct Investment* (United Nations publication, Sales No. E.91.II.A.12), pp. 67-74.

¹⁵David Gold, Persephone Economou and Paz Estrella Tolentino, "Trade blocs and investment blocs: the Triad in foreign direct investment and international trade". Paper presented at the Annual Meeting of the Academy of International Business, Miami, Florida, 17-20 October 1991.

¹⁶Comparable data on exports of foreign affiliates other than those of Japanese and United States firms for the same time-periods are not available. Some indications for 1986 are available for Swedish majority-owned foreign affiliates, which accounted for 0.44 per cent of total manufactured exports of Latin America. See Blomström, 1990, op. cit.

¹⁷For similar findings, see Seiji Naya and Pearl Imada, "Trade and foreign investment linkages in ASEAN", in Soon Lee Ying, ed., *Foreign Direct Investment in ASEAN* (Kuala Lumpur, Malaysian Economic Association, 1990).

¹⁸Atchaka Sibunrang and Peter Brimble, "Export-oriented industrial collaboration: a case study of Thailand" (New York, United Nations Centre on Transnational Corporations, 1990), mimeo.

¹⁹See, among other studies, Sanjaya Lall and Sharif Mohammad, "Foreign ownership and export performance in the large corporate sector of India," in Gray, op. cit. Those studies indicate that foreign ownership has a positive correlation with export propensity. Other empirical studies covering other countries, however, indicate that firm-ownership does not influence export

propensity in any consistent direction. See UNCTC, *Transnational Corporations and International Trade* (United Nations publication, Sales No. E.85.II.A.4) for the case study on Brazil.

²⁰See, among other studies, Marian Radetzki, "Where should developing countries' minerals be processed? The country view versus the multinational view", in Bruce McKern, ed., *United Nations Library on Transnational Corporations: Transnational Corporations and the Exploitation of Natural Resources* (London, Routledge, forthcoming).

²¹See R. A. Read, "The banana industry: oligopoly and barriers to entry", in McKern, op. cit.

²²Carl Goldstein, "Marketing: brand of hope", *Far Eastern Economic Review*, vol. 154, No. 40 (3 October 1991), pp. 52-54; Brian Levy, "Transactions costs, the size of firms and industrial policy: lessons from a comparative case study of the footwear industry in Korea and Taiwan", *Journal of Development Economics*, vol. 34, Nos. 1-2 (November 1990), pp. 151-178; Charles M. Galbraith, Jr., "Offshore sourcing—Hong Kong: a world apparel player", *Bobbin*, vol. 29, No. 10 (June 1988), pp. 106-107; Steven Feldman, "Offshore sourcing: the open door to the Far East", *Bobbin*, vol. 29, No. 10 (June 1988), pp. 100-112.

²³Andrew Daniels, "Bordering on opportunity", *World*, vol. 22, No. 3 (Summer 1988), pp. 4-5.

²⁴Lewis E. Salcedo, "Export oriented industrial collaboration: a case study of Colombia" (New York, United Nations Centre on Transnational Corporations, 1991), mimeo.

²⁵Monkid Mestassi, "La collaboration industrielle tournée vers l'exportation: le cas du Maroc" (Geneva, UNCTAD, 1991), mimeo.

²⁶Marjan Svetlicic and Matiga Rojec, "Export-oriented industrial collaboration in Yugoslavia" (Geneva, UNCTAD, 1991), mimeo.

²⁷See United Nations Centre on Transnational Corporations, *Transnational Corporations and the Electronic Industries of ASEAN Economies* (United Nations publication, Sales No. E.87.II.A.13), and Alden M. Hayashi, "The new shell game", *Electronic Business*, vol. 14, No. 5 (1 March 1988), pp. 36-40.

²⁸See Michael Westlake, "Aviation and aerospace '88: China—Joint ventures and joint opportunities", *Far Eastern Economic Review*, vol. 139, No. 5 (4 February 1988), pp. 50-56.

²⁹John D. Morocco, "Korean aerospace firms seek greater role in world market", *Aviation Week and Space Technology*, vol. 130, No. 24 (12 June 1989), pp. 201-206.

³⁰For a discussion of marketing barriers faced by developing countries, see, Sanjaya Lall, "Marketing barriers facing developing country manufactured exports: a conceptual note", *The Journal of Development Studies*, vol. 27, No. 4 (July 1991), pp. 137-150.

³¹UNCTAD/GATT, *Structural Change in Export Marketing Channels for Developing Countries* (Geneva, International Trade Centre, 1988).

³²Japan, Ministry of International Trade and Industry, *Dai Yon-kai Kaigai Jigyo Katsudo Kihon Chosa: Kaigai Toshi Tokei Soran* (Tokyo, Okura-sho Insatsu-kyoku, 1991), tables 2-25-1 to 2-25-12, pp. 210-211. All data contained in this survey underestimate the true value of operations of Japanese TNCs as the survey is based on the companies that responded to the questionnaire of MITI. In this survey, only 47 per cent of TNCs responded. Data include retail trading affiliates.

³³United States, Department of Commerce, *U.S. Direct Investment Abroad: 1989 Benchmark Survey* (Washington, D.C., United States Government Printing Office, 1991), tables 2, 4 and 5.

³⁴Japan, Ministry of International Trade and Industry, op. cit., tables 2-90-1 to 2-90-12, pp. 475-480. Data include retail trading affiliates.

³⁵In fact six of the world's ten largest companies in terms of sales are *sogo shosha*; see "The global 1000", *Business Week*, 15 July 1991, pp. 52-105.

³⁶Data compiled from Toyo Keizai Shimposha, *Kaisha-betsu Kaigai Shinshutsu Kigyō, 1991/1992* (Tokyo, 1991). On *sogo shosha* in developing countries generally, see Kiyoshi Kojima and Terutomo Ozawa, *Japan's General Trading Companies* (Paris, OECD, 1984).

³⁷See A. K. Young, *The Sogo Shosha: Japan's Multinational Trading Companies* (Boulder, Colorado, Westview Press, 1978); *Nihon Keizai Shimbun*, 8 November 1985, p. 8; 28 April 1988, p. 9; and 14 October 1989, p. 8.

³⁸*Ekonomisuto*, 12 July 1988, p. 96.

³⁹ESCAP/UNCTC, *Transnational Trading Corporations in Selected Asian and Pacific Countries* (Bangkok, ESCAP/UNCTC, 1985).

⁴⁰UNCTC, *Transnational Corporations and World Development: Trends and Prospects* (United Nations publication, Sales No. E.88.II.A.7).

⁴¹GATT, *International Trade, 1990-91*, vol. I (Geneva, GATT, 1992) p. 5.

⁴²Kenneth Heydon, "Developing country perspectives", in World Bank and UNCTC, *The Uruguay Round: Services in the World Economy* (Washington, D.C. and New York, The World Bank and United Nations Centre on Transnational Corporations, 1990), pp. 159-165.

⁴³Heydon, op. cit.

⁴⁴The data on intermediate products have been estimated on the basis of data on crude materials, inedible, except fuels; petroleum and products; coal and coke; chemicals; road vehicles and parts; and metal manufactures.

⁴⁵Paul A. Natke, "Foreign ownership and firm-level import performance in Brazilian manufacturing industries", *Atlantic Economic Journal*, vol. 15, No. 4 (December 1987), pp. 39-48.

⁴⁶Louis T. Wells, "Foreign investment from the Third World: the experience of Chinese firms from Hong Kong", *Columbia Journal of World Business*, vol. 13, No. 1 (Spring 1978), pp. 39-49.

⁴⁷This was particularly the growth path of Tuntex Fiber Company. See W.L. Ting and C. Schive, "Direct investment and technology transfer from Taiwan", in K. Kumar and M. G. McLeod, eds., *Multinationals from Developing Countries* (Lexington, Massachusetts, D.C. Heath and Company, 1981), pp. 101-114.

⁴⁸Data obtained from United States, Department of Commerce, *U.S. Direct Investment Abroad: 1982 Benchmark Survey Data* (Washington, D.C., United States Government Printing Office, 1985); *U.S. Direct Investment Abroad: 1989 Benchmark Survey, Preliminary Results* (Washington, D.C., United States Government Printing Office, 1991).

⁴⁹Robert Lipsey and Zbigniew Zimny, "Impact of transnational service corporations in developing countries", in Karl P. Sauvant and Padma Mallampally, eds., *Transnational Corporations and Services. United Nations Library on Transnational Corporations* (London, Routledge, forthcoming).

⁵⁰Karl P. Sauvant, "The tradability of services," in World Bank and UNCTC, op. cit., pp. 114-122.

⁵¹UNCTC, 1988, op. cit.

⁵²Edward Mansfield and Anthony Romeo, "Technology transfer to overseas subsidiaries by U.S.-based firms", *Quarterly Journal of Economics*, vol. 19, No. 4 (December 1980), pp. 737-750.

⁵³R. Jenkins, "Comparing foreign subsidiaries and local firms in LDCs: theoretical issues and empirical evidence", *Journal of Development Studies*, vol. 26, No. 2 (January 1990), pp. 205-228.