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World Investment Report 1995

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Note

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**This report is dedicated to
the memory of Kenneth K.S. Dadzie**

The *World Investment Report 1995* was prepared by a team led by Karl P. Sauvant and comprising Victoria Aranda, Richard Bolwijn, Persephone Economou, Masataka Fujita, John Gara, Michael Gestrin, H. Peter Gray, Khalil Hamdani, Padma Mallampally, Fiorina Mugione, Lilach Nachum, Jörg Weber and Zbigniew Zimny. Specific inputs were also received from Martin Mandl, Michael Mortimore, Prasada Reddy and James X. Zhan. The work was carried out under the overall direction of Roger Lawrence.

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OVERVIEW

Transnational corporations and competitiveness

Enabled by increasingly liberal policy frameworks, made possible by technological advances, and driven by competition, globalization more and more shapes today's world economy. Foreign direct investment (FDI) by transnational corporations (TNCs) now plays a major role in linking many national economies, building an integrated international production system -- the productive core of the globalizing world economy. Transnational corporations deploy their tangible and intangible assets (capital, research-and-development capacity and technology, organizational and managerial practices, trade links), with a view towards increasing their competitiveness and profitability. At the same time, the deployment of these assets by firms strengthens the resource base of countries and their capacity to produce, to reach and expand markets for their products and to restructure their economies -- in brief, to improve their overall economic performance. To link the increased competitiveness of TNCs to the economic performance of host and home countries as closely as possible poses a challenge for policy makers. These developments and issues are the particular theme of the *World Investment Report 1995*.

Part One examines recent global and regional trends in FDI, with a special emphasis on the emergence of TNCs from developing countries and on changing forms of international transactions. Part Two focuses on the role of TNCs in influencing countries' access to resources and markets and in facilitating economic restructuring. Part Three discusses policy issues, from an inward and outward FDI perspective. The annex contains statistics on FDI trends.

Global and regional trends

International production by TNCs -- now some 40,000 parent firms and some 250,000 foreign affiliates -- increasingly influences the size and nature of cross-border transactions. In the process, it shapes the nature of the world economy. Outward FDI stock and global sales of foreign affiliates -- two generally accepted proxy indicators of international production -- now stand at \$2.6 trillion (1995) and \$5.2 trillion (1992), respectively. In the 1990s, the rate of growth of FDI stock has substantially exceeded that of world output (GDP) and world exports. The size and scope of international production are amplified further by the activities of TNCs in forms other than FDI, such as subcontracting, licensing and franchising, through which markets for goods, services and factors of production can be reached and international production organized. Global sales in international markets associated with this more broadly defined international production amounted to an estimated \$7 trillion in 1992, compared to some \$3 trillion in arm's length trade. In fact, in the case of TNCs headquartered in the United States, four out of five dollars received for goods and services sold abroad by these firms are actually earned for goods and services produced by their foreign affiliates or sold to them. The various forms of international production may be substitutes or complements for each other, depending on the strategies of TNCs. All of them are aimed at ensuring access both to markets for goods and services and to markets for tangible and intangible factors of production, in a quest to convert globally inputs into outputs for global markets as efficiently and profitably as possible.

The diverse nature of international production suggests that international policy discussions about market access have to deal not only -- as they currently do -- with trade in goods and services but also with FDI as a modality to access markets. Beyond that, FDI is also a modality to access factors of production. Such a broader perspective also raises the question as to the extent to which specific government policies may introduce a bias in favour or against any specific modality of international transactions and, therefore, distort the way in which firms undertake and organize their international activities. The importance of such distortions would become clearer if governments paid greater attention to the interrelationships between investment, trade and other forms of international transactions in their dual function of accessing markets for goods, services and factors of production and organizing international production.

Partly in response to globalization, progress in coming to grips with the nature of international production is already being made. National, regional and international agreements are paying more attention to FDI. Although for a number of countries there is still an imbalance between the degree of liberalization of FDI and trade regimes (with progress achieved for the latter, furthermore, bound in multilateral agreements), FDI regimes at the national level are rapidly being liberalized: continuing a trend of earlier years, 101 out of 102 legislative changes made in 1993 in 57 countries were in the direction of a more liberal FDI framework; in 1994, 103 out of 116 legislative changes made in 49 countries were in the same direction. In fact, only 5 out of a total of 373 FDI regulatory changes during 1991-1994 were *not* in the direction of greater liberalization. Such unilateral measures have been accompanied by the conclusion of

bilateral investment agreements, primarily between developed and developing countries, but increasingly also among developing countries. Of the more than 900 treaties that existed by mid-1995 between 150 countries, nearly 60 per cent date from the period since the beginning of 1990, 299 from 1994 alone. Another dimension has been added to the liberalization process at the regional level, with the strengthening of free trade agreements which, increasingly, also liberalize FDI flows (and, therefore, properly ought to be called free trade and investment agreements). In fact, the OECD countries began negotiations in September 1995 on a Multilateral Agreement on Investment, with a view to reaching such an Agreement by May 1997 as a free-standing treaty open also to non-OECD countries. Finally, a proposal has been made to negotiate an investment agreement in the World Trade Organization. All this means that the enabling framework for FDI is being strengthened, thus giving further impetus to the process of globalization.

International production by TNCs is boosted by the continuing recovery from the FDI recession ...

International production, as reflected by the FDI stock accumulated by TNCs, has been growing at a rapid pace since the early 1980s, a growth that only briefly slackened during the FDI recession of the early 1990s. Investment stocks and flows remain concentrated primarily in the developed world and particularly in the Triad (the European Union, Japan and the United States), both as far as their origin and destination are concerned. This distribution of inward FDI stock mirrors market size, with the developing countries accounting for between one-fifth and one-quarter of both world GDP and global inward FDI stock. However, the FDI stock in developing countries is highly concentrated: the 10 largest developing host countries account for about two-thirds of the total stock in developing countries, more than would be expected from their share in developing country output or trade. As far as outward stock is concerned, firms from developing countries generated only 6 per cent of the world FDI stock in 1994, reflecting the superior competitiveness of Triad firms, based on their ownership-specific advantages. As with inward investment, the outward developing country FDI stock is largely accounted for by firms from only a handful of developing countries.

As far as FDI flows are concerned, the share of developing countries in world inflows is now higher than their share in world imports (about 30 per cent in the early 1990s). The volume of FDI flows reflects the strength of countries' current locational advantages for inflows and the strength of firms' current ownership-specific advantages for outflows. In terms of FDI outflows, the developing-country share is about a half of their share in world exports.

If the value of sales associated with inward FDI is compared with the value of imports, this suggests that, for developing countries as a group, inward FDI rivals imports when it comes to obtaining what they need from the rest of the world, while they still rely much more on exports than on outward FDI when it comes to delivering goods and services to foreign markets. The implication is that, although developing countries are becoming more fully integrated into the world economy through inward FDI, this integration is asymmetric and does not yet apply to outward FDI. There are, however, significant differences in the experiences of various groups of developing countries (see below).

By the end of 1993, FDI outflows had largely recovered from the FDI recession (reaching \$222 billion) and, in 1994, maintained this level. Preliminary estimates for 1995 (\$230 billion) suggest that the recovery has been further consolidated. The recovery is partly a cyclical phenomenon: as the major home countries came out of a period of recession, their firms embarked upon expansion plans that included investing abroad. Over and above this cyclical movement are structural factors -- in particular the pressures of growing international competition, coupled with advances in communications technology that allow better coordination of cross-border activities -- which make it essential for firms to invest abroad in order to be competitive internationally. Furthermore, the liberalization of the regulatory frameworks for FDI, trade and technology and the privatization of state-owned enterprises create additional opportunities for foreign investors.

... in the developed countries (led by the United States) ...

The recovery of FDI flows has been due primarily to an increase in FDI activity by firms from developed countries. A repositioning took place among the top five home countries, together accounting for nearly 70 per cent of global outflows, with the United States reasserting its lead once more as the principal home economy for FDI, accounting (with \$610 billion) for a quarter of the world's stock and (with \$46 billion) one-fifth of world outflows in 1994. The vigorous FDI expansion experienced by the United States has not been matched by other Triad members. Although Japan's outward investment rose by nearly one-third (to \$18 billion) in 1994, it remained way below earlier peaks (\$48 billion in 1990). As economic growth in France, Germany and the United Kingdom resumed or gathered momentum, TNCs based in those countries again became more active abroad.

Most of this activity remained concentrated in the Triad. Out of an estimated \$235 billion of world inflows in 1995, inflows to developed countries as a group are projected to be \$138 billion, compared to \$129 billion in 1993 and \$135 billion in 1994. The United States resumed its position as the single largest FDI recipient (\$49 billion in 1994), while flows to Japan remained negligible (with less than \$900 million in 1994, about the same order of magnitude as flows to the Czech Republic). Although Western Europe continues to be the largest FDI recipient, a number of countries in the region (such as the Netherlands and the United Kingdom) have not yet emerged from the FDI recession. The region's recovery in terms of inflows has been slower than its recovery in terms of outflows, reflecting partly the more dynamic performance of other parts of the world.

While outward FDI flows from European countries have regained their momentum, South, East and South-East Asia -- the most dynamic region in the world -- continues to be neglected by them as a host region. Perhaps preoccupied with regional integration, European Union firms have only some 4 per cent of their stock and about 3 per cent of their flows directed to this region. The region's share of European Union exports is not much larger, about 5 per cent. Japanese TNCs have invested four times more in this region, and United States TNCs two-to-three times more than their European Union competitors. Country level data illustrate this further: for instance, Germany's FDI stock in developing Asia (excluding West Asia) is

about half the size of her stock in Spain, and Germany's flows to that region during 1990-1993 were less than Germany's flows to Austria. In the case of the United Kingdom, the country's FDI stock in developing Asia is about the same as in Australia, while flows are about the size of flows to Sweden. However, there are signs that European Union firms are changing course, as reflected in their increasing outflows to Asia. With South, East and South-East Asia being the fastest growing region in the world, FDI competition there is set to intensify, both in terms of countries seeking to attract FDI and in terms of TNCs competing for investment opportunities. Firms from the region itself have actually acquired a leadership role in this competition.

... and the enduring growth of FDI flows to developing countries, ...

In spite of the renewed attractiveness of the developed countries, developing countries have succeeded in attracting growing investment flows, reaching \$84 billion in 1994 to account for 37 per cent of world FDI inflows. This is a continuation of a trend that began in 1990 and has propelled developing countries to become a major force in world FDI. (If intra-European Union flows are excluded, the share of the developing countries in world FDI flows rises from 35 per cent in 1993 to 44 per cent in 1994.) To a large extent, the successive annual increments to FDI flows into these economies reflect the growing attractiveness of a single country, China. With some \$34 billion in inflows, China was the second largest recipient of FDI flows worldwide in 1994, accounting for some 40 per cent of all flows into developing economies. But, even if China is excluded, FDI flows into developing countries registered an increase of 11 per cent in 1994 (from \$46 billion to \$51 billion). The year 1995 may well register another increase, both for China and all other developing countries as a group, to reach an estimated total of \$90 billion.

A notable aspect of the increase in FDI inflows into the developing world is that, since 1990, these flows have become the largest and fastest growing single component of external finance for this group of countries, taken together. More specifically, FDI flows accounted for 7 per cent of domestic fixed capital formation in 1993 and have been larger than official development assistance flows since 1992 for the developing world as a whole. They were also larger than other private flows in some years during the late 1980s and early 1990s. Indeed, for 30 developing economies and four economies in Central and Eastern Europe, FDI inflows in 1993 represented the single largest component of all net external resource flows. The number increases to 81 developing economies and seven economies in Central and Eastern Europe, if only private net external resource flows are considered. The dominant role of FDI flows is not only important because of the productive assets associated with them, but also because of their greater resilience, as compared with portfolio equity investments, to adverse economic shocks and currency depreciations, reflecting the fundamental differences in motivation between these two types of external finance.

The success of the developing countries in attracting FDI lies in an investment climate characterized by growing markets and increasingly favourable regulatory frameworks coupled with the general trend for firms from all countries to invest abroad in order to remain competitive internationally. Naturally, there are significant inter- and intra-regional differences:

- Driven by its relatively fast economic growth, the *Asia-Pacific* region as a whole remains the most important host region among developing countries, with some \$61 billion in inflows in 1994. That region now accounts for more than 70 per cent of the total developing-country FDI stock. Within Asia, countries have performed unevenly in attracting FDI: China and East and South-East Asia are at the forefront, while the Pacific island economies and some of the South Asian countries are still lagging behind. China remains the largest recipient in Asia, even if allowance is made for the fact that an overvaluation of FDI inflows may have inflated the magnitude of inflows by one-quarter. Moreover, the country is now becoming more cautious in terms of appraising FDI projects and more careful in terms of monitoring the fulfillment of contractual FDI

commitments. At the same time, China is now attracting a share of FDI that is not only large in absolute terms but also in relative terms. It seeks, and it encourages a greater geographic dispersion of FDI within the region.

of the extent to which countries in the region. Evidence suggesting that market-seeking investments in Asia and Thailand; such as the emergence of China. FDI is likely to be mobile. Hence, FDI located there from other countries. Indeed, FDI in India is beginning to grow considerably more if it becomes a major recipient nor source of FDI. The process could boost

seems fragile, depending on the economic growth and investment prospects for the region. Argentina, with some \$6 billion in inflows in 1993 with some \$6 billion in inflows in 1994. The implementation of NAFTA may become a major factor for the region.

the beginning of 1995 has created new opportunities for

The success of China in attracting FDI flows has raised the issue of whether this accomplishment has been achieved at the expense of other countries. With the possible exception of export-oriented FDI, there is no evidence that this has indeed been the case. Profitable opportunities for market-seeking investments abound in other countries in Asia, notably, India, Indonesia, Malaysia. Investments are unlikely to have shifted among countries with high growth. Similarly, resource-seeking FDI is location-bound and not likely to shift. Only a small part of the FDI attracted by China is likely to have reallocated to other economies in Asia in response to cost and productivity considerations. FDI flows into ASEAN have started to grow again since 1994. ASEAN is likely to attract significant amounts of investment and is likely to attract FDI. ASEAN sustains its liberalization policy. West Asia is still neither a major source of FDI, although the prospective success of the Arab-Israeli peace process could boost economic growth and open up new investment opportunities.

- Inward FDI growth in *Latin America and the Caribbean* appears to depend very much on privatization programmes. Flows into Latin America increased only marginally in 1994, to some \$20 billion, largely as a result of programmes open to foreign investors. The region's resumed liberalization of trade and investment regimes are factors that have helped sustain FDI inflows. Experiences across countries vary considerably, which was the largest recipient among Latin American countries with some \$10 billion in inflows, largely as a result of the implementation of its privatization programme. Peru experienced a sharp decline in 1994 (to some \$1.2 billion). Colombia, with some \$2.7 billion (also very much related to privatization), experienced a sharp upswing in FDI in 1994. The implementation of MERCOSUR and the possible enlargement of the region are important factors for the configuration of FDI inflows within the region.

The devaluation of the Mexican peso at the end of 1994 and the subsequent economic recovery had a mixed effect on FDI flows. On the one hand, it has created

export-oriented investment and lowered the cost in foreign currency of purchasing domestic assets; this is likely to boost FDI in Mexico by United States and Canadian TNCs seeking to establish or deepen regional production networks in response to NAFTA, and by non-NAFTA TNCs interested in penetrating the NAFTA market. On the negative side, however, domestic market-seeking investments are suffering from the recession. It is still too early to assess how these two sets of effects will work themselves out, although it is clear that FDI flows have been less affected by the crisis than portfolio flows. Although FDI inflows to Mexico during the first half of 1995 fell to an estimated \$2.6 billion from the level (\$3.5 billion) reached in the first half of 1994 -- a drop that can be partly explained by the peso crisis and partly by a post-NAFTA effect (similar to the initial rise and the subsequent drop of FDI flows into the European Union after the implementation of the Single Market programme) -- they nevertheless exceeded the levels reached in the first six months of 1992 and 1993 (\$2.2 billion and \$2.1 billion, respectively).

In contrast to Mexico, where rapid FDI-led integration with North America since the mid-1980s had preceded the NAFTA negotiations, the other countries in Latin America and the Caribbean are advancing at a much slower pace as far as such integration is concerned. There are, however, some recent indications that this process is gaining momentum, especially in the case of Chile. Given the already substantial FDI stock in Latin America and the Caribbean accounted for by United States and Canadian TNCs, and the intra-firm trade flows associated with it, the region holds considerable potential for becoming more closely linked to the North American production system and benefiting from the growth it stimulates.

- *Africa* remains marginalized. The FDI boom in developing countries has largely bypassed that continent. Sub-Saharan Africa received FDI flows worth \$1.8 billion in 1994 (the size of flows to New Zealand), while North Africa received \$1.3 billion (comparable to flows to Portugal). Most FDI in Africa continues to be concentrated in a small number of countries endowed with natural resources, especially oil.

In spite of these small investment flows, it is not correct to perceive Africa as a region with poor investment opportunities. The heterogeneity of the region disguises significant differences in FDI performance and potential. It includes a number of countries that do well in terms of attracting FDI, even when compared to the average for all developing countries. Furthermore, key determinants of FDI location, such as the level of development, market size and market growth, suggest that unexploited FDI potential exists in a number of countries. Indeed, an analysis based on the performance of United States affiliates since the early 1980s reveals that profitability in Africa is higher than in certain other developing country areas. Most governments have made considerable progress in undertaking far-reaching domestic policy reforms and improving substantially their regulatory frameworks, especially regarding FDI. But more needs to be done to tap the existing FDI potential. Well implemented privatization programmes, for example, could be of help here, and in some countries (e.g., Egypt and Morocco)

progress is being made in this respect. This underlines further the need to differentiate when considering investment opportunities in Africa.

... with the countries of Central and Eastern Europe being drawn into the international production system as well.

The countries of Central and Eastern Europe are not yet major players as regards FDI inflows and outflows. In 1994, total inflows into the region, at \$6 billion, were lower than inflows to Singapore alone, and the region's cumulative stock (of some \$20 billion) was comparable to that of Argentina. Furthermore, inflows remain concentrated in a handful of countries (the Czech Republic, Hungary and Poland) in which privatizations have been an important factor. Elsewhere, FDI flows are lagging behind recovery. Foreign affiliates contribute to the process of transformation, especially in terms of their above-average performance as regards productivity and exports, the provision of specialized services and the stimulation of competition. With more countries creating functioning markets and emerging from the transitional recession, they are likely to attract more FDI. However, care will need to be taken that such factors as excessive expectations, the negative side-effects of privatization and restructuring (such as lay-offs) and sovereignty sensibilities do not lead to a backlash against FDI.

As the world's top 100 TNCs are becoming more transnationalized ...

About one-third of the total assets of the world's 100 largest TNCs, as ranked by UNCTAD on the basis of the value of their foreign assets, are located abroad. It is estimated that these TNCs account for one-sixth of world outward FDI stock. Royal Dutch Shell, the biggest of these firms, operates in petroleum extraction and processing activities, but firms in new information industries, such as IBM and General Electric, have been moving up the ladder. Ranking firms by foreign assets is important as it captures the absolute impact that individual TNCs can have on host countries. But it does not say anything about either the extent of their transnationalization or about the strategies firms pursue, and especially the role they assign to the various units (including foreign affiliates) that comprise a transnational corporate system. Arranging the top 100 TNCs on the basis of UNCTAD's new composite index of transnationality (that takes into account the respective shares of foreign assets, foreign sales and foreign employment in the corresponding totals but does not, of course, capture corporate strategies and the role of the individual units comprising a TNC system) yields a ranking that gives Nestlé the top position, followed by Holderbank and Thompson Corporation. According to UNCTAD's transnationality index, 40 out of the top 100 TNCs have more than half of their activities abroad, with the average share for the group as a whole being 41 per cent. The index also shows important differences by industry, with chemicals (61 per cent) and food (53 per cent) scoring highest on the transnationality index, and trading the lowest (30 per cent). The index also reveals -- not surprisingly -- that TNCs from small economies such as Belgium and Switzerland have a strikingly larger proportion of their activities abroad than TNCs from large countries such as Japan or the United States. But even in the case of United States firms among the top 100 TNCs, the transnationalization index reaches an average of 34 per cent.

The universe of TNCs comprises not only large companies. Increasingly, it also includes small and medium-sized firms (i.e., firms with less than 500 employees in their home countries), each of which contributes to the integration of the world economy. UNCTAD's sample of 50 small and medium-sized enterprises from developed countries suggests that these firms can be quite international. Their transnationality index is 27 per cent, with 13 of them scoring over 40 per cent (6 of which even exceeded 50 per cent). In this sample, firms tended to be more transnationalized in terms of employment (44 per cent) than in terms of assets (28 per cent) and sales (26 per cent), pointing to the larger importance of labour-intensive activities for smaller firms -- and hence the benefits of seeking out low labour costs abroad.

... more and more firms from developing countries are entering the ranks of outward investors.

The globalization process extends, of course, to firms from the developing world as well. While small in the global context, FDI outflows from developing countries as a share of world flows have doubled in importance from 5 per cent in 1980-1984 to 10 per cent in 1990-1994. In 1994, in fact, 15 per cent (or \$33 billion) of world FDI outflows originated in developing countries. Most investments originate from a small number of newly industrializing economies in Asia (and Latin America). Although a growing share is directed to developed countries, most outflows take place in a regional context within Asia and Latin America. Regional flows are increasingly important, especially in Asia: in nine important Asian developing economies, the share in total inward FDI stock accounted for by the same economies rose from 25 per cent in 1980 to 37 per cent in 1993.

Not surprisingly, TNCs from Asia dominate (with 32 entries) the first-ever list compiled of the 50 largest TNCs from developing countries (ranked by the size of their foreign assets), with the remainder being based in Latin America. Asian firms also capture the top seven rankings in terms of transnationality, which reflects the fact that Asian TNCs as a group are more transnationalized (16 per cent) than Latin American TNCs (12 per cent). Although five firms have more than 40 per cent of their activities abroad, TNCs from developing countries as a group, scoring 13 per cent on the transnationality index, are considerably less transnationalized than their developed country counterparts -- an indication that the transnationalization process for these firms is only just beginning. Indicative of this is also the

ing country TNC (Cemex S.A. from Mexico)
the list of the world's top 100 TNCs (R.J.R.

fact that the foreign assets of the leading developing
are barely as large as those of the last firm on the
Nabisco from the United States).

Competitiveness and country performance

Competitive global economic environment, the
of per capita income (as a proxy for welfare)
as they establish with the rest of the world
and through firms that undertake international
and capital. Foreign direct investment and
international production create opportunities for

Foreign direct investment, firm competition

In today's increasingly open and competitive
performance of countries -- best measured in terms
and growth -- depends significantly on the linkages
economy. Key among these are linkages generated
production, along with flows of trade, technology
non-equity modes of participation by TNCs in inter-

countries to strengthen their capacities to produce, to reach and expand the markets for their products, and to adapt their economies to changing conditions. Part Two of the *World Investment Report 1995* looks at key aspects of the relationship between FDI and the competitiveness of firms, and the implications of that relationship for the economic performance of host and home economies in which those firms operate.

International competition in a liberalizing and increasingly integrated international economy poses new challenges for TNCs...

An increasing number of firms in many countries are now subject to integrated corporate strategies that span more than one country and involve not only headquarters but also domestic and foreign affiliates: they constitute parts of transnational corporate systems. Firms comprising these systems are becoming increasingly specialized with product mandates being given to individual firms and a tendency to locate discrete parts of the value-added chain in any part of the world where it yields the maximum benefit to the system as a whole. The intra-firm international division of the production process has become a necessary -- if not imperative -- element for firms that wish to compete in the international arena. Given the liberalization of trade, FDI and technology flows, it becomes increasingly difficult for firms to withdraw behind various types of barriers into the safe havens of their home markets. Competition is everywhere. All markets are increasingly being contested by a whole range of international economic transactions. Firms wishing to remain competitive need to maximize their efficiency, drawing on three principal sources: a portfolio of proprietary (or firm-specific) assets; a portfolio of locational assets; and the managerial expertise to exploit these portfolios, with a view towards converting global inputs into outputs for global markets as profitably as possible.

... with significant implications for countries' economic performance.

The forces driving TNC systems to enhance their competitiveness have important implications for countries' economic performance. To the extent that these firms bring with them tangible or intangible resources (including capital, research and development, technology and organizational and managerial practices) that increase the capacity of a country to produce a greater quantity or improved quality of goods and services, the performance of the country will be affected positively. Positive effects can also result from the expansion of market access that TNCs can bring about, directly or indirectly, as a consequence of intra-firm transactions or a greater ability to reach national and international markets, as well as from economic restructuring fostered by TNCs. To the extent that governments make it difficult for firms to develop fully their three principal sources of efficiency, they handicap them in international competition, ultimately harming global welfare and, under certain conditions, their own countries' welfare as well.

Transnational corporations not only create assets and provide privileged access for the individual firms comprising their corporate systems, ...

Capital, innovation, technology, skilled human resources and efficient organizational and managerial practices are all important for the competitiveness of firms and, given an appropriate

macroeconomic environment, can help to improve the economic performance of the countries that are host to them. Transnational corporate systems generate these resources and they disseminate them throughout their cross-border corporate networks in the normal course of their business operations. In fact, a fair share of the worldwide availability of these resources can be attributed to the activities of TNCs:

- *Capital.* Corporate systems generate savings in the form of retained profits. Estimates based on United States data suggest that the total profits generated by foreign affiliates worldwide were some \$175 billion in 1994. The part of those profits that is reinvested is significant -- in the case of the United States, it amounts to over half. The remainder is repatriated for distribution to shareholders. In other words, TNC systems also serve as conduits for the circulation of capital (and related payments) among their units via equity flows, intra-company loans and repatriated earnings. Capital generated internally can be deployed anywhere in a TNC system, offering advantages in terms of flexibility in project financing and minimizing transaction costs.
- *Innovatory capabilities, technology and skills.* Corporate systems are an important source of innovation, generating technologies -- and, in the process, technological capabilities and skills -- that are key to improving a company's competitiveness. Some four-fifths of global civilian research and development is undertaken within TNC systems. The United States, the largest outward direct investor, saw a doubling of research-and-development expenditures by TNC parent firms and an increase by three-and-a-half times in such expenditures by foreign affiliates during 1982-1992. Patent data also suggest that the world's largest industrial firms, most of which are TNCs, account for around half of the world's commercial inventions. And collaborative strategic alliances for the development of new technologies are on the rise.

An increasing share of research and development undertaken by TNCs is accounted for by foreign affiliates, but different indicators give different pictures of the magnitudes involved and the extent to which this trend has gained in importance in recent years. For United States TNCs, the share of research and development performed by (majority-owned) foreign affiliates increased from 9 per cent in 1982 to 12 per cent in 1992 (measured by expenditures). Patent data not only confirm this trend but also suggest that the share of research and development undertaken by foreign affiliates of TNCs from a number of countries may be even higher. While research and development that takes place outside the home countries of TNCs is located largely in developed economies, increasingly, it is also being located in developing economies and economies in transition. Principal among the forces behind this trend are competitive pressures driving firms to tap into pools of knowledge, expertise and skills wherever they are located, capitalizing on the transnational nature of TNCs. The availability of the requisite talent and capabilities in a number of developing and transitional economies at a much lower cost, combined with the liberalization of regulatory frameworks and (for some industries particularly important) improvements in the protection of intellectual property rights have fostered this trend. There are, however, retarding forces, especially a "stickiness" resulting from an established pattern of locating research at home. But

the self-interest logic of a TNC system suggests that research and development (like manufacturing before it) will increasingly be performed where this can be done most efficiently -- and that should mean more and more geographical dispersion within TNC systems.

Beyond being conduits for the dissemination of innovatory capabilities, TNC systems offer privileged access to technology for their member units. An estimated four-fifths of global cross-border flows of royalties and fees (a proxy for technology flows) take place within TNC systems. Integrated research-and-development networks with cross fertilization through two-way flows of information and skills between parent firms and foreign affiliates are, however, prevalent mainly in the developed world where conditions for their operations are more likely to exist. For the majority of developing countries, as well as many developed economies, it is usually a transfer of production technology that takes place, from the parent firm to its foreign affiliates.

- *Organizational and managerial practices.* Transnational corporations are also an important source of organizational innovation and the generation of new and more efficient managerial practices. Drawing upon the ideas of creative individuals within their own corporate sphere and upon knowledge generated outside -- e.g., in business schools and management-consulting firms -- firms constantly seek to modernize their organizational and managerial practices, in order to gain firm-specific advantages and as a way to improve the efficiency of their operations. The transnational nature of their organizations creates particular demands for sophisticated transnational and cross-cultural management and organization. The very transnational nature of the corporate system facilitates this, as any part of the system is a potential source of improvements. Moreover, many TNCs typically operate in the forefront of technology and constantly need new practices to respond to the changes in production methods that this requires. The TNC system provides parent firms and foreign affiliates privileged access to any new organizational and managerial practices developed elsewhere in the system, although the actual dissemination of such practices depends upon the characteristics of the individual TNC system concerned.

The role that TNCs have in the generation of these competitiveness-enhancing resources gives these firms a leading edge in the globalizing world economy. And, being part of a TNC system may be necessary for obtaining access to some of these resources.

... but can also provide indigenous firms linked to their systems with advantageous access to the resources available in TNC systems, ...

While the units belonging to TNC systems have *privileged* access to the assets available through these systems, firms linked to them can have *advantageous access* to the same assets. This is particularly apparent -- and important -- in the area of technology. For example, collaborative agreements between TNC systems and indigenous firms can enhance the competitiveness of all the firms involved, by taking advantage of technological or knowledge complementarities. Similar arrangements may be made between TNC systems and local

research institutions. Some foreign affiliates, for instance, sponsor research and development carried out by indigenous firms or institutions. As far as production technology is concerned, backward linkages (including through non-equity arrangements) with TNCs are an important means of acquisition of new or advanced technology by indigenous producers. Such arrangements can contribute substantially to competitiveness and the creation of national technological capabilities, as the experience in several East Asian countries attests.

regards outward FDI is whether the investment takes place at the expense of domestic investment in the home country. If the build-up of foreign affiliates' assets is financed through cross-border flows of capital, and if raising this capital involves the crowding out of home-country investments, then outward FDI would affect domestic capital formation adversely. There seems to be little evidence, however -- at least for major home countries -- that such crowding out takes place. On the other hand, the indirect effects on home-country investment from the remittance of profits or increased demand for exports must also be taken into account. Moreover, domestic factors of production may be released for more productive use when outward FDI takes place, improving long-term economic performance through restructuring.

- *Innovatory capabilities, technology and skills.* Given the dominant role of TNCs in the innovation of new products and processes, inward FDI (and non-equity arrangements with TNCs) are an important source of new and advanced technologies and skills. Foreign direct investment that involves the setting up of research-and-development affiliates also strengthens the innovatory capacities of host countries. At the same time, outward FDI can strengthen home countries by allowing firms to access overseas research-and-development capabilities and technologies otherwise difficult to obtain and to minimize costs of technological development. As research-and-development dispersion by TNCs increases, the size of a home country's technology base may shrink and some technological capabilities may diminish or disappear as a result of an international division of labour in research and development. The implications of these changes must be balanced against the returns in terms of repatriated earnings from the worldwide exploitation of the technologies generated and against the effect they have on the competitiveness of the firms involved.
- *Organizational and managerial practices.* The adoption of more efficient organizational and managerial practices by units of TNC systems can improve productivity in an economy directly as well as through the linkages, spillovers and externalities mentioned earlier. The strong competitive position of the United States manufacturing industry in the interwar period and thereafter, as well as the sustained competitive strength of Japanese manufacturing industries in recent decades, can be attributed in some measure to the managerial practices pioneered by the firms of those countries; many of these innovators have been TNCs.

Inward FDI has (along with other channels of transfer of knowledge) acted as a conduit for the spread of Japanese organizational and managerial practices to other countries during the 1970s and 1980s. The comeback of the United States automobile industry and, more generally, the recovery and growth of United States manufacturing productivity is due partly to the successful adaptation of Japanese organizational and managerial practices. Similarly, in developing host countries, foreign affiliates have often acted as conduits for the transfer, and as catalysts for the adoption, of numerous improvements in organization and management by indigenous enterprises, presumably contributing to a more efficient use of resources and improved performance of the economy as a whole.

Foreign direct investment also affects the competitiveness of firms by helping them get better access to markets, ...

The competitiveness of firms depends not only on their ability to obtain access to assets that complement and enhance their capacities to produce goods and services, but also on their ability to access markets that are large enough to exploit those assets fully and most efficiently. Foreign direct investment strengthens the capabilities of TNCs to reach international markets not only through cross-border trade but also through the sales of foreign affiliates ("establishment trade"). The latter allow TNCs to secure markets for goods and (especially) services that are impossible to reach without proximity to customers, to expand markets for goods and services that are difficult or costly to service from a distance and to respond rapidly to new or changing customer tastes and market conditions.

Equally important, FDI allows firms to build intra-firm networks of trade that link production units within TNC systems and provide them with privileged access to the rest of the system. These intra-firm activities are estimated to comprise one-third of world trade, or approximately \$1.6 trillion of exports in 1993. The resulting efficiency benefits to the TNC system stem from reduced transaction costs as compared with arm's length trade and from economies of scale and scope. From a country's point of view, these same arrangements may, however, give rise to concerns over restrictive business practices and transfer pricing which need to be addressed. Beyond such intra-firm trade, TNCs also sell to non-affiliated firms abroad, and such sales are estimated to account for about another one-third of world exports of goods and services. Furthermore, the markets served by establishment trade must also be taken into account.

... standing or expanding, in the process, markets for other firms, ...

The efforts of TNCs to expand their sales and organize their production efficiently create market opportunities for other firms in host and home economies, if these other firms are linked to TNC systems. This applies especially to suppliers of parts and components and of producer services. It also applies to firms that utilize transnational trading corporations, which have played a particularly important role in providing suppliers of primary or manufactured goods with access to international markets. Thus, firms not being members of TNC systems, but being linked to them, can have advantageous access to the sizeable markets worldwide served by TNC systems, an opportunity that may give them a competitive edge over their rivals.

... with, again, implications for the performance of host and home countries.

What does this mean for the economic performance of host and home country economies? For host countries, and especially developing countries, inward FDI not only contributes a package of resources that are often complementary to domestically available resources and hence expand their production capacities, but also expands the markets for output. Given a competitive environment, and one in which domestic producers are not simply overwhelmed

by TNCs, inward investment should thus contribute to raising output of host countries directly as well as through linkage and competition. Where the last of these conditions is lacking, in particular, and one or more industries in a country become exclusively comprised of foreign affiliates, the sharing of the benefits between the host country -- i.e., its consumers (through prices), producers (through spillovers and eventual capacity-building), labour and other domestic resources (through wages and other factor returns) and government (through fiscal revenues) -- and TNCs become of particular importance. Maintaining competition becomes key.

A particular contribution by foreign affiliates to markets of developing economies relates to export expansion: there is evidence that foreign affiliates in developing countries often have high export propensities and tend to be more export-oriented than domestic firms, especially in manufacturing. Their high export propensities are however accompanied, particularly in the earlier stages of investment, by relatively high import propensities which can exacerbate foreign exchange shortages in the short run. But, in the longer run, the overall high trade orientation of foreign affiliates can strengthen the linkages of host countries to the world economy, with benefits in terms of their trade performance as well as output growth.

The relationship between outward FDI that strengthens market access for TNCs and the performance of a home economy is less straightforward. This is because outward FDI could, under certain circumstances, displace (actual or potential) domestic investment, and affect output and employment in the home country adversely, particularly in the short or medium-term. Empirical evidence varies in this regard, although the balance of evidence for FDI in general seems to suggest that the effects of outward FDI on the level of home country economic activity are marginally positive. In addition, available evidence suggests that outward FDI as a whole has a positive effect on home country exports, while, in the aggregate, also resulting in increased imports as well as a changing pattern of trade. It contributes, moreover, to income generation for the home economy through repatriated income and strengthens innovatory capacity on account of the abilities of TNCs to finance and sustain high rates of research and

To improve their performance -- to be able to maintain or increase welfare through improved productivity over an extended period of time -- countries need to restructure, i.e., to change the composition of their economic activities (output, employment, exports etc.) across sectors, industries or types of activities within an industry. This is an ongoing process that affects all growing countries. In general, three categories of restructuring can be distinguished:

- Sectoral restructuring of an economy, from the primary sector, especially agriculture, through manufacturing to services.
- Restructuring within a sector, e.g., restructuring of manufacturing industries from low-productivity, labour-intensive (and typically low-technology) light industries to high-productivity (and usually high-technology) knowledge-based industries.
- A shift within an industry -- from low-technology, low-value added goods or services to higher-technology, higher-value-added ones.

Transnational corporations can -- and do -- facilitate restructuring of home and host countries by introducing new industries or activities that would be unlikely to emerge from purely national enterprises alone or from upgrading existing ones. They can do this because they can supply a package of tangible and intangible assets, reinforced by privileged access to the wider pool of resources residing in their systems as a whole, and by linking their resources with those available in the countries -- host or home -- in which they are established. Firms can play this role through various forms of involvement, ranging from wholly-owned foreign affiliates through joint ventures to licensing and subcontracting agreements. The central and common characteristics of all these forms is that TNCs retain control over key assets, and hence over key parts of the production or distribution process (or both).

...as exemplified in Asia...

Nowhere are the phenomena related to the positive role that TNCs can play in industrial restructuring more clearly visible than in parts of Asia, a region undergoing rapid structural transformation. It is a restructuring that involves, to various degrees, TNCs in many of these countries' manufacturing industries. This role can be seen particularly in Indonesia, Malaysia, the Philippines and Thailand, but increasingly also in China and Viet Nam. But even in countries that are considered textbook cases of successful restructuring and development based principally on indigenous capabilities -- Japan, the Republic of Korea and Taiwan Province of China -- TNCs have played a role.

...by the restructuring of manufacturing in Japan by its own TNCs...

In the immediate post-war period, foreign TNCs helped turn Japanese light industries into internationally competitive industries, and Japanese automobile makers learnt the techniques of mass production in joint ventures with TNCs. This role, however, was short-lived: due to

the Japanese ability to develop local capabilities, it soon gave way to looser links with foreign firms in non-equity forms which served mainly as a conduit for technology transfer.

Much clearer and long-lived has been the role of the country's own TNCs, in terms of helping restructure Japan's manufacturing sector through outward FDI. Japan's success in becoming a highly competitive economy owes much to its ability to restructure its manufacturing sector continuously from labour-intensive industries through resource-based heavy industries and assembly-oriented industries towards high technology industries. Outward FDI in manufacturing was important at each stage of the restructuring process. It accelerated the process of Japan's industrial restructuring, notably by scaling down -- through moving abroad -- industries or activities losing competitiveness (and thus releasing resources for industries gaining competitiveness), strengthening the existing structure by acquiring abroad assets lacking at home, or lowering the cost of this upgrading by sharing these costs with foreign TNCs. At each stage of the restructuring process, some industries (or activities within industries) came under competitive pressures and had to be restructured at home or relocated abroad, or both.

Some examples illustrate this process. During the 1960s, competition led to the transformation of Japanese small and medium-sized companies in the textile and apparel industries into TNCs: they relocated their production to the (now) newly industrializing economies with (then) an abundant supply of cheap unskilled labour. More recently, Japan's manufacturing FDI is on the rise again, supporting the next round of competitiveness-enhancing industrial restructuring, this time mainly to alleviate the brunt of the yen appreciation by relocating certain types of production to lower-cost countries, mostly in Asia. The activities concerned include parts and components (giving domestic assembly-based industries the benefit of cheaply imported inputs) and low-end final consumer goods such as radios, colour television sets and microwave ovens in which Japan (but not necessarily Japanese firms) has been losing its comparative advantage.

...and by that in newly industrializing economies by foreign and their own TNCs, ...

By relocating assets that were no longer of use at home to neighbouring developing host countries that had a comparative advantage based on an abundance of cheap labour and certain skills -- but which could not realize their comparative advantage fully in the absence of these assets -- Japanese TNCs (and, for that matter, also United States TNCs) contributed to the building, upgrading and turning around of industries in the countries concerned. In particular, they turned inward-looking industries into export-oriented, internationally competitive industries, thus helping countries realize or enhance their comparative advantages. Even the Republic of Korea and Taiwan Province of China used some TNC-controlled assets in the initial phase of industrialization (as illustrated by the case of the textile and apparel industries), and more when they were moving up the ladder of industrial upgrading (as illustrated by the case of the electronics industry). The reliance on TNC-controlled assets has been higher in countries that have more limited capabilities. If a country wants to pursue an export-oriented strategy, (especially at an early stage of industrialization) TNCs can provide key assets (such as access

to markets, product design or quality control) that can help to make this strategy a success. Since such key assets can be provided through non-equity arrangements as well, the role of TNCs in economic restructuring is much greater than FDI-based measures would show.

Quite logically, those developing countries in Asia that successfully restructured gave rise, eventually, to their own TNCs; these began to undertake FDI initially in the developing countries of the region and later on also in developed countries. Conversely, the emergence and growth of outward FDI indicates a successful restructuring process. As a result, the newly industrializing economies involved have been taking advantage of both inward and outward FDI as agents of industrial transformation.

...leading to interactive TNC-assisted restructuring in the whole region.

The successful restructuring of the first generation of newly industrializing economies created new home countries (and, hence, sources of FDI). Combined with the liberalization of inward FDI policies in the region, this has led to the growing importance of FDI in the restructuring process of other developing countries of the region, first Indonesia, Malaysia, the Philippines and Thailand, and, more recently, China and Viet Nam. Successful restructuring (including in countries relying largely on their indigenous capabilities such as the Republic of Korea and Taiwan Province of China), moreover, typically leads to a greater role of inward FDI because it involves a movement towards more knowledge-based industries (such as the electronics industry) usually dominated by TNCs.

Furthermore, by shifting assets from home to host countries, Japanese (and United States) TNCs and TNCs from the newly industrializing economies have linked the processes of industrial restructuring within the region, initially between Japan and the newly industrializing economies and later between these countries and other countries in Asia. This has led to an interactive TNC-assisted restructuring process among an increasing number of economies of the region (described by some as a “flying geese” formation). By doing so, TNCs smooth (and speed up) the adjustment process in response to changing patterns of comparative advantage and contribute to economic growth.

The extent of TNC participation -- through both equity and non-equity forms -- in the industrial restructuring of especially East and South-East Asia has been such that TNC activities need to be included among the factors that explain the above-average economic growth in Asia. The interactive nature of this process, and the impetus it gives to economic development in general, can perhaps be described as “tandem economic development” through interactive TNC-assisted industrial restructuring.

Other regions, too, have the potential to follow Asia's example.

Restructuring in Asia has taken place in and among countries that differed greatly as regards the degree of government intervention in the economy, forms of technology acquisition, and the role of FDI. But some conditions have been common to this process:

- The countries involved were at different levels of development, with corresponding factor endowments, cost structures and local capabilities; this provided a wide range of choices for TNCs to match host country capabilities with their own.
- The governments involved allowed restructuring to happen, including by letting phase out some firms or industries while letting phase in others, and allowed the emergence of their own TNCs.
- Restructuring was to be verified by the market.
- An enabling framework was created, permitting TNCs to deploy their assets between the countries involved and to play their restructuring role, at least for the industries targeted by governments for upgrading; this included especially the liberalization of external transactions (particularly FDI and associated trade) and a framework for

Policy implications

As the trend towards liberalization and facilitation of inward FDI continues, ...

With policy regimes becoming increasingly open and, thus, similar, governments are making extra efforts to attract FDI and to strengthen linkages between foreign affiliates and domestic enterprises, with a view towards enhancing their countries' economic performance.

*... governments are fine-tuning their policies to attract performance-enhancing FDI.
Targeted promotion is important to attract capital, ...*

Governments which actively seek investment also actively seek to improve their countries' image within the investment community as a favourable location for investment. In doing so, they rely heavily on direct contact with prospective investors, especially important ones. In fact, successfully enticing one important TNC to locate in a country can trigger a chain reaction that leads to substantial sequential and associated investment. Examples abound. During the early 1970s, for example, Malaysia's Industrial Development Authority (MIDA) identified specific companies in the then fast-growing semiconductor sector in the United States; these companies were targeted for discussions between senior government officials and executives of the companies. By 1987, Malaysia was the world's largest exporter and the world's largest producer of semiconductors.

Selecting target firms involves a number of choices: which countries are likely sources, which industries are good candidates and, within those industries, which kinds of firms and activities should be sought. Therefore, successfully targeted investment promotion requires extensive research to determine which firms are likely candidates -- not only to invest in the country but also what kind of investment they would bring.

... and after-investment services are crucial for upgrading or retaining it.

The most obvious targets are firms already established in a country. Governments can strive to encourage sequential investment (including through reinvested earnings), which can also provide positive demonstration effects for potential new investors: a satisfied foreign investor is the best commercial ambassador a country can have. Policy makers should be concerned when foreign investors leave the host country due to deteriorating local conditions. Emphasis on after-investment and investment-facilitation services for current investors is therefore crucial. This could involve the creation of joint committees consisting of representatives of government, foreign affiliates and local employees to try to resolve problems that could lead to relocation; avoid conflicts; and consider alternative solutions. Also, a business ombudsperson could be appointed to handle complaints about unreasonable delays and demands by government officials on business people. He or she could be given authority to report publicly and periodically on the business climate.

Transfer of technology remains an important issue for most countries, but facilitating the diffusion of research-and-development capabilities is increasingly becoming as important for many, ...

The importance of FDI as a conduit for technology transfer has long been recognized by policy makers. However, today, policies in most countries focus on effective technology transfer, rather than regulating specific aspects of technology transactions. Consequently, a number of countries have not only liberalized their technology-transfer legislation relating to restrictions on contractual aspects, they have also focused more on improving the capacity to absorb and use new technologies. However, the actual policy instruments used in that regard can vary widely. Much depends on the existing and evolving levels of local skills and capabilities, and on the nature of the technologies concerned. What is desirable for a country such as the Republic of Korea may be inappropriate for Mexico and simply out of the question for a least developed country. Bearing that in mind, there are, however, two major types of policy instruments that can be said to facilitate technology diffusion.

The first type embraces policy instruments that create an overall attractive environment for technology transfer. They support the institutional base conducive to building local technical skills; a general economic atmosphere that rewards enterprises and innovation; and a dependable legal system, especially intellectual property protection. The second set of policy instruments involves the promotion of linkages between foreign affiliates and local firms, as well as laboratories and research centres. Among the most common factors are workforce mobility; subcontracting and other backward linkages; equipment-supplier systems; user-producer relationships; consultancy services; informal linkages; and strategic alliances that may involve linkages with government, universities, local firms and research-and-development institutions.

... with science parks playing an important role.

Of special interest to governments wishing to attract technology intensive FDI is the establishment of infrastructural facilities to foster technology partnerships and encourage positive agglomeration effects. Science parks play a particular role in this respect. The current usage of these facilities, the extent of awareness of their existence on the part of TNCs, the identification of obstacles to their greater use, and the effectiveness of the available services and facilities are all aspects that need to be carefully assessed. Policies must, however, be consistent with a country's mix of competitive industries, its stage of development, and the capacity of its firms and research institutions. Since not all countries have the resources necessary to develop science parks, regional or subregional initiatives may be useful to pool scarce scientific, technological, financial and institutional resources in specific sectors.

Encouraging the acquisition of skills through training is fundamental, ...

It is indispensable for improved national economic performance that human resources adapt to technical change and contribute to diffusing technology. This requires appropriate

training. Lifelong education and retraining are also important, supported by policies that link the educational system to industry and encourage industry's own efforts at training. For that to be effective, however, requires policies that encourage a nexus between pre-work education and on-the-job training. Among other things, this could involve institutional support to promote cooperative arrangements between TNCs and local learning institutions. Such programmes may require fiscal incentives or other public support, but it is also important that TNCs be encouraged to contribute to the development of human skills beyond their standard operating procedures. If fiscal incentives or public subsidies are to be granted, they should be differentiated on the basis of the expected benefits of training.

... but facilitating linkages is necessary for a further dissemination of skills.

Education and training are, however, only part of the story. One of the most important determinants of a foreign affiliate's impact on the technology and skills in a host country is the extent of its forward and backward linkages with local firms. More technology and skills will be transferred by FDI in linkage-intensive industries than by FDI in industries where such linkages are more difficult to develop. Thus, one policy approach is to encourage industries that lend themselves to local subcontracting through the purchase of parts and components from outside suppliers. Specific consideration might be given to the establishment of an "open school" for small and medium-size businesses, with seminars in various cities, lectures by TNC specialists, case illustrations, plant visits etc. Moreover, encouragement could be given to the establishment of centres that provide information and advice on matters such as the availability of courses, teaching materials and training techniques. Since lack of training is usually not the only impediment to a small firm's competitiveness, these centres might offer complementary services such as technological information, market studies, management techniques, and industrial extension services in general, in order to increase their attractiveness to the business world.

Incentives can also be offered to TNCs that have their own training centres to share their facilities and expertise with small and medium-sized enterprises, particularly suppliers and subcontractors. This would give smaller enterprises access to training and make use of subcontracting networks as collective education mechanisms. It could also be useful to co-finance visits to "best practice" plants abroad by representatives of small and medium-sized enterprises.

Foreign direct investment can facilitate access to world markets ...

Many countries have adopted export-oriented strategies to promote their development. In pursuing such strategies, governments, typically, focus on trade and exchange-rate policies, but tend to neglect the FDI dimension. Few explicitly recognize that inward and outward FDI can be an important means of accessing world markets. Yet, market expansion can be one of the most important contributions that FDI can make towards the performance of host economies, especially developing ones, since foreign affiliates provide privileged access to the

markets within TNC systems and advantageous access to other markets due to linkages with TNCs.

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The implication for policy makers is straightforward: integrated investment and trade policy can facilitate access to international markets. Foreign-direct-investment policy should have a trade component as TNCs are interested in whether a country is suitable for investment in their intra-firm division of labour; at the same time, trade policy should have an FDI component, precisely to take advantage of the market access that TNC systems provide. While many countries have liberalized their trade and investment policies, the two have tended to proceed at a different pace. When FDI policy is more open than trade policy, the type of investment that is attracted tends to take the form of stand-alone production oriented to the domestic market and often relies on trade protection. Such affiliates have difficulties in benefiting from the resources of their TNC systems, and can also be less subject to the rigours of competition. Generally, FDI should not be encouraged to be either entirely import-substituting (e.g., through tariff incentives) or completely export-oriented (e.g., through export-processing zones). Both introduce inefficiencies and distortions. By contrast, the recent Latin American experience shows, exposure to international markets is a powerful incentive for managers to cut waste, ensure quality control and upgrade production processes and standards. And, as the contrasting experiences of export-processing zones and import-substituting estates also suggests, access to the domestic market stimulates the development of export-oriented products and technological capabilities, which are less developed in specialized import-substituting units.

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Support for the establishment of local linkages.

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The market access afforded by TNC systems need not be confined to their member firms. A key policy requirement for the successful establishment of linkages is the availability of local services to potential small and medium-sized domestic subcontractors. Supportive economic policies are also important, particularly a stable exchange rate that is favourable to the production of tradeables, thereby encouraging local sourcing for TNC systems.

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The various FDI components should be treated as parts of a single package.

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For analytical purposes, policies regarding the different components of the FDI package should be considered separately. Since FDI is a package, it should be treated as such. The composition of the package that can be attracted very much depends on a country's characteristics, its level of development. This suggests that each government needs to determine the role of FDI in its economy and what the potential is for further FDI; to what extent the regulatory framework in place for FDI facilitates the realization of this potential; and what measures (perhaps supported, where appropriate, by a technical cooperation programme) are needed to make the regulatory framework more effective. UNCTAD has initiated a series

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of Investment Policy Reviews, to assist individual governments with these objectives in mind. At the same time, UNCTAD will assist the members of the newly established World Association of Investment-Promotion Agencies (WAIPA) to benefit from each others' considerable experience in this area.

Governments use incentives to attract and retain FDI ...

International competition for FDI has led more and more governments to offer increasingly generous incentives to influence the locational decisions of TNCs. Incentives may be justified to cover the "wedge" between the social and private rates of return for specific FDI undertakings with positive spillovers and to reduce market distortions; they can thus serve a number of development purposes. However, they also involve economic, financial and administrative costs. Moreover, as governments compete for FDI, they may be tempted to offer more and larger incentives than is justified. Competing for FDI with incentives can thus lead to welfare costs exceeding the benefits an investment can bring.

... and, as a result, unavoidably and increasingly compete among themselves, which can lead to waste or distortions.

Evidence suggests that the number and range of incentive programmes available to foreign investors has increased over the past ten years. For major investment projects, furthermore, incentives are often provided on an *ad hoc* basis, determined in negotiations with the investor. And as countries are orienting their development strategies towards exports, technology-intensive industries and higher value-added activities, incentives competition is especially strong in these areas. In fact, countries are deliberately changing their FDI-incentives programmes in the light of actions taken by other countries.

Incentives play, however, only a relatively minor role in the locational decisions of TNCs (relative to much more important factors such as market size and growth, production costs, skill levels, infrastructure, political and economic stability and the nature of the FDI regulatory regime). This is not surprising since investment decisions are typically made because they promise to be profitable on the basis of market conditions alone; if incentives are offered, they typically become "icing on the cake". Still, the impact of incentives is not always negligible. When all other factors are equal, incentives can tilt the balance in investors' locational choices. But this logic fails when all countries do the same.

National and international approaches are needed to contain excessive incentive competition.

A number of approaches can be pursued to contain excessive incentive competition:

- *National initiatives.* To rationalize the use of incentives, governments could undertake national incentive reviews to determine, among other things, the complete array of FDI

incentive instruments -- including discretionary incentives -- at all levels of government; whether any of these incentives are redundant; what have been the results obtained from the use of incentives and at what cost for the country; whether some incentives can be eliminated, or a ceiling placed on them; and whether a proper balance is being maintained between investment incentives and undertaking investment-promotion activities. The Investment Policy Reviews mentioned earlier are also meant to include an inventory of FDI incentives, with a view towards helping governments formulate more effective and efficient incentive policies. A more detailed and systematic review of incentives could be carried out on the basis of a manual prepared for use by governments.

- *Bilateral initiatives.* Some countries have used bilateral investment treaties to curtail the use of performance requirements in host countries; a reduction of these requirements could also moderate the use of incentives that are linked to them. Moreover, in the absence of a multilateral or regional approach, governments could consider investment incentives when negotiating bilateral treaties on investment or double taxation, so that the issue would at least be tabled for discussion. In fact, it might be possible to negotiate a conditional incentives-limitation clause in bilateral agreements that would only become operative if a specified number of countries adopted the same clause.
- *Regional initiatives.* On the basis of incentive reviews similar to those that could be undertaken at the national level, efforts at the regional level to curtail excessive incentives could involve, among other things, agreeing on overall ceilings on investment-incentive packages; criteria to phase out some of the most distorting incentives; and prior approval of incentives packages by the competent regional organization.
- *Multilateral initiatives.* Multilateral efforts to limit incentives competition are in their infancy and could be reinforced and expanded. To assist this process, an International Group of Eminent Persons could hold hearings on FDI incentives, with the participation of the private sector as well as national and international institutions. Based on experiences with the effectiveness of incentives, the Group could explore a wide range of issues, including ways and means of (a) improving transparency regarding FDI incentives; (b) further clarifying and documenting the cost and benefits of FDI incentives; and, on that basis, (c) identifying a limited number of particularly distorting incentives, with a view towards dealing with them first; (d) elaborating a check list of points that governments should take into account in their incentives policies.

The Group could conclude its work with a "challenge" round of pledges by countries to reduce the level of incentives by some fixed amount over a time period. A demonstration that such a pledge might be feasible could enhance the willingness of governments to seek a multilateral agreement on FDI incentives.

Indeed, just as the international community has begun to deal successfully with subsidies that distort trade, it may be possible, step by step, to make similar progress towards dealing with incentives that shift the benefits of incentives from host country taxpayers to investing firms.

In an increasingly integrated world economy, governments also need to pay attention to outward FDI.

Historically, outward FDI was mostly undertaken by large firms from a small number of developed countries. More firms are however now establishing themselves abroad, including firms from developing countries and a growing number of small and medium-sized enterprises. For many firms, outward FDI has become a strategic option necessary to gain access to markets and resources.

More governments recognize that outward FDI is a strategic option that should be left open to firms, lest they risk to impair the competitiveness of firms located on their territory - in fact, precisely the competitiveness of their strongest firms, namely those that have developed the ownership advantages that would allow them to establish themselves successfully abroad. Governments, too, have recognized that outward FDI can be to their countries' benefit, precisely because of better access to resources and expanded markets and in their interest in economic restructuring and growth. Consequently, a process of liberalization of outward FDI regulations is taking place, although change in this respect has been distinctly uneven between developed and developing countries.

The experience of developed countries ...

Developed countries have historically permitted and even promoted outward FDI. Where capital flows were restricted, countries used foreign exchange or capital-movement control systems with accompanying licensing or project-approval requirements. The usefulness and effectiveness of national exchange controls was undermined during the 1980s. At the same time, changes in exchange-rate policies -- notably the adoption of floating exchange rates -- and improved monetary management techniques reduced potential problems that could arise from the lifting of capital-control restrictions. By the end of 1994, only three developed countries maintained (limited) restrictions on outward FDI.

Independent from these liberalization efforts, furthermore, virtually all developed countries have created a variety of programmes to promote outward FDI, particularly to

- *Direct financial support.* Financial support was provided in about half of the developed countries during the 1980s, through development-finance institutions. For example, at least eight Japanese agencies sponsor programmes that promote outward FDI, the Export-Import Bank of Japan standing out as a unique institution in this respect. Similarly, the German Investment and Development Company, the United Kingdom's Commonwealth Development Corporation, the European Community's Investment Partners Programme and, on a broader scale, the International Finance Corporation provide both loan and equity financing for FDI projects in developing countries. Other countries' programmes emphasize the link between FDI and exports (e.g., the Canadian Export Development Corporation).
- *Investment insurance.* National investment insurance programmes exist in most developed countries -- and at the international level -- to provide coverage for expropriation, war and repatriation risks. In the United States, for example, the Overseas Private Investment Corporation has provided financing and political risk insurance since 1971 to support United States investments (worth some \$73 billion) in 140 countries worldwide, generating an estimated \$40 billion in exports and supporting more than 100,000 jobs in the United States. For many firms, the availability of such insurance is important when contemplating investment in developing countries.

With domestic outward FDI policies liberalized, developed countries have sought to supplement their domestic policies with international instruments aimed at protecting and facilitating outward FDI by improving FDI liberalization standards generally and levelling the playing field among themselves. An expanding network of bilateral, regional and international agreements has been the result, which, eventually, may give rise to a comprehensive multilateral agreement.

... and of developing countries and economies in transition ...

Few developing countries and economies in transition have paid much attention to outward FDI policies; typically these are subsumed under general capital-control policies which, in turn, are normally quite restrictive. The reasons appear self-evident: developing countries typically face a foreign exchange shortage and are capital constrained.

In recent years, however, these concerns have been re-evaluated. Governments are seeing merit in their firms and economies having better access to markets and resources (both material and labour inputs) and benefiting from restructuring -- or, broader, in becoming part of the emerging international production system.

- Among the Asian economies, the Republic of Korea and Taiwan Province of China already have a long record of liberalizing and in the case of the latter, even encouraging outward FDI. In the case of the Republic of Korea, "globalization" is the watchword of international economic policy-making, and outward FDI is an integral element of it. Singapore's history of liberal trade and investment policies has made it one of the first

developing countries to pursue a deliberate policy to acquire, through outward FDI, an “external wing”; the country now emphasizes the need to seek overseas investment opportunities and actively supports outward FDI. Malaysia and Thailand, too, seek to ensure the competitiveness of their firms not only by allowing but actively promoting outward FDI, especially in a regional context. India, after allowing outward FDI in the form of equipment and technology exports, has just begun to liberalize outward FDI to help improve international trade competitiveness, substantially relaxing requirements for prior approval. China, since the early 1990s, has embarked on a course to create “world class transnational corporations”, as part of a broader quest for deeper integration into the world economy; the country’s priorities revolve around securing access to markets and to key natural resources, and acquiring new technology and management skills. Despite retaining constraints on capital exports, China recently became the leading source of FDI from the developing countries, investing in both developed and other developing countries.

- In Latin America, Chile is perhaps most advanced among the principal outward investors in terms of liberalizing outward FDI, rivalled only by Mexico; there are no ceilings on the amount of capital allowed for outward FDI projects, nor are there any restrictions with respect to the financing of such investments.
- Balance-of-payments considerations constrain but do not prevent outward FDI from Central and Eastern Europe, with most countries of that region maintaining various forms of restrictions on outward FDI. Most restructured or privatized state enterprises have sought to retain their existing foreign affiliates, while reform programmes spurred a mini-surge in outward FDI in the early 1990s.

Many of these countries also have incipient promotional policies. Specific programme goals and contents vary widely. Fiscal incentives generally play an important role in supporting outward FDI. Various types of direct financial support and incentives are provided by India, the Republic of Korea, Malaysia, Singapore and Taiwan Province of China. While Thailand does not provide fiscal incentives, the Export-Import Bank of Thailand provides enterprises in Thailand with access to a number of facilities such as long-term loans at preferential rates and equity participation in certain projects. Investment insurance programmes have so far not been priority concerns for these countries. In any event, the need to provide such insurance has been alleviated by the establishment of the Multilateral Investment Guarantee Agency in 1985, which provides insurance for non-commercial risks for firms from member countries undertaking outward FDI.

The emergence of a number of these countries as home countries is also leading to a change of attitude towards international agreements on FDI. This is most obviously reflected in the growth of bilateral investment protection and promotion treaties signed among developing countries and economies in transition: only two such treaties were negotiated in the 1960s, followed by 12 in the 1970s, 46 in the 1980s, and 154 in the first half of the 1990s.

... suggests several approaches -- but no single model -- for selecting and implementing more liberal outward FDI policies.

Once a country has decided to liberalize its outward FDI regime, one option is to do this all at one stroke. More typically, the issue is how to phase in a liberalization programme involving the design of a mechanism to approve desired outward FDI. An approval process enables governments to control directly the purposes, nature and dimensions of outward FDI projects while reducing general restrictions. At the same time, however, such an approach substitutes government decision-making for market signals in determining business responses to global competition, with all the known risks. A minimal procedure, contemplated for example in Hungary's draft foreign exchange law, only examines whether applicants are in good standing in respect to their domestic financial obligations. A related criterion tests the financial soundness of the prospective outward investor, requiring at least a minimum period without bankruptcy or, more positively, a certain level of profitability over a number of years as a measure of managerial ability and the probable success of the new venture. Another approach is to organize the approval or licensing process on the basis of the size of the prospective investment: full assessment would be required only for projects over a certain size. A third approach is to evaluate all proposed outward FDI projects against a list of benefits desired for the home country (e.g., increased exports, inward technology transfers, raw material imports, repatriating earnings). An industry approach is more common when the opposite "negative list" approach is chosen, requiring review and permission only for specified industries. Still another approach is to review and approve outward FDI applications in terms of country or regional destinations or in the light of the existence of bilateral investment or taxation treaties. Broader foreign policy considerations may also influence outward FDI approvals, positively or negatively. Each of these options, individually or in combination with each other, permits countries with restrictive regulations on outward FDI to liberalize their regimes incrementally, if they so desire.

Beyond these broad approaches, where foreign exchange or savings availabilities are a policy concern, there are various possibilities for minimizing capital outflows associated with outward investment:

- *Outward FDI can be financed by foreign borrowing.* This is, in fact, not an uncommon practice (though not recorded in FDI-flow statistics). In the case of a merger or acquisition, the foreign borrowing can be secured by the assets acquired, with the servicing and repayment of the debt being made from profits arising from the new venture. For greenfield enterprises, a guarantee could be issued by the parent firm in the home country, to be replaced by the pledging of the assets once these have been established abroad; unless executed, this guarantee would not appear in the balance of payments of the home country. However, these guarantees would be taken into account when determining the credit available to the country from abroad for other purposes.
- *Alternatively, the government of the home country could provide a guarantee for the loan required,* once an outward greenfield FDI project is approved and a foreign bank

has agreed to finance it. In a variation of this approach, host country financial institutions could issue a bridge guarantee to be replaced by the assets of the foreign affiliate once it is established.

- *Foreign-direct-investment venture capital funds could be established* by investors looking for good projects abroad. Such funds, in turn, could provide finance to FDI projects, including approved FDI projects by firms from countries that restrict capital outflows on account of foreign exchange difficulties. In a variation of this technique, such entities as insurance companies and pension funds could be allowed to diversify their investments. Initial permission for such investments could be linked to the funding of approved outward FDI projects from the same country, thereby utilizing the same foreign exchange draw-off for a dual purpose.
- *In cases where foreign affiliates already exist, a government could permit the liberal usage of the earnings of these affiliates for (additional) investment abroad*, be it for the expansion of an existing venture, or the establishment of a new venture. Such reinvested earnings involve, for balance-of-payments account purposes, simultaneous (offsetting) entries in both the current and capital accounts, i.e., they do not affect the level of foreign

reserves.

in which outward FDI involves the establishment of sourcing or marketing countries that are less developed than the home country, *it is possible that bank of the home country has assets denominated in the (non-convertible) currency of the potential host country*, thus making it easier to authorize outward FDI.

Some of the assets for outward FDI can consist of such intangible assets as property rights, goodwill or brand names, or such tangible assets as capital equipment or raw materials. Some of these approaches may be particularly suitable for

non-equity forms of FDI. Management contracts, licensing arrangements, and the like provide, for parent firms, many of the advantages of reaching markets and factors of production, without involving any foreign exchange

- In those cases where the home country has affiliates in countries with convertible currencies, the central bank of the home country could authorize outward FDI in the currency of the host country.
- Some or all of the assets for outward FDI could be in the form of intellectual property, equipment or technology, which could be transferred to joint ventures or to the host country.
- The use of non-equity forms of FDI, such as franchising and licensing, could be authorized for foreign market entry without involving foreign exchange outlays.

suggests that the availability of substantial foreign exchange reserves facilitates the implementation of outward FDI policies. But it suggests also that balance-of-payments liberalization is a necessary condition for the liberalization of outward FDI. Still, there is no denying that countries facing foreign exchange constraints confront a policy dilemma concerning outward FDI policies. The liberalization of the foreign exchange reserves requires trade-offs among competing objectives (servicing debt, servicing of inward FDI, financing outward FDI, etc.). Countries should be able to develop calibrated and phased liberalization policies that take into account their own conditions and permit enterprises to maintain their international competitiveness through outward FDI.

Experience suggests that the liberalization of outward FDI policies is a necessary condition for the liberalization of the foreign exchange constraint. Still, there is no denying that countries facing foreign exchange constraints confront a policy dilemma concerning outward FDI policies. The liberalization of the foreign exchange reserves requires trade-offs among competing objectives (servicing debt, servicing of inward FDI, financing outward FDI, etc.). Countries should be able to develop calibrated and phased liberalization policies that take into account their own conditions and permit enterprises to maintain their international competitiveness through outward FDI.

Going beyond liberalization, careful thought is required before countries -- be they developed or developing -- choose promotional measures to accompany their regulatory reforms. The promotion options cover a broad range of measures whose costs and potential distorting impacts increase as governments move from providing information services to offering fiscal and financial incentives. Providing basic information on possible FDI locations is a relatively low-cost promotional technique useful at early stages in outward FDI and of particular interest to small and medium-sized investors. Fiscal or financial incentives involve a subsidization of enterprise operations and is harder to justify on both economic and political grounds. Government-sponsored insurance programmes and bilateral investment protection and promotion treaties can be effective and are less costly.

In conclusion, as countries become more closely integrated in a globalizing economy, the competitiveness of national firms in foreign markets will become increasingly important to overall national performance. The dilemma for national policy makers is that of balancing macroeconomic balance-of-payments considerations with the microeconomic competitiveness requirements of individual firms.

In considering this policy dilemma, governments must recognize that firms which are restricted to invest abroad in today's world economy are being handicapped. Furthermore, if imports and inward FDI are being liberalized, they are doubly handicapped, in that firms must confront foreign competitors at home without a comparable opportunity to realize the benefits from their own overseas investments or from challenging competitors in their home markets. When liberalizing outward FDI, governments can turn this double handicap for their firms into a double advantage for their countries: they can benefit from allowing their own firms to exploit their ownership advantages (and thereby improve competitiveness) by operating in foreign markets; and they can benefit from allowing foreign affiliates in their countries to develop overseas projects. In fact, if governments are not sufficiently flexible in terms of allowing outward FDI, they may actually face the loss of firms, including perhaps of those which could have become competitive internationally. This can occur when the handicapped firms cannot withstand the increased competition in their own markets and, therefore, fail -- or relocate their headquarters to another country. Be that as it may, each government needs to decide on its own, in the light of its concrete circumstances, the precise modalities of liberalizing its outward FDI regime.

Towards a multilateral agreement on FDI?

Inward and outward FDI policies were considered separately in the preceding analysis and, typically, are considered separately by governments. In reality, however, they interact, being joined, in particular, by the overriding desire of all countries to improve their economic performance and restructure their economies towards higher income-creating activities, and the contribution that FDI can make in this regard. As more countries become more important both as home and host countries, the interrelationships between inward and outward FDI will

become more apparent as well, as will be the interests of countries in stable, predictable and transparent international investment relations.

In fact, given the growing importance of FDI and international production for linking national economies and improving national economic performance, and given the transnational nature of this investment, it is almost unavoidable that a framework will be sought that provides for stability, predictability and transparency at the multilateral level, to allow firms to contribute to economic growth, while prospering internationally. Elements of a multilateral framework -- and the seeds for something more comprehensive -- are contained in the Final Act of the Uruguay Round of Multilateral Trade Negotiations, now being implemented by the World Trade Organization. Efforts could furthermore build on achievements at the regional level, in the context of trade-related regimes, especially in the framework of the European Union, NAFTA, MERCOSUR and APEC. Progress is also being sought among the members of OECD which, in September 1995, began negotiations on a binding Multilateral Agreement on Investment; the Agreement, once concluded, would be open to non-members as well. UNCTAD, for its part, is helping in the discussions on an international framework for FDI through activities designed to advance understanding of the issues involved, especially as far as the development discussion is concerned, and to promote consensus building.

Whether or not these efforts will lead in the foreseeable future to a comprehensive and effective multilateral framework facilitating international production, giving due regard to the various forms of accessing markets for goods and services as well as for factors of production, cannot be predicted at this time. What can be said, however, is that, if such a framework were to be established, it could well rival in importance the international trade framework created by GATT some 50 years ago in terms of setting new parameters within which TNCs maintain or increase their competitiveness and countries improve their economic performance.

PART ONE

RECENT TRENDS

CHAPTER I

GLOBAL TRENDS

This chapter examines the role of foreign direct investment (FDI) in the world economy and reviews recent global trends in stocks and flows, as well as the activities of the principal actors, transnational corporations (TNCs). The key development was that the recession in FDI flows came to an end in 1993, thanks to renewed economic growth in some major source countries and the solid growth performances of many developing economies. Investments from developing countries, though small, also played a role in the upturn of FDI flows. As a result, traditional patterns of FDI -- a focus on the developed countries where, in any event, most of the investment stock is located -- are reasserting themselves, although the developing countries appear to be in the process of shifting that pattern in their favour. The underlying trend is for the largest 100 TNCs to become increasingly internationalized, with investments abroad aimed at gaining markets for outputs and access to markets of factors of production. These twin objectives underlie the organization of international production, using various modalities that fall increasingly under the governance of TNCs.

A. Recent trends in foreign direct investment

1. The growing importance of foreign direct investment

International production by TNCs dominates international commercial transactions. It is more important than trade. Global sales generated by the foreign affiliates of TNCs were worth \$5.2 trillion in 1992 (table I.1), exceeding worldwide exports of goods and (non-factor)

services worth \$4.9 trillion in that year (\$4.8 trillion in 1993) (an estimated one-third of which takes place on an intra-firm basis). During 1991-1993, the world FDI stock grew about twice as fast as worldwide exports of goods and services which, in turn, grew about one and-a-half times faster than world gross domestic product.

One measure of the importance of inward FDI to an economy is its size relative to gross fixed capital formation. For developing countries, that ratio increased from 2 per cent to 7 per cent between 1985 and 1993, while the upward trend in that ratio during 1985-1989 for the developed countries was reversed during the FDI recession (figure I.1). As a result, FDI now plays a bigger role in investment in the developing than in the developed countries.

The flow of financial capital in the form of FDI is one aspect of the multitude of activities and cross-border transactions associated with international production. In developing countries, inward FDI is an increasingly important form of long-term net resource flows, and sustained FDI growth during the 1990s has taken place alongside a general surge in private capital flows,

Table I.1. Selected world FDI, economic and financial indicators, 1981-1993

Indicator	Value at current prices, 1993 (Billions of dollars)	Average annual growth rates (Percentage)		
		1981-1985	1986-1990	1991-1993
FDI outflows	222	0.8	28.3	5.6
FDI outward stock	2 135	5.4	19.8	7.2
Sales of foreign affiliates of TNCs ^a	5 235 ^b	1.3 ^c	17.4	-2.6 ^d
Current gross domestic product at factor cost	23 276	2.1	10.6	3.3
Gross fixed capital formation	5 351	0.7	9.9	3.2
Exports of goods and non-factor services	4 762	-0.1	14.3	3.5
Royalties and fees receipts	38	-0.7	21.8	13.0

Source: UNCTAD, Division on Transnational Corporations and Investment, based on International Monetary Fund, balance-of-payments tape, retrieved in June 1995; and unpublished data provided by the Organisation for Economic Co-operation and Development Secretariat and the World Bank, International Economics Department.

^a Estimated by extrapolating the worldwide sales of foreign affiliates of TNCs from France, Germany, Italy, Japan and the United States on the basis of the relative importance of these countries in worldwide outward FDI stock. However, the data on sales of foreign affiliates for France are included only after 1988 because of unavailability of the data prior to that year. For Italy the sales data are included only in 1986, 1988, 1990 and 1992.

^b 1992.

^c 1982-1985.

^d 1991-1992.

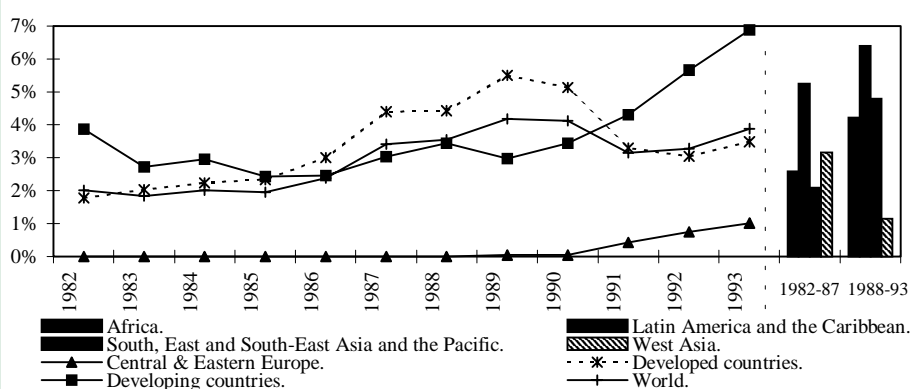
especially portfolio equity investment (figure I.2). Between 1990 and 1994, total private capital flows to developing countries almost quadrupled, with FDI constituting the largest and fastest-growing single component (figure I.2). Although FDI and portfolio equity investment have grown together, the causal links between these two movements are weak. To be sure, the opening of domestic stock markets to foreign participation expands the options available to TNCs for raising capital. It also provides alternative channels for investment (e.g., the acquisition of firms listed in stock exchanges), and sends positive signals to potential foreign direct investors regarding a country's overall investment climate. But it is unlikely that these factors alone would lead to a strong relationship between the different forms of investment.

Portfolio equity and FDI flows are quite different both in terms of investors' commitment to the host country and the volatility of flows. A decision of whether or not to undertake FDI is usually based on strategic considerations by TNCs. By definition, FDI involves a lasting involvement in the management of enterprises in the recipient economy, although some financial transactions associated with these investments may be volatile.¹ In contrast, portfolio equity investment flows are typically more speculative in nature and respond quickly to changing perceptions of risk and reward. As a result, portfolio equity investment is more unstable than FDI (figure I.3) and reacts faster to transient shocks, for instance, as the one experienced by Mexico in 1994/1995.

2. Stocks

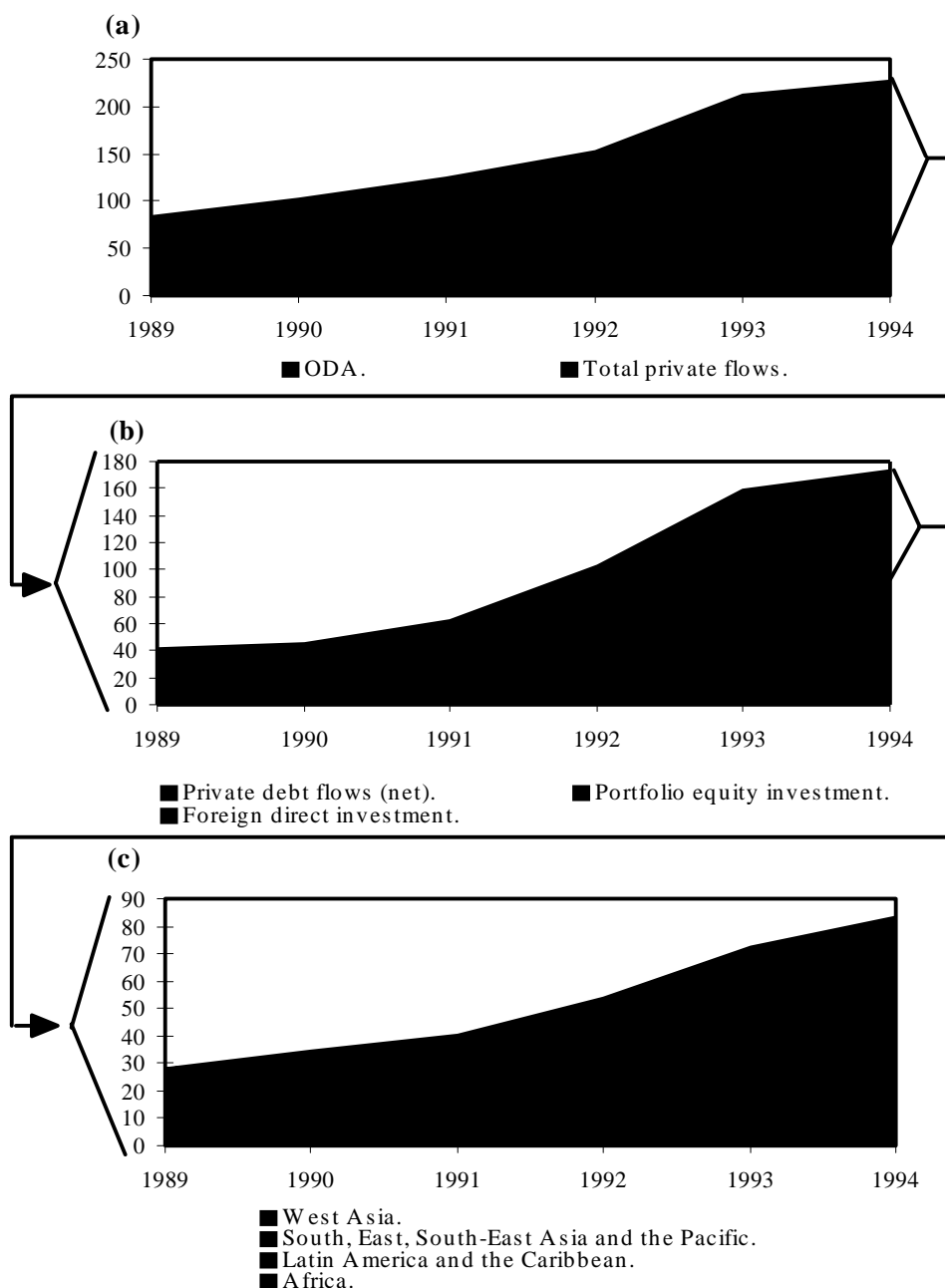
The overall investment activities of TNCs outside their home countries are best captured by the stock of FDI. The structure of this stock reflects the structure of international production as undertaken by TNCs. Furthermore, the transactions associated with these stocks, and the manner in which they are organized, are key indicators of the depth and nature of economic integration of countries. Beyond that, the structure of FDI reflects, to a certain extent, the structure of economic activity: most FDI originates from and is concentrated in developed countries. As far as developing countries as a group are concerned, they account for between a fifth and a quarter of the global inward FDI stock and for a similar share of world GDP and world exports (figure I.4). The importance of developing countries in world economic activity is therefore also reflected in their

Figure I.1. The ratio of FDI flows to gross fixed capital formation, by regions, annual average, 1982-1987 and 1988-1993
(Percentage)



Source: UNCTAD, Division on Transnational Corporations and Investment, FDI database.

Figure I.2. ODA, total private flows, FDI, portfolio equity investment and private debt flows to developing countries, 1989-1994^a
(Billions of dollars)



Source: World Bank, 1995, table I.1; UNCTAD, Division on Transnational Corporations and Investment, FDI database.

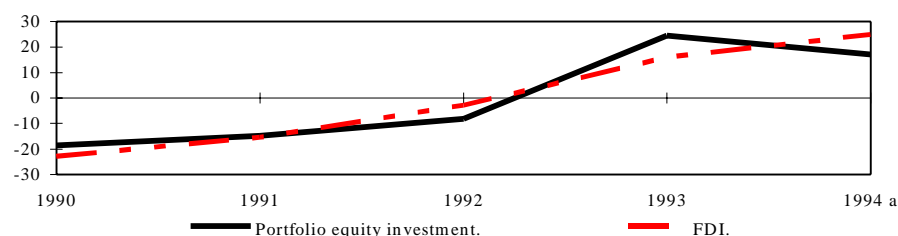
^a ODA data do not include technical cooperation grants. Data for 1994 are estimated.

Note: The World Bank's classification of developing countries and hence the data on FDI and other financial flows presented in (a) and (b) are different from those used elsewhere in this volume, as well as those in (c).

share of global inward FDI stocks. But the concentration of FDI in the 10 largest recipient developing economies, together accounting for some two-thirds of the inward FDI stock of developing countries, appears to be a unique feature of these countries: the same pattern is not reflected in the share of these countries in the developing country share of exports or GDP (figure I.4).

Figure I.3. Annual variations in FDI and portfolio equity investment, 1990-1994

(Billions of dollars)



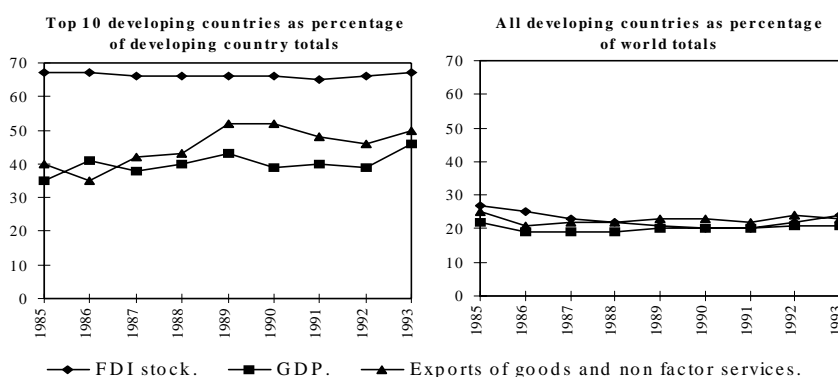
Source: World Bank, 1995.

^a Projected by the World Bank.

Note: The World Bank's classification of developing countries and hence the data on FDI presented here are different from those used elsewhere in this volume.

The global outward FDI stock -- attributable to more than 250,000 foreign affiliates controlled by at least 38,000 parent firms (table I.2) -- stood at an estimated \$2.4 trillion at the end of 1994 (figure I.5). Developed countries, taken as a whole, account for three-quarters of the global inward FDI stock (figure I.5), reflecting, in particular, the size and dynamism of their economies. Foreign-direct-investment stocks continue to be concentrated in the Triad (Japan, the European Union and the United States) (figure I.6), with European Union countries accounting for the largest share of both inward and outward FDI -- about 39 per cent and 45 per cent respectively -- in 1994. The dominant position of developed countries is particularly significant with respect to outward FDI stock, of which they account for 94 per cent. These shares have been quite stable, although there are indications that this may well change in favour of developing countries if they continue to attract a growing share of investment.

Figure I.4. The concentration of FDI, GDP and exports in developing countries and in the 10 largest recipients of inward FDI stocks among developing countries, 1985-1993
(Percentage)



Source: UNCTAD, Division on Transnational Corporations and Investment, FDI database.

The FDI inward stock in developing countries was estimated at some \$500 billion in 1993 and \$584 billion in 1994 nearly a quarter of the global total. Most of it is concentrated in the ten largest host economies, but less strongly in terms of

**Table I.2. Number of parent corporations and foreign affiliates,
by area and country, latest available year**

(Number)

Area/economy	Year	Parent corporations based in country	Foreign affiliates located in country ^a
Developed countries		34 353^b	93 311
Australia	1994	732	2 450
Austria	1993	838	2 210
Belgium and Luxembourg	1978	96	1 121
Canada	1993	1 447	4 475
Denmark	1992	800	1 289 ^c
Finland	1994	1 200	1 050
France	1993	2 216	7 097 ^d
Germany	1993	7 003 ^e	11 396 ^f
Greece	1991	..	798
Iceland	1991	14 ^g	28
Ireland	1994	39	1 040
Italy	1993	445 ^h	1 474 ^h
Japan	1993	3 650 ⁱ	3 433 ^j
Netherlands	1993	1 608 ^k	2 259 ^k
New Zealand	1993	247	1 717
Norway	1993	1 000	3 000
Portugal	1993	1 165	7 602
South Africa	1978	..	1 884
Spain	1992	744	6 232
Sweden	1993	3 700	6 150
Switzerland	1985	3 000	4 000
Turkey	1994	..	2 739 ^l
United Kingdom ^m	1992	1 443 ⁿ	3 376 ^o
United States	1992	2 966 ^p	16 491 ^q
Developing economies		3 788^b	101 139
Bolivia	1990	..	298
Brazil	1994	797	9 698
China	1993	379 ^g	45 000
Colombia	1995	302	2 220
El Salvador	1990	..	225
Guatemala	1985	..	287
Hong Kong	1991	500	2 828
India	1991	187	926 ^r
Indonesia	1995	313 ^s	3 472 ^t
Mexico	1993	..	8 420
Oman	1995	92 ^t	351 ^t
Pakistan	1993	57	758
Paraguay	1988	..	208
Peru	1990	..	905
Philippines	1987	..	1 952
Republic of Korea	1991	1 049	3 671
Saudi Arabia	1989	..	1 461
Singapore	1986	..	10 709
Taiwan Province of China	1990	..	5 733
Uruguay	1988	..	117
Former Yugoslavia	1991	112	3 900

/...

(Table I.2, cont'd)

Area/economy	Year	Parent corporations based in country	Foreign affiliates located in country ^a
Central and Eastern Europe^u		400^b	55 000
Albania	1994	..	118
Belarus	1994	..	393
Bulgaria	1994	26	918
CSFR	1994	26	..
Estonia	1994	..	1856
Hungary	1994	66	15 205
Poland	1994	58	4 126
Romania	1994	20	..
Russian Federation	1994	..	7 793
Ukraine	1994	..	2 514
World		38 541	251 450

Source: UNCTAD, Division on Transnational Corporations and Investment, based on national official and secondary sources.

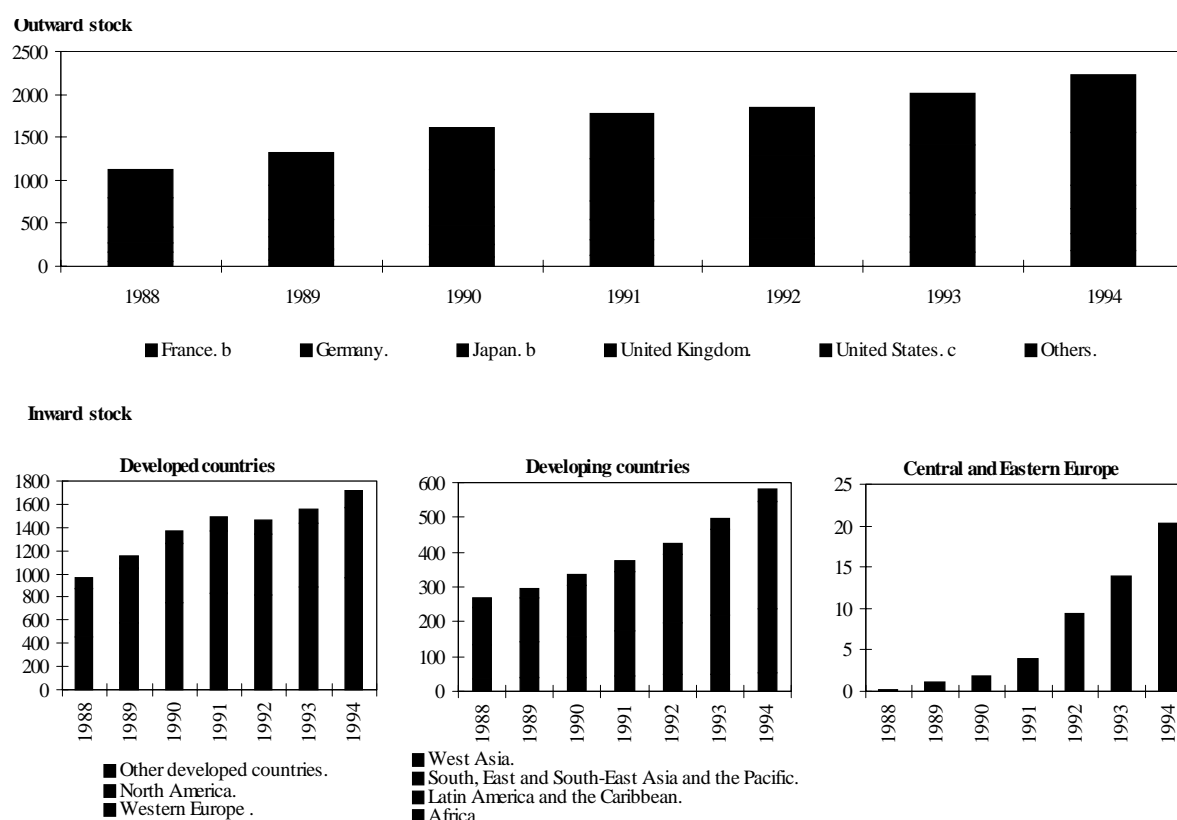
- a Represents the number of foreign affiliates in the country shown.
- b Totals exclude countries for which data are not available.
- c For 1991.
- d For 1992.
- e Does not include holding companies abroad that are dependent on German-owned capital and which, in turn, hold participating interests of more than 20 per cent abroad (indirect German participating interests).
- f Does not include the number of foreign-owned holding companies in Germany which, in turn, hold participating interests in Germany (indirect foreign participating interests).
- g For 1989.
- h Not including the services sector.
- i The number of parent companies not including finance, insurance and real estate in March 1993 (3,378) plus the number of parent companies in finance, insurance and real estate industries in December 1992 (272).
- j The number of foreign affiliates not including finance, insurance and real estate in March 1993 (3,192) plus the number of foreign affiliates in finance, insurance and real estate industries in November 1992 (241).
- k As of October 1993.
- l As of November 1994.
- m Data on the number of parent companies based in the United Kingdom, and the number of foreign affiliates in the United Kingdom are based on the register of companies held for inquiries on the United Kingdom's FDI abroad and FDI into the United Kingdom conducted by the Central Statistical Office. On that basis, the numbers are probably understated because of lags in identifying investment in greenfield sites and because some companies with small presences in the United Kingdom and abroad have not yet been identified.
- n Represents a total of 24 bank parent companies and 1,443 non-bank parent companies in 1991.
- o Represents 518 foreign affiliates in banking in 1992 and 3,376 non-bank foreign affiliates in 1991.
- p Represents a total of 2,154 non-bank parent companies in 1992 and 89 bank parent companies in 1989 with at least one foreign affiliate whose assets, sales or net income exceeded \$3 million, and 723 non-bank and bank parent companies in 1989 whose affiliate(s) had assets, sales and net income under \$3 million.
- q Represents a total of 11,688 bank and non-bank affiliates in 1992 whose assets, sales or net income exceeded \$1 million, and 4,336 bank and non-bank affiliates in 1987 with assets, sales and net income under \$1 million. Each affiliate represents a fully consolidated United States business enterprise, which may consist of a number of individual companies.
- r For 1988.
- s For 1993.
- t As of May 1995.
- u Data for affiliates are estimated.

Note: Cross-country comparisons based on data reported in this table should be made with caution given differences in years and coverage across countries and that many countries report as parent companies or foreign affiliates only those companies with significant investments.

stocks than in terms of flows (table I.3). With the exception of Brazil and Saudi Arabia, whose large stocks were accumulated in earlier years and which do not appear in the list of the largest recipients in terms of flows for 1993, the countries included in the ranking of the ten largest recipients are the same in terms of both stocks and flows.

The sectoral structure of international production has changed profoundly over the past decades. In 1970, some 23 per cent of the world FDI stock was in natural resources, as compared to 31 per cent in services. By 1990, natural resources represented only 11 per cent of that stock, compared to 50 per cent for services (UNCTAD-DTCI, 1993a). In other words, there has been a strong shift towards services in international production, a pattern reflected in the outward FDI stock composition of major home countries (figure I.7).

Figure I.5. FDI world stock, by country and region,^a 1988-1994
(Billions of dollars)



Source: UNCTAD, Division on Transnational Corporations and Investment FDI database.

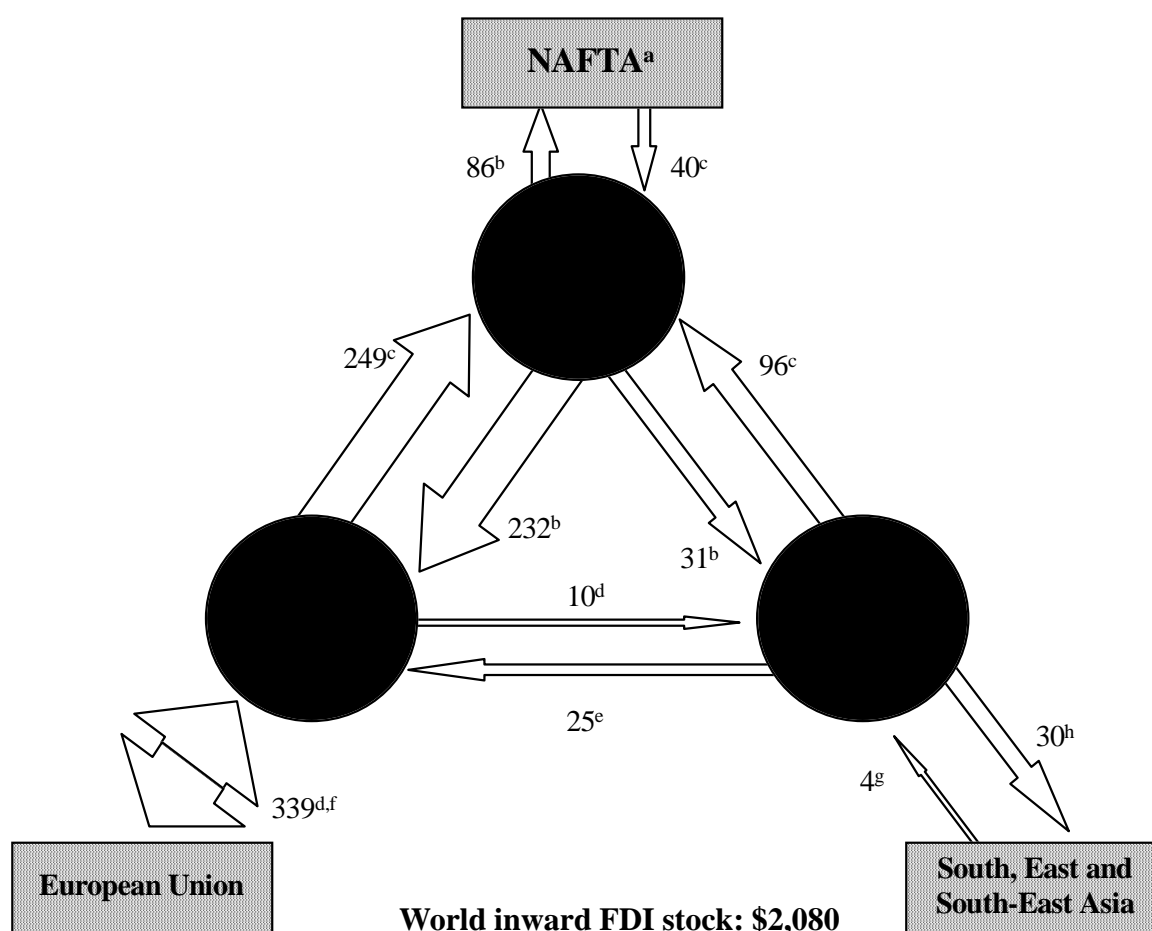
^a For most countries (except, for example, Germany, the United Kingdom and the United States), stocks are estimated as accumulated flows or as flows added to the stock reported in a particular year. Data for 1994 are estimates. For details see the annex tables 3 and 4.

^b Not including reinvested earnings.

^c Excluding FDI stock in the finance (except banking), insurance and real estate industries of the Netherlands Antilles. Based on book values (historical costs).

Figure I.6. FDI stock among Triad members and their clusters, 1993

(Billions of dollars)



Source: UNCTAD, Division on Transnational Corporations and Investment, FDI database.

^a Canada and Mexico.

^b United States outward FDI stock.

^c United States inward FDI stock.

^d Outward FDI stock of Austria, Finland, France, Germany, Italy, Netherlands, Sweden and the United Kingdom. Data for Austria are for 1991 and data for France and the Netherlands are for 1992.

^e Data from inward FDI stock of Austria, France, Germany, Italy, Netherlands and United Kingdom. Data for Austria and France are 1991 and data for Italy and the Netherlands are for 1992.

^f For Sweden, the data reflect FDI to and from all European countries. Intra-European Union FDI, based on inward stocks, is \$225 billion.

^g Data are based on approvals/notifications and represent those from countries other than those in North America and Europe.

^h Estimated by multiplying the values of the cumulative flows to the region according to FDI approvals by the ratio of disbursed to approved/notified FDI in developing countries.

3. Flows

While data on FDI stock indicate the structure of international production, data on FDI flows indicate how this structure is changing -- or not. In 1993, for example, 75 per cent of FDI inward stock was in the developed countries, and 24 per cent in the developing countries, while their respective shares in terms of FDI inflows were 62 per cent and 35 per cent. If this geographic structure of flows is maintained, the structure of stocks, by necessity, will also change. Flow figures are, therefore, an important indicator of the direction of evolution of international production, reflecting, as they do, the *current* strength of the location specific advantages of countries as far as inward FDI is concerned and the *current* strength of ownership-specific advantages (e.g., proprietary knowledge, trademarks and brand names, human capital, etc.) as far as outward FDI is concerned.

Table I.3. The ten largest host developing economies to FDI flows and stock,^a 1993
(Millions of dollars)

Host economy	Flows	Host economy	Stock
All developing economies	73 351	All developing economies	500 896
Total, ten largest developing host economies	58 009	Total, ten largest developing host economies	336 997
Percentage share of the ten largest developing host economies in total flows into developing economies	79	Percentage share of the ten largest developing host economies in total inward stock of developing economies	67
China	27 515	China	57 172
Singapore	6 829	Singapore	50 802
Argentina	6 305	Indonesia	44 146
Malaysia	5 206	Mexico	41 912
Mexico	4 901	Brazil	40 371
Indonesia	2 004	Malaysia	26 936
Thailand	1 715	Saudi Arabia	22 463
Hong Kong	1 667	Argentina	21 701
Colombia	950	Hong Kong	17 669
Taiwan Province of China	917	Thailand	13 824
Memorandum:			
Percentage share of the nine largest host economies, excluding China	42	Percentage share of the nine largest host economies, excluding China	56

Source: UNCTAD, Division on Transnational Corporations and Investment, based on International Monetary Fund, balance-of-payments tape, retrieved in June 1995; data from the Organisation for Economic Co-operation and Development Secretariat; and national official sources.

^a Excluding tax havens.

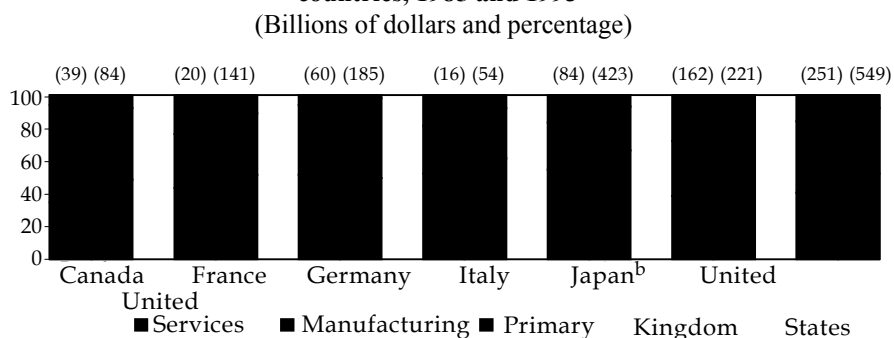
The relationship between stocks and flows has several elements. New flows, by definition, add to the FDI stock. In addition, stocks themselves generate flows in the form of profits which may be reinvested, thus also adding to the stock. The size of these profits depends, in turn, on the size of the investment stock, the profitability of the investment and the vintage of the stock. Stock of an older vintage is likely to generate more profits than that of more recent vintage because start-up problems have been resolved.

The size of investment flows in any given year is small compared with the size of stocks. Even during their peak in 1990, outflows were only 15 per cent of the global outward stock; in 1993, that share was 10 per cent. Developing countries, as a whole, have only recently begun to receive sizeable investment flows. Their inflows in 1993 were 15 per cent of their inward stock compared with a corresponding share of 8 per cent for developed countries. Although the absolute size of investment flows into developing countries is, on average, less than half the size of investment flows into developed countries, these flows are producing a more rapid increase in inward stocks than are flows to developed countries. One implication of this is that the sectoral structure of FDI stocks in developing countries can change more rapidly.

The year 1993 marked the end of the FDI recession that had prevailed in 1991 and 1992. In 1993, the two-year fall in FDI flows was reversed, with global outflows increasing by 17 per cent, to reach \$222 billion (table I.4). The volume of FDI outflows was maintained almost at the same level in 1994, and is expected to reach an estimated \$230 billion in 1995 (\$235 billion in the case of inflows). The United States was the largest outward investor worldwide in both 1993 and 1994 (table I.5). Outflows from the five largest home countries increased by 19 per cent in 1993, to \$146 billion (for a share of worldwide outflows of 66 per cent); data for 1994 show a decline of 10 per cent, to a level of \$132 billion (table I.5). With nearly \$28 billion, China emerged as the second largest recipient of FDI inflows worldwide in 1993 (accounting for 13 per cent of these flows), a position just behind the United States; it continued to hold this position in 1994 (an estimated \$34 billion in inflows for China versus \$49 billion in inflows for the United States).²

Investment outflows from the developed countries rose by 13 per cent in 1993 and declined by -2 per cent in 1994, not quite recovering from the decline during 1990-1992 (table I.4). The reversal of the downward trend for the

Figure I.7. Sectoral distribution of outward FDI stock of major home countries, 1985 and 1993^a



Source: UNCTAD, Division on Transnational Corporations and Investment FDI database.

^a The left bar is for 1985 and right bar for 1993. Data for Canada, France and the United Kingdom are for 1992. The figures in parentheses show the value of total outward FDI stock.

^b Based on FDI approved by, or notified to, the Ministry of Finance. The sectoral breakdown of actual FDI data is not available.

developed countries is mostly a consequence of their recovery from the recent downswing in economic activity. Led by the United States and the United Kingdom in 1993, and reflecting their early recovery from recession, outflows from other developed countries (mostly in the European Union and Japan) recovered vigorously in 1994. The highlights for the developed countries are as follows (for a more detailed discussion, see chapter II):

Table I.4. FDI inflows and outflows, 1982-1994

(Billions of dollars and percentage)

Year	Developed countries		Developing countries		Central and Eastern Europe		All countries	
	Inflows	Outflows	Inflows	Outflows	Inflows	Outflows	Inflows	Outflows
Value (Billions of dollars)								
1982-1986	43	53	19	4	0.02	0.01	61	57
1987-1991	142	183	31	12	0.6	0.02	174	195
1989	172	202	29	15	0.3	0.02	200	218
1990	176	226	35	17	0.3	0.04	211	243
1991	115	188	41	11	2.5	0.04	158	199
1992	111	171	55	19	4.4	0.02	170	191
1993	129	193	73	29	6.0	0.08	208	222
1994 ^a	135	189	84	33	6.3	0.07	226	222
Share in total ^b (Percentage)								
1982-1986	70	94	30	6	0.03	0.01	100	100
1987-1991	82	94	18	6	0.4	0.01	100	100
1992	65	90	32	10	3	0.01	100	100
1993	62	87	35	13	3	0.03	100	100
1994 ^a	60	85	37	15	3	0.03	100	100
Growth rate ^b (Percentage)								
1982-1986	24	25	-11	7	3	53	11	24
1987-1991	0.5	9	16	15	278	47	4	9
1992	-3	-9	34	76	81	-54	8	-4
1993	16	13	34	51	35	353	22	17
1994 ^a	5	-2	15	13	5	-13	8	0.04

Source: UNCTAD, Division on Transnational Corporations and Investment, based on International Monetary Fund, balance-of-payments tape, retrieved in June 1995; and data from the Organisation for Economic Co-operation and Development Secretariat.

^a Based on preliminary estimates.

^b Calculated on the basis of FDI flows expressed in millions of dollars.

Note: Here and in other tables, the levels of worldwide inward and outward FDI flows and stocks should balance; however, in practice, they do not. The causes for the discrepancy include differences between countries in the definition and valuation of FDI; the treatment of unremitted branch profits in inward and outward FDI; the treatment of unrealized capital gains and losses; the recording of transactions of "offshore" enterprises; the recording of reinvested earnings in inward and outward FDI; the treatment of real estate and construction investment; and differences in the equity threshold between inward and outward FDI. The size of the world FDI discrepancy has declined over the past years.

- *North America.* After experiencing a large decline in 1992, FDI flows into the United States and Canada recovered to reach some \$46 billion in 1993 and \$55 billion in 1994. Outflows increased by 75 per cent in 1993, reaching a new historic high of \$75 billion, but declined in 1994 to the level of \$50 billion. The 1994 level is, however, the second highest yet reached.
- *Countries in Western Europe.* Investment inflows decreased to \$76 billion in 1993, and to \$74 billion in 1994. Outflows of FDI continued to decline in 1992 and 1993, but regained their 1991 level by 1994.

Table I.5. FDI outflows from the five major home countries, 1982-1994
(Billions of dollars and percentage)

Year	France ^a	Germany	Japan ^a	United Kingdom	United States ^b	Total (5 countries)	All countries
Value (Billions of dollars)							
1982-1986	3	6	7	10	11	37	57
1987-1991	20	18	35	28	25	127	195
1989	20	18	44	35	26	143	218
1990	35	29	48	19	27	157	243
1991	24	23	31	16	33	127	199
1992	31	16	17	19	39	123	191
1993	21	17	14	26	69	146	222
1994 ^c	23	21	18	25	46	132	222
Share in total ^d (Percentage)							
1982-1986	5	10	13	18	19	65	100
1987-1991	11	10	18	14	13	65	100
1992	17	9	9	10	21	64	100
1993	10	9	7	13	34	66	100
1994 ^c	11	10	9	12	23	59	100
Growth rate ^d (Percentage)							
1982-1986	17	35	34	24	7	22	24
1987-1991	27	26	12	-15	6	7	9
1992	31	-30	-44	20	17	-3	-4
1993	-34	8	-20	34	77	19	17
1994 ^c	11	18	31	-2	-34	-10	0.04

Source: UNCTAD, Division on Transnational Corporations and Investment, based on International Monetary Fund, balance-of-payments tape, retrieved in June 1995; and national official sources.

^a Not including reinvested earnings. In the case of France, reinvested earnings are not reported after 1982.

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

^c Based on preliminary estimates.

^d Calculated on the basis of FDI flows expressed in millions of dollars.

- *Japan and other developed countries.* After attracting nearly \$3 billion in 1992, investment flows into Japan fell to \$86 million in 1993 (about the same as flows into Gabon in that year), to recover to \$888 million in 1994. Outflows declined by another 20 per cent (for the third consecutive year), to \$14 billion, falling to a trough in 1993, but increased again in 1994, with signs of recovery thereafter. Investment flows into other developed countries increased by 4 per cent, reaching nearly \$7 billion in 1993, but declined to \$6 billion in 1994.

Though the advance of FDI flows to developed countries was substantial, the rate of growth of flows to developing countries was even larger (34 per cent) in 1993, producing a new record level of FDI inflows of \$73 billion;³ a further increase (of 15 per cent) was registered in 1994, to an estimated \$84 billion (table I.4). The lion's share of this increase was accounted for by China. Excluding China, FDI flows into developing countries increased only by 5 per cent in 1993 and 10 per cent in 1994. In other words, China received the bulk of the additional FDI flows during these two years. Overall, however, flows into developing countries increased more than fourfold between 1986 (the beginning of the most important FDI upswing to date) and 1993. Inflows to developing countries in 1995 are projected to reach \$90 billion. This underlines the fact that developing countries as a group are becoming more attractive to TNCs because of improved growth performance, liberalized FDI policies (UNCTAD-DTCI, 1994a, chap. 7) and privatization programmes open to foreign participation. In fact, developing countries today receive twice as much as the value of *world* FDI flows was in 1986. (The share of developing countries in global flows increased from 18 per cent in 1989 to 44 per cent in 1993 if intra-European Union investments are excluded.) Investment outflows from developing countries -- particularly to other developing countries -- have also increased noticeably since the mid-1980s, to reach \$13 billion in 1994.

The highlights, by geographical region, are as follows (for a more detailed discussion of regional trends, see chapter II; for a discussion of the volatility of FDI flows to developing countries, see UNCTAD-DTCI and World Bank, forthcoming):

- *Asia.* Investment inflows to South, East and South-East Asia and the Pacific increased by 54 per cent in 1993, reaching some \$48 billion in that year (with \$28 billion accounted for by China), with a further increase to \$59 billion in 1994 (\$34 billion to China). This subregion accounted for 70 per cent of total flows into developing countries in 1994 (table II.2). Inflows to West Asia have been small, amounting to only a yearly average of \$1.4 billion during 1991-1994, despite the region's investment potential.
- *Latin America and the Caribbean.* Investment inflows increased by 13 per cent in 1993 and by 2 per cent in 1994, reaching \$20 billion in 1994. The region accounted for 24 per cent of total flows into developing countries in 1994.
- *Africa.* At about \$3 billion in 1993 and \$3.1 billion in 1994, FDI flows into Africa remained stagnant, despite the liberalization of investment regimes by a number of countries. As a result, Africa's share of all flows into developing countries declined to 4 per cent in 1993, compared with 11 per cent during 1986-1990.

The ten largest host developing economies have consistently absorbed a substantial portion of total flows to developing countries over the past ten years (79 per cent in 1993) (table I.3). On the other hand, FDI flows to the 48 least developed countries have remained consistently small: only some \$800 million in 1993 (about the size of flows into Brazil); their share of total flows into developing countries was minuscule, at 1 per cent that year. The concentration of FDI in developing countries is considerably higher than that of ODA and the average GDP per capita of the ten largest host developing economies, as expected, is significantly above that of the ten largest recipients of ODA, underlining the attractiveness of prosperous markets to TNCs (figure I.8).

Investment flows into the countries of Central and Eastern Europe⁴ increased by 35 per cent in 1993 and by another 5 per cent in 1994, reaching some \$6 billion in the latter year, for a stock of \$20 billion at the end of 1994, attributable to some 55,000 foreign affiliates (table I.2). Central and Eastern Europe accounted for 3 per cent of worldwide inflows in 1994.

One special factor that played a role in the growth of FDI across regions was privatization. The value of FDI from privatization accounted for nearly 8 per cent of total investment flows into developing countries in 1993 (table I.6). The story varies from region to region. In Latin America and the Caribbean, FDI from privatization more than halved in 1993 while total FDI flows continued to grow strongly. On the other hand, privatization-related FDI increased more than tenfold in sub-Saharan Africa between 1992 and 1993, though over 90 per cent of that investment consisted of one privatization (in Nigeria). East Asia and the Pacific saw a doubling of FDI from privatization in 1993 from a low initial level, but the share of these investments in total inflows remained constant. Privatization need

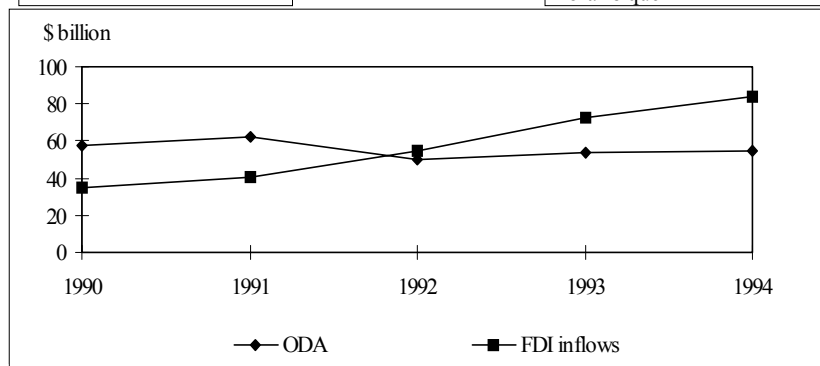
Figure I.8. FDI and ODA in developing economies, 1990-1994

Top 10 FDI recipients' share of developing-economy total: 79 per cent. Average GDP per capita: \$6,610

Top 10 ODA recipients' share of developing-economy total: 32 per cent. Average GDP per capita: \$456

1993 order
China
Singapore
Argentina
Malaysia
Mexico
Indonesia
Thailand
Hong Kong
Colombia
Taiwan Province of China

1993 order
China
Indonesia
India
Egypt
Pakistan
Philippines
Ethiopia
Tanzania, United Republic of
Thailand
Mozambique



Source: UNCTAD, Division on Transnational Corporations and Investment, FDI database and World Bank, 1995.

not represent a one-off factor influencing FDI flows. In many cases, additional post-privatization investments have followed the initial investment; at the same time, privatization has also led to disinvestments (Dunning and Rojec, 1993).

Looking at the picture as a whole, the recovery of FDI flows in 1993 and 1994 appears robust. However, only a few developed and developing countries registered sizeable increases in investment inflows, with these increases being concentrated in China and the United States. As FDI flows to developed countries resume their upward trend and as the rapid growth of flows into China subsides, the distribution of investment flows will shift again in favour of developed countries. In other words, the growing share of developing countries in global FDI

Table I.6. FDI from privatization in developing countries, 1989-1993 ^a
(Millions of dollars and percentage)

Region	1989	1990	1991	1992	1993	1989-1993
North Africa and Middle East						
FDI from privatization	1.0	-	3.2	19.2	302.0	325.4
Share of region's FDI inflows	0.06	-	0.4	1.4	22.3	5.5
Sub-Saharan Africa						
FDI privatization	13.8	38.2	11.1	49.8	544.7	657.6
Share of region's FDI inflows	0.6	4.3	1.2	4.6	52.1	10.8
East Asia and the Pacific						
FDI from privatization	-	0.7	77.1	522.7	1 076.4	1 676.9
Share of region's FDI inflows	-	0.01	0.6	2.6	2.9	1.9
South Asia						
FDI privatization	0.1	10.6	4.2	41.8	16.2	72.9
Share of region's FDI inflows	0.02	2.0	0.9	6.9	2.0	2.5
Latin America and the Caribbean						
FDI from privatization	183.3	2 461.5	3 264.3	2 414.5	1 107.4	9 430.5
Share of region's FDI inflows	2.3	32.5	27.8	18.4	7.2	16.9
All developing regions						
FDI from privatization	198.2	2 511	3 359.9	3 048	3 047	12 164.1
Share of region's FDI inflows	0.9	12.3	12.2	8.4	5.5	7.6
Memorandum:						
Central and Eastern Europe						
FDI from privatization	461.5 ^b	475.5 ^b	1 868.2	2 697.9	2 979.8	7 545.9 ^c
Share of region's FDI inflows	..	..	76.3	58.5	53.3	59.7 ^c

Source: Based on Sader, 1994.

^a The World Bank's developing-country classification used in this table differs from that used elsewhere in this report.

^b FDI from privatization is larger than the recorded FDI inflows reported by the IMF in the balance-of-payments data.

^c 1991-1993.

Note: For the purposes of this table, each region comprises only those countries that have received FDI in connection with privatizations.

flows until 1993 has reflected mostly temporary factors -- the FDI recession in the developed countries and the rapid emergence of China as a host country -- and not a structural shift in the distribution of these flows towards developing countries.

4. The largest -- and smallest -- transnational corporations

The largest 100 TNCs (excluding those in banking and finance) ranked according to foreign assets had an estimated \$3.7 trillion worth of global assets in 1993, of which \$1.3 trillion was outside their respective home countries (table I.7). These top 100 TNCs -- all based in developed countries -- accounted for about a third of the combined outward FDI stock of their countries of origin in 1993. In the same year, foreign assets of these firms remained stagnant, reflecting sluggish economic conditions, while their total assets grew by 10 per cent.⁵ Highlights are the following:

- Oil, electronics and automobile companies dominate the largest 10 of the top 100 TNCs by foreign assets. Transnational corporations in electronics industries (ranging from consumer and industrial electronics to telecommunications systems) have moved up in the ranking. Indeed, the foreign assets of the electronics TNCs among the top 100 exceed those of any other industry (figure I.9).
- Total sales by the foreign affiliates of 23 electronics TNCs accounted for 80 per cent of the estimated total world sales in electronics.⁶ The total value of foreign sales is, in fact, highest in the electronics industry (figure I.10). A ranking by foreign sales gives a different ordering of companies (table I.8) than that based on foreign assets.
- The top 100 TNCs appear to be concentrating on core activities, reducing the number of product areas through divestment and consolidation. For example, Electrolux has divested almost all operations in commercial services (*Annual Report*, 1993). Nestlé withdrew from a service industry by selling its hotel business, reducing in the process its total number of overseas employees by 9,000.

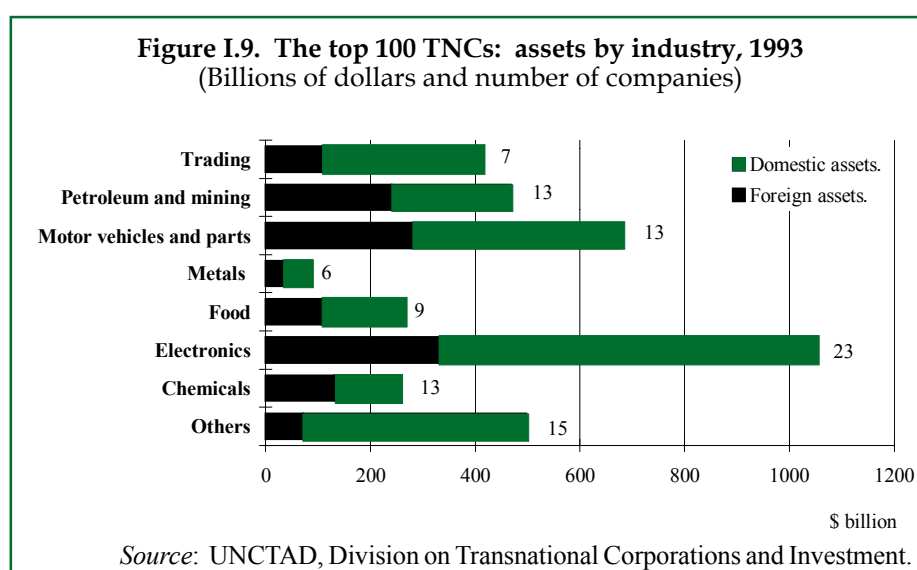


Table I.7. The top 100 TNCs ranked by foreign assets, 1993

Ranking by:		Company	Home country	Industry ^a	Assets		Sales		Employment		Index ^b (Percent-employees)
Foreign assets	Index ^b				Foreign	Total	Foreign	Total	Foreign	Total	
age)											
1	26	Royal Dutch Shell ^c	Netherlands/ United Kingdom	Petroleum refining	69.4	100.8	45.5	95.2	85 000	117 000	63.1
2	21	Exxon	United States	Petroleum refining	47.4	84.1	87.7	111.2	57 000	91 000	66.0
3	35	IBM	United States	Computers	44.1	81.1	37.0	64.1	130 655	256 207	54.4
4	85	General Motors	United States	Motor vehicles and parts	36.9	167.4	28.6	133.6	270 000	756 000	26.4
5	95	General Electric	United States	Electronics	31.6	251.5	11.2	60.5	59 000	222 000	19.2
6	74	Toyota	Japan	Motor vehicles and parts	.. ^d	97.6	41.1	94.6	23 824	110 534	32.3
7	66	Ford	United States	Motor vehicles and parts	30.9	198.9	36.0	108.5	180 904	332 700	34.4
8	87	Hitachi	Japan	Electronics	.. ^d	86.7	16.5	71.8	.. ^e	330 637	23.8
9	25	Sony ^d	Japan	Electronics	.. ^d	41.5	26.3	36.3	70 000	130 000	63.2
10	68	Mitsubishi	Japan	Trading	.. ^d	85.2	65.3	168.4	.. ^e	157 900	34.2
11	1	Nestlé	Switzerland	Food	24.8	30.6	38.4	39.2	203 100	209 800	92.0
12	32	Mobil	United States	Petroleum refining	23.1	40.7	42.5	63.5	28 600	61 900	56.6
13	69	Nissan Motor	Japan	Motor vehicles and parts	.. ^d	68.3	24.2	56.5	34 464	143 916	33.4
14	59	Matsushita Electric	Japan	Electronics	22.5	77.2	31.7	64.3	98 639	254 059	39.1
15	46	Elf Aquitaine	France	Petroleum refining	22.4	45.5	14.9	35.5	44 603	94 253	46.0
16	5	Asea Brown Boveri ^f	Switzerland	Electrical equipment	21.5	24.9	24.7	28.3	.. ^e	206 490	89.1
17	7	Philips Electronics	Netherlands	Electronics	.. ^d	23.8	26.6	30.3	200 000	244 400	84.9
18	14	British Petroleum	United Kingdom	Petroleum	19.0	28.1	39.2	52.4	62 600	84 500	72.2
19	29	Hanson	United Kingdom	Building materials	19.0	37.9	7.6	15.4	53 000	71 000	58.1
20	73	Siemens	Germany	Electronics	.. ^d	58.4	13.8	50.0	153 000	403 800	32.5
21	28	Unilever ^g	Netherlands/ United Kingdom	Food	18.0	24.7	16.1	40.0	187 000	294 000	58.8
22	89	Mitsui	Japan	Trading	.. ^d	72.5	49.8	172.9	.. ^e	11 528	27.3
23	60	Alcatel Alsthom	France	Electronics	.. ^d	44.2	5.0	26.5	115 500	196 500	38.6
24	55	Du Pont	United States	Chemicals	16.4	37.1	16.8	37.1	36 400	114 000	40.5
25	19	B.A.T. Industries	United Kingdom	Tobacco	15.7	50.5	25.3	33.2	175 500	190 308	66.4
26	61	Philip Morris	United States	Food	15.6	51.2	22.5	65.1	86 000	173 000	38.3
27	53	Volkswagen	Germany	Motor vehicles and parts	15.6	45.9	24.5	44.4	103 000	253 000	43.3
28	72	Nissho Iwai	Japan	Trading	..	45.6	36.6	100.0	2 078	7 245	32.7

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(Table I.7, cont'd)

Ranking by: Foreign assets	Index ^b	Company	Home country	Industry ^a	Assets		Sales		Employment		Index ^b (Percent-employees)
					Foreign	Total	Foreign	Total	Foreign	Total	
					(Billions of dollars)		(Number of employees)				
29	9	Ciba - Geigy	Switzerland	Chemicals	14.9	21.5	14.5	15.3	68 854	87 480	81.0
30	23	Hoechst	Germany	Chemicals	.. ^d	22.6	21.5	27.7	89 963	172 483	64.8
31	70	Veba	Germany	Trading	.. ^d	32.0	10.8	35.3	32 280	128 348	31.3
32	84	Sumitomo	Japan	Trading	.. ^d	51.4	47.2	162.4	2 500	9 212	27.6
33	62	Renault	France	Motor vehicles and parts	.. ^d	36.1	13.3	28.2	39 029	139 733	37.7
34	81	Chevron	United States	Petroleum refining	12.6	34.7	10.2	36.2	10 627	47 576	28.9
35	67	Xerox	United States	Scientific & photo. equipt.	.. ^d	38.8	8.6	17.2	20 626	97 000	34.2
36	44	Dow Chemical	United States	Chemicals	11.5	24.6	8.8	18.1	28 250	62 200	47.0
37	79	Itochu Corporation	Japan	Trading	11.5	61.4	43.0	165.8	3 329	7 449	29.8
38	65	Daimler - Benz	Germany	Motor vehicles and parts	11.3	52.3	34.5	56.7	82 160	366 736	35.0
39	38	BASF	Germany	Chemicals	11.2	23.2	17.4	24.6	41 779	112 020	52.0
40	22	Saint - Gobain	France	Building materials	.. ^d	16.6	8.3	12.7	66 000	98 000	65.7
41	10	Michelin	France	Rubber and plastics	.. ^d	14.1	9.9	12.3	87 000	124 575	75.6
42	40	Procter & Gamble	United States	Soaps and cosmetics	.. ^d	25.5	15.9	30.4	59 400	103 500	50.5
43	92	Marubeni	Japan	Trading	10.4	68.5	36.2	151.4	2 800	10 000	22.4
44	37	Bayer	Germany	Chemicals	10.4	23.1	15.2	23.6	83 300	164 200	53.4
45	93	Toshiba	Japan	Electronics	.. ^d	47.8	12.6	41.6	23 248	175 000	21.7
46	24	Volvo	Sweden	Motor vehicles and parts	.. ^d	16.1	11.6	13.3	29 664	73 641	63.8
47	47	Lyonnaise des Eaux	France	Diversified services	.. ^d	24.4	6.7	15.8	.. ^e	158 000	45.8
48	64	Honda	Japan	Motor vehicles and parts	9.9	28.3	25.0	37.5	3 652	91 300	35.3
49	56	Texaco	United States	Petroleum refining	9.7	26.6	15.8	33.2	11 611	32 514	39.9
50	34	Sharp Corporation	Japan	Electronics	.. ^d	19.9	7.3	14.6	29 000	42 883	55.1
51	76	Fujitsu Limited	Japan	Electronics	9.1	35.0	7.9	30.6	65 000	163 000	30.5
52	48	Ferruzzi/Montedison	Italy	Food	.. ^d	29.3	7.8	13.5	22 300	44 949	45.8
53	4	Electrolux	Sweden	Electronics	.. ^d	9.3	11.8	12.8	99 598	114 716	89.5
54	88	Amoco	United States	Petroleum refining	8.2	28.5	7.0	28.6	7 951	46 317	23.5
55	91	Nippon Steel Corporation	Japan	Metals	.. ^d	42.3	5.0	26.8	15 000	50 438	22.5
56	80	ENI	Italy	Petroleum refining	.. ^d	27.3	12.3	31.6	22 007	106 391	29.6
57	3	Thomson Corporation	Canada	Publishing and printing	7.8	8.2	5.4	5.8	40 700	46 400	91.3
58	57	Hewlett - Packard	United States	Computers	.. ^d	16.7	6.7	20.3	35 155	89 000	39.6
59	13	Glaxo Holdings	United Kingdom	Pharmaceuticals	7.7	11.1	7.2	8.0	.. ^e	47 104	72.8
60	2	Holderbank	Switzerland	Building materials	.. ^d	8.3	5.2	5.7	30 096	32 162	91.9

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(Table I.7, cont'd)

Ranking by:		Company	Home country	Industry ^a	Assets		Sales		Employment		Index ^b (Percent- age)	
Foreign assets	Index ^b				Foreign	Total	Foreign	Total	Foreign	Total		
					(Billions of dollars)							(Number of employees)
61	11	Grand Metropolitan	United Kingdom	Food	7.5	14.7	10.1	10.2	.. ^e	87 163	74.6	
62	94	ITT	United States	Diversified services	.. ^d	70.6	7.4	22.8	24 258	114 000	21.4	
63	63	Eastman Kodak	United States	Scientific and photo. equipment	.. ^d	20.3	4.9	16.4	56 300	133 200	36.1	
64	77	Pepsico	United States	Food	.. ^d	20.5	6.7	25.0	128 054	423 000	30.3	
65	100	AT&T	United States	Electronics	.. ^d	60.8	5.6	67.2	47 000	227 000	13.5	
66	27	Digital Equipment	United States	Computers	6.6	11.0	9.2	14.4	60 100	94 200	62.7	
67	97	NEC Corporation	Japan	Electronics	6.6	39.6	8.5	35.1	15 270	147 910	17.1	
68	12	Seagram	Canada	Beverages	.. ^d	11.7	5.9	6.0	.. ^e	15 805	74.1	
69	20	Total	France	Petroleum refining	6.4	9.0	16.7	22.9	27 229	49 772	66.2	
70	54	Robert Bosch	Germany	Motor vehicles and parts	.. ^d	14.7	9.6	19.6	60 488	164 506	42.9	
71	39	Bridgestone	Japan	Rubber and plastics	.. ^d	15.6	7.1	14.3	52 000	83 081	50.8	
72	33	MAN AG	Germany	Motor vehicles and parts	6.2	10.7	6.4	11.1	30 240	58 527	55.9	
73	98	Chrysler	United States	Motor vehicles and parts	.. ^d	43.7	5.8	43.6	30 671	129 000	17.1	
74	83	Sanyo Electronics	Japan	Electronics	.. ^d	21.9	7.2	16.6	8 128	58 417	28.4	
75	99	GTE	United States	Telecommunications	6.1	41.6	2.5	19.7	35 178	161 567	16.3	
76	42	Canon Inc.	Japan	Computers	.. ^d	19.3	11.3	16.4	27 839	64 535	47.8	
77	6	Solvay	Belgium	Chemicals	.. ^d	7.4	6.4	6.8	38 674	43 263	88.3	
78	16	Roche Holdings	Switzerland	Pharmaceuticals	.. ^d	20.8	9.5	9.7	45 430	56 082	68.9	
79	49	Mannesmann	Germany	Machinery, telecom.	.. ^d	13.1	9.9	17.2	39 936	127 695	44.2	
80	71	McDonald's	United States	Restaurants	5.7	12.0	3.5	7.4	.. ^e	168 000	32.9	
81	45	Alcoa	United States	Metals	5.6	11.6	3.8	9.1	31 700	63 400	46.7	
82	43	Fried. Krupp AG	Germany	Metals	5.6	11.3	5.8	11.8	35 000	78 376	47.8	
83	15	Hoesch-Krupp	Canada	Metals	5.6	9.8	6.3	7.2	39 000	54 000	72.1	
84	18	Alcan Aluminum	United Kingdom	Telecommunications	.. ^d	9.7	4.3	6.5	31 069	39 837	66.6	
85	41	Cable and Wireless	United States	Pharmaceuticals	5.4	12.2	6.9	14.1	43 372	82 647	48.5	
86	82	Johnson & Johnson	Australia	Metals	5.3	18.0	3.6	11.5	12 000	47 000	28.7	
87	90	BHP	United States	Petroleum refining	5.2	23.9	4.4	18.5	6 000	26 800	22.6	
88	17	Atlantic Richfield	Sweden	Forestry products	.. ^d	8.3	5.0	6.4	17 202	33 641	68.1	
89	52	Stora	United States	Food	4.9	10.9	5.2	14.6	71 479	138 000	44.1	
90	58	Sara Lee	United States	Mining	4.9	12.2	6.9	14.0	25 000	86 168	39.4	
90		Minnesota Mining										

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(Table I.7, cont'd)

Ranking by:		Company	Home country	Industry ^a	Assets		Sales		Employment		Index ^b (Percentage)
Foreign assets	Index ^b				Foreign	Total	Foreign	Total	Foreign	Total	
91	30	Fletcher Challenge	New Zealand	Forestry products	4.8	8.9	2.9	5.1	15 877	26 029	57.2
92	36	Thomson	France	Electronics	4.7	14.8	8.2	11.5	57 148	99 895	53.6
93	75	Fiat	Italy	Motor vehicles and parts	.. ^d	48.7	19.5	31.6	66 712	287 957	31.5
94	31	Pechiney	France	Metals	4.7	8.8	7.2	11.1	31 129	59 212	56.9
95	50	Motorola Inc.	United States	Electronics	4.7	13.5	9.2	17.0	52 500	119 900	44.1
96	8	RTZ	United Kingdom	Mining	.. ^d	6.8	4.8	5.3	58 527	59 975	84.7
97	51	United Technologies	United States	Aerospace	4.4	14.9	8.1	15.6	86 900	171 500	44.1
98	86	International Paper	United States	Paper	4.3	16.6	2.9	13.7	20 000	72 500	25.0
99	96	Kobe Steel, Ltd.	Japan	Metals	.. ^d	23.3	2.2	12.2	3 500	20 209	17.7
100	78	RJR Nabisco	United States	Food and tobacco	4.0	31.3	4.5	15.1	32 060	66 500	30.2

Source: UNCTAD, Division on Transnational Corporations and Investment.

^a Industry classification for companies follows that in the "Fortune Global 500" list in *Fortune*, 25 July 1994, and the "Fortune Global Service 500" list in *Fortune*, 22 August 1994. *Fortune* classifies companies according to the industry or services that represent the greatest volume of their sales; industry groups are based on categories established by the United States Office of Management and Budget. Several companies are, however, highly diversified. These companies include Asea Brown Boveri, GE, Grand Metropolitan, Hanson, Sandoz, Total and Veba.

^b The index of transnationality is calculated as the average of foreign assets to total assets, of foreign sales to total sales and of foreign employment to total employment.

^c Foreign sales figures are outside Europe whereas foreign employment figures are outside the United Kingdom and the Netherlands.

^d Data on foreign assets are either suppressed to avoid the disclosure or they are not available. In the case of non-availability, they are estimated on the basis of the ratio of foreign to total employment, foreign to total sales and similar ratios.

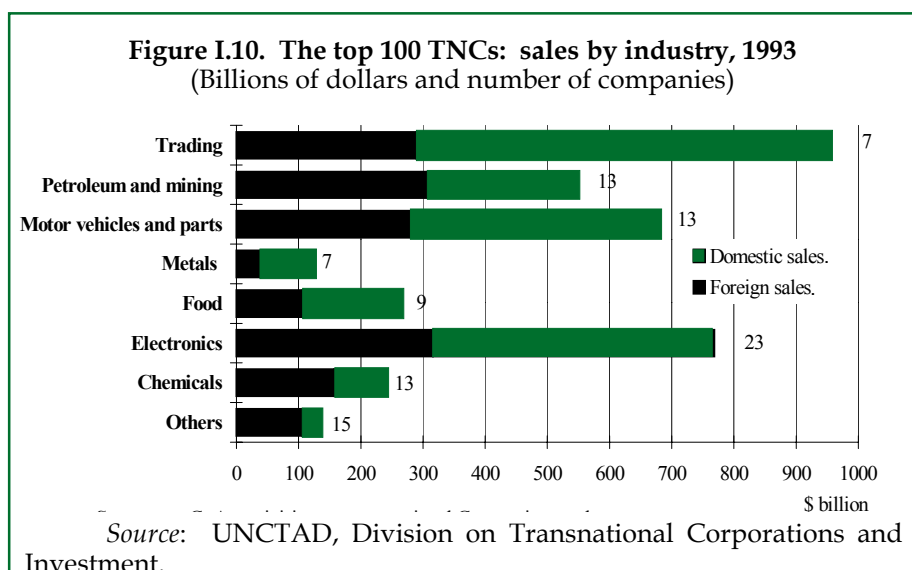
^e Data on foreign employment are suppressed to avoid the disclosure.

^f The company's business includes electric power generation, transmission and distribution, and rail transportation. The company was formed by the merger of a Swedish and a Swiss firm. Data on foreign sales and assets are outside Switzerland.

^g Foreign sales, assets and employment figures are outside the United Kingdom and the Netherlands.

- The top 100 TNCs are important employers at home and a broad (tables I.7 and I.9). However, the process of rationalization by a number of TNCs among the top 100 has also involved the downsizing

of corporate operations. Major car producers, such as Daimler Benz and Ford, have reduced the workforce in their domestic operations (by 6 and 4 per cent, respectively), while expanding employment abroad (by 9 and 8 per cent, respectively). In other cases, such as Volkswagen and Chrysler, the reduction affected both domestic and overseas employees. Similarly, large reductions of total and overseas employees have been implemented by Xerox, IBM and Philips and have been announced by Royal Dutch Shell.



The figures for foreign assets, foreign employment and foreign sales, taken in isolation, do not capture fully the extent of involvement of TNCs in the world economy. For example, foreign assets, in and of themselves, may understate the importance of transnational labour-intensive operations by some TNCs. On the other hand, TNCs in industries such as petroleum refining and mining may have minimal involvement of local labour or other local resources in their overseas operations. To capture more adequately the importance of international activities for the top 100 TNCs, an index of transnationality has been calculated as a composite measure of shares of foreign assets, foreign sales and foreign employment (figure I.11).⁷

Ranking the top 100 TNCs according to the composite transnationality index gives a quite different picture from the one arising by ranking these TNCs according to the absolute amount of their foreign assets. Royal Dutch Shell, the top TNC on the basis of the size of its foreign assets, falls to twenty-second place on the transnationality index, and Nestlé rises to first place. Indeed, the transnationality of the top 100 TNCs as captured by this index is not correlated at all with their size measured in terms of foreign assets. Industry differences play a more important role. By industry, chemical TNCs score highest on the transnationality index (61 per cent), followed by food TNCs (53 per cent). Firms in electronics -- the largest industry in terms of foreign assets -- fall in relative importance (43 per cent), and trading firms have the lowest ranking (30 per cent).

Table I.8. The top 5 TNCs by foreign sales, 1993
(Billions of dollars)

Company	Industry	Home country	Foreign sales
The top 5 TNCs by foreign sales			
Exxon	Petroleum	United States	87.7
Mitsubishi	Trading	Japan	65.3
Mitsui	Trading	Japan	49.8
Sumitomo	Trading	Japan	47.2
Royal Dutch Shell	Petroleum	United Kingdom/ Netherlands	45.5
The top 5 electronics TNCs by foreign sales			
IBM		United States	37.0
Matsushita Electronics		Japan	31.7
Philips Electronics		Netherlands	26.6
Sony		Japan	26.3
Asea Brown Boveri		Switzerland	24.7
The top 5 motor vehicles and parts TNCs by foreign sales			
Toyota		Japan	41.1
Ford		United States	36.0
Daimler-Benz		Germany	34.5
General Motors		United States	28.6
Honda		Japan	25.0

Source: Based on table I.7.

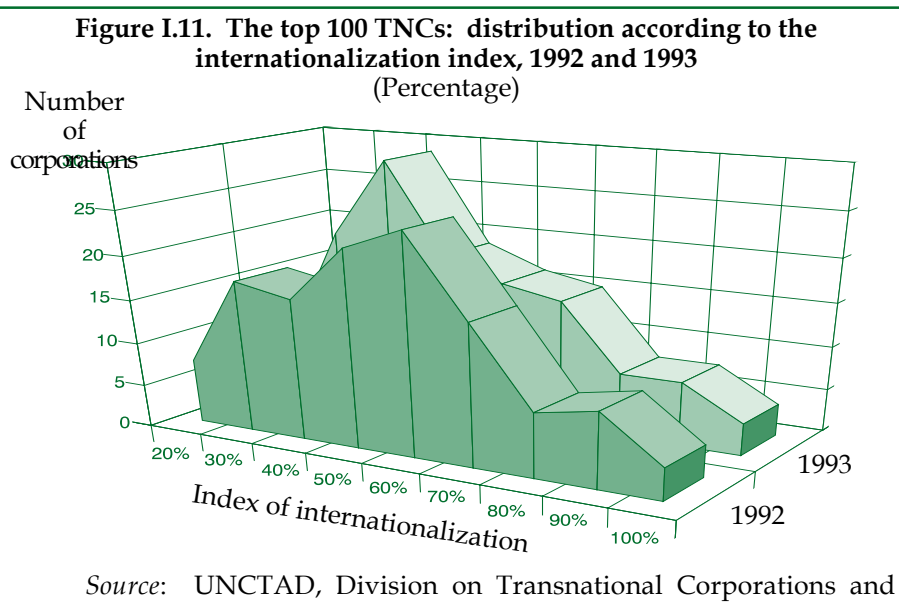
The transnationality index also shows that TNCs from small economies (in terms of GDP), such as Belgium, the Netherlands, Sweden and Switzerland, have a strikingly larger proportion of their activities abroad than TNCs based in large economies, such as France, Germany, Japan and the United States. Obviously, the size of their domestic markets is a limitation and provides an additional incentive to expand abroad. Examples are Solvay and ABB, each with 90 per cent of their activities abroad. Generally, TNCs from Japan rank low on the transnationality index, although this may be partly due to the higher weight of yen-denominated assets at a time when that currency is strong.

Table I.9. The top 5 TNCs by foreign employment, 1993
(Number of employees)

Company	Industry	Home country	Foreign employment
General Motors	Motor vehicles and parts	United States	270 000
United Technologies	Aerospace	United States	252 000
Nestlé	Food	Switzerland	203 000
Philips Electronics	Electronics	Netherlands	200 000
Asea Brown Boveri	Electrical equipment	Switzerland	193 000

Source: Based on table I.7.

Attention normally focuses on large TNCs as these, individually, tend to have a greater impact on host economies and international economic transactions. But, as the universe of TNCs indicates (table I.2), there are many small and medium-sized enterprises that are also TNCs, each contributing to the integration of the world economy. Many of them are quite transnationalized: a sample of 50 small and medium-sized TNCs based in developed countries (table I.10) indicates a composite transnationality index of 33 per cent, which compares with 41 per cent for the composite index of the top 100 TNCs. None the less, a number of small and medium-sized firms have most of their production located abroad and only their headquarters at home, focusing on management and R&D activities. Examples include Dalcon A/S (Denmark), a frozen food manufacturer (75 per cent), and Data Measurement Corporation, a United States manufacturer of industrial control systems (57 per cent). Among the three indicators of transnationality, small and medium-sized TNCs are more transnationalized in terms of employment (44 per cent) than in terms of assets (28 per cent) and sales (26 per cent), reflecting the generally more labour-intensive nature of smaller firms. Although a number of firms in the sample (about one-half) are operating in high-technology industries, many have relatively high labour-intensive operations abroad.



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In sum, the universe of TNCs is diverse, comprising not only large, but also small firms. Indeed small and medium-sized enterprises are quite international, though not as much as the largest TNCs. While the TNCs discussed so far are based in developed countries, the universe of TNCs (table I.2) also includes firms from developing economies, to which the discussion now turns.

B. Foreign direct investment and transnational corporations from developing countries

The need to remain competitive internationally -- including the necessity of servicing prosperous markets through a local presence and the need to have access to resources elsewhere -- has pushed growing numbers of firms from developing countries to invest abroad (box I.1). Governments are also beginning to recognize the importance of outward FDI for the

Table I.10. A sample of 50 small and medium-sized TNCs ^a

No.	Company	Industry	Year	Home country	FDI stock	Assets		Sales		Employment		Index ^b (Percentage)
						Total	Foreign	Total	Foreign	Total	Foreign	
1	Daito Cacao Company Ltd.	Manufacture and sale of confectionery products.	1991	Japan	0.05	116.5	14.1	47.5	11.3	87	3	13.1
2	Toyoshima & Company Ltd.	Wholesale of textiles.	1994	Japan	0.05	1.0	0.0	1.9	0.2	1 212	759	25.2
3	Miller Graphics Scandinavia AB	Manufacture of rollers, sleeves & plates for the graphic industry.	1991	Sweden	0.08	6.5	0.1	7.2	0.2	80	2	2.3
4	Takahashi Electric Co., Ltd.	Manufacture of electrical machinery parts.	1991	Japan	0.13	19.7	0.1	40.1	3.7	400	70	9.1
5	Maruyoshi Seisakujo	Manufacture of heads of dolls.	1991	Japan	0.24	29.7	0.4	16.5	1.0	370	360	34.9
6	Optometrics Corporation	Manufacture of optical elements and instruments and thin film component.	1991	United States	0.35	3.5	0.7	3.6	1.5	50	25	37.7
7	Air	Sale of UNIX basis software.	1994	Japan	0.43	18.9	0.4	16.4	0.0	53	2	2.1
8	Nippon Trading Company Ltd.	Wholesale of chemical products and man-made fibres.	1991	Japan	0.44	264.7	4.8	707.3	3.1	394	105	9.6
9	Sanyo Kako Company Ltd.	Manufacture of colouring chemical compounds of plastics.	1991	Japan	0.55	44.8	-	166.0	-	233	5	2.1
10	Shachihata Industrial Co., Ltd.	Manufacture of stationery.	1994	Japan	0.69	171.9	14.9	166.6	26.2	472	202	22.4
11	CAMAG	Manufacture of instruments for modern thin-layer chromatography.	1994	Switzerland	0.70	6.1	0.1	9.3	4.1	70	20	25.2
12	Hikawa Shoji Kaisha, Ltd.	Trading company.	1991	Japan	0.85	407.8	13.0	1160.0	54.9	341	6	3.2
13	MODEC, INC.	Designing, engineering and supplying of equipments for ocean development.	1991	Japan	0.91	9.9	0.5	19.8	1.5	34	4	8.2
14	Neway Manufacturing Inc	Manufacture and sale of engine valves, reconditioning tools and equipment.	1994	United States	1.00	3.0	1.0	2.5	0.8	32	7	28.4
15	Central Trading Co., Ltd.	Trading of Japanese food.	1991	Japan	1.19	5.1	4.8	22.9	13.7	78	55	74.8
16	Van Dijk Beheer	Trading of fresh fruits, vegetables, flowers and plants.	1990	Netherlands	1.25	74.5	..	345.2	137.2	506	252	44.8
17	DEUTSCHE MESSE AG	Performance of exhibitions and fairs in their own fairgrounds or elsewhere.	1994	Germany	1.30	1 296.1	..	259.2	..	460	20	4.3
18	Eximco N.V	Fabrication and distribution of welding electrodes and welding machines.	1990	Belgium	1.32	28.2	..	35.4	17.5	363	206	53.0
19	NISSIM SA	Designing, marketing and manufacturing of adult apparel.	1990	Belgium	1.50	9.3	3.6	15.0	7.8	62	10	35.6
20	Clinical Data Inc.	Manufacture of clinical laboratory instruments.	1991	United States	1.50	6.0	..	10.0	..	98	75	76.5
21	Takasago Kogyo	Manufacture of equipments and plants for ceramic industry.	1994	Japan	1.62	158.9	..	132.8	..	490	..	..
22	Caldwell MFG CO. INC.	Manufacture of window HDW.	1991	United States	2.00	..	..	50.0	3.0	400	20	5.5
23	Borealis Exploration Limited	Mineral exploration.	1991	Canada	2.46	9.8	2.5	0.1	-	10	4	32.6
24	TACO Ltd.	Textile converting.	1991	Switzerland	2.51	..	..	17.4	1.4	80	20	16.5
25	HOH Vandteknik A/S	Manufacture and supply of equipment and plant for water purification.	1994	Denmark	3.07	12.7	3.1	18.0	3.6	78	5	16.9
26	Primo Company Limited	Manufacture and sale of communication and sound equipments.	1991	Japan	3.30	89.4	20.2	124.5	42.5	812	448	37.3

(Table I.10, cont'd)

No.	Company	Industry	Year	Home country	FDI stock	Assets (Millions of dollars)		Sales (Millions of dollars)		Employment (Number of employees)		Index ^b (Percentage)
						Total	Foreign	Total	Foreign	Total	Foreign	
27	DALCON A/S	Frozen food manufacturer.	1990	Denmark	4.04	35.6	5.8	42.2	31.7	224	75	41.6
28	Georgia Bonded Fibers, Inc.	Manufacture of artificial leather.	1994 ^c	United States	4.40	30.1	17.7	47.7	27.1	200	85	52.7
29	Yamato Co., Ltd.	Manufacture of starch adhesives, sensitive tapes and general stationery.	1994	Japan	4.80	53.0	5.5	83.1	12.5	200	80	21.8
30	Data Measurement Corporation	Manufacture of industrial control systems.	1994	United States	5.00	20.2	7.0	28.0	16.0	240	50	37.5
31	Nishio Rent All Co., Ltd.	Renting of construction equipments.	1994	Japan	5.06	536.3	6.1	361.2	4.0	800	20	1.6
32	Nippon Kohbunshi Co., Ltd.	Manufacture of plastic products.	1991	Japan	5.20	49.6	4.2	75.2	1.2	401	65	8.8
33	Richardson Pacific Ltd.	Manufacture and sale of perforated metal, expanded metal, welded spir	1991	Australia	5.23	23.0	..	23.3	3.5	232	25	13.0
34	Josefssons Postorder AB	Mail-order	1991	Sweden	5.86	58.0	4.9	98.3	10.7	321	21	8.6
35	Scan Coin AB	Manufacture of money processing, food processing and material handling	1990	Sweden	6.76	41.3	..	63.4	23.8	433	201	42.0
36	Daikei	Service activities such as typing or accounting.	1994	Japan	6.80	67.9	12.3	27.0	8.4	974	808	44.1
37	Raisio Group / Chemical Division	Modified starches and latices to the paper industry.	1991	Finland	7.42	..	..	118.7	24.7	300	60	20.4
38	Taitso Corporation	Manufacture and sale of plastic film capacitors.	1994	Japan	7.68	90.4	29.2	115.9	43.0	869	558	44.5
39	Metech Kitamura	Processing of semiconductor devices.	1994	Japan	8.20	69.9	..	68.5	..	202	6	3.0
40	XCAN GRAIN LTD	Grain trading (primarily international).	1994	Canada	9.79	92.5	0.8	1 003.6	662.4	125	20	27.6
41	FAMITEC INTERNATIONAL, I	Manufacturing and marketing of machine tools and semiconductor.	1991	United States	10.00	30.9	9.6	45.7	13.0	450	338	44.9
42	Chiyoda Integre Company Ltd.	Manufacture of parts of electric and electronic equipments.	1994	Japan	10.64	329.9	173.4	330.6	183.1	1 920	1360	59.6
43	Enplas Corporation	Manufacture and sale of precise parts of electrical equipments.	1994	Japan	11.50	318.0	28.0	258.0	59.0	1 100	500	25.7
44	Yamamoto Chemicals, Inc.	Manufacture of chemical products.	1994 ^d	Japan	12.53	112.7	13.4	38.5	0.0	107	4	7.8
45	Misumi Corporation	Trading (Sale of metal models etc.).	1991	Japan	15.42	118.8	24.5	160.8	3.3	280	15	9.3
46	AEBI & CO AG Maschinenfabrik	Manufacture and sale of special vehicles for agricultural and green kee	1991	Switzerland	41.84	41.8	..	57.9	..	600	150	25.0
47	Jal Trading Inc.	Wholesale of various goods.	1991	Japan	49.74	249.8	52.8	560.4	52.8	516	20	11.5
48	Brauerei Eichhof	Manufacture and sale of beers, soft drinks and laboratory equipments.	1991	Switzerland	83.68	..	..	189.7	97.6	1 050	400	44.8
49	Clyde Petroleum A/C	Exploration and production of oil and gas.	1990	United Kingdom	319.61	834.5	333.8	129.6	51.8	150	45	36.7
50	Battle Mountain Gold Company	Gold mining, processing and exploration.	1994	United States	565.00	680.0	560.0	243.0	196.0	1 500	1150	79.9

Source: UNCTAD, Division on Transnational Corporations and Investment, database on small and medium-sized TNCs.

a Ranked in the ascending order of FDI stock. Small and medium-sized TNCs are those with less than 500 employees in home country. Although some companies with more than 500 employees in home country are listed in this table, they were small when they made their first FDI.

b The index of transnationality is calculated as the average of the ratio of foreign assets to total assets, of foreign sales to total sales and of foreign employment to total employment. For the companies for which these shares of foreign components are not all available, the average is calculated based only on the available components.

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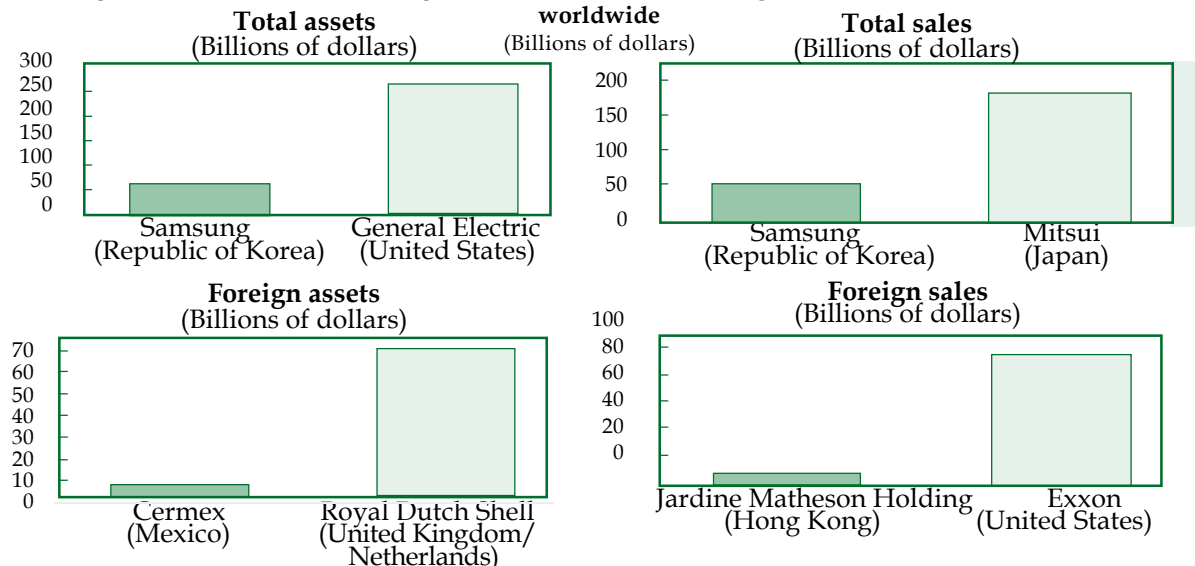
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competitiveness of their indigenous firms and are beginning to remove regulatory obstacles to such investments (chapter VII). In response, FDI outflows from developing countries grew rapidly, amounting to \$33 billion in 1994, and their share in global outflows increased from 5 per cent to 10 per cent between the periods 1980-1984 and 1990-1994 (table I.11).⁸ Still, the share of outflows from developing countries in worldwide outflows is significantly lower than the share of exports from developing countries in global exports and the share of developing countries in world GDP: 6 per cent compared with 23 per cent for exports and 21 per cent for GDP in 1993. But TNCs based in developing countries certainly have the potential to become a formidable new source of FDI over time, including for other developing countries.

Box I.1. The 50 largest TNCs based in developing countries

Of the 100 largest companies based in developing countries in terms of total sales, 65 are TNCs. The 50 largest of these ranked by foreign assets are contained in box table 1 -- the first attempt to compile a list of the largest TNCs based in developing countries. In terms of the size of total assets and total sales, as well as foreign assets and foreign sales, TNCs from developing countries are significantly smaller than the largest TNCs worldwide (box figure 1). The largest company in terms of *total assets*, Samsung (Republic of Korea), had total assets equivalent to those of Sony (Japan). Samsung is also the largest developing country TNC by *total sales*, equivalent to British Petroleum (United Kingdom) in the list of the top 100 TNCs.

Figure 1. Comparison of the largest TNCs based in developing countries and the top 100 TNCs



Source: UNCTAD, Division on Transnational Corporations and Investment.

The largest developing-country TNC judging by the size of its *foreign assets* is Cemex S.A. (Mexico), whose principal activities are in construction. Its foreign assets are 90 per cent of the foreign assets of RJR Nabisco (United States), the last in the list of the top 100 TNCs worldwide. In 1993, Cemex S.A. expanded its activities abroad by acquiring two Spanish cement companies and by acquiring a major cement company in Venezuela.^a In total, Cemex S.A. owns cement production facilities in six countries, including the United States.^b As a result of these recent

(Box I.1, cont'd)

Table.1. The largest TNCs based in developing economies, ranked by foreign assets, 1993

Ranking by:		Corporation	Economy	Industry	Assets		Sales		Employment		Index ^a (Per- cent- age)
Foreign assets	Index ^a				Foreign	Total	Foreign	Total	Foreign	Total	
					(Millions of dollars)						
1	8	Cemex S.A.	Mexico	Cement	3 603	8 018	949	2 897	5 171	18 395	35.3
2	10	Hutchison Whampoa Limited	Hong Kong	Diversified	2 743	8 375	815	3 202	9 046	22 489	32.8
3	17	Daewoo Group	Korea, Republic of ^b	Electronics	.. ^c	44 352	.. ^d	30 893	64 000	156 000	26.6
4	40	Samsung Group	Korea, Republic of ^b	Electronics	.. ^c	50 692	.. ^d	51 531	.. ^e	191 303	8.0
5	6	Jardine Matheson Holdings Ltd. ^f	Hong Kong	Diversified	.. ^c	9 799	5 510	8 424	.. ^e	220 000	38.8
6	45	Petroleo Brasileiro S/A - Petrobras	Brazil	Petroleum refining	1 105	20 178	1 037	15 263	17	51 228	4.9
7	36	Hyundai Motor Co.	Korea, Republic of ^b	Motor vehicles & parts	948	8 983	1 439	10 544	979	42 306	9.4
8	16	Grupo Televisa S.A. de C.V.	Mexico	Media	770	3 442	208	1 925	.. ^e	23 000	27.5
9	15	Souza Cruz S.A.	Brazil	Tobacco	770	1 040	262	3 721	.. ^e	12 659	27.5
10	22	Genting Berhad	Malaysia	Diversified	752	1 541	101	744	.. ^e	30 000	21.9
11	4	Dong Ah Construction Industrial Co.	Korea, Republic of ^b	Construction	706	2 935	858	1 895	6 366	12 097	40.6
12	19	Tatung Co. Ltd.	Taiwan Province of China	Electronics	703	3 836	806	3 121	8 564	27 254	25.2
13	37	New World Development Co. Ltd.	Hong Kong	Diversified	624	6 944	316	1 721	.. ^e	28 000	9.3
14	25	Keppel Corporation Ltd.	Singapore	Diversified	565	6 948	134	946	2 500	10 707	15.2
15	28	LG Electronics Inc. ^g	Korea, Republic of ^b	Electronics	485	7 679	1 105	7 565	.. ^e	58 800	13.0
16	5	Acer	Taiwan Province of China	Electronics	467	1 909	1 116	2 010	2 579	6 348	40.2
17	12	Sime Darby Berhad	Malaysia	Food	419	2 829	1 493	2 738	6 500	30 000	30.3
18	39	China Steel Corporation	Taiwan Province of China	Metals	.. ^c	6 215	476	2 355	6	9 601	8.8
19	14	CITIC Pacific Ltd. ^h	Hong Kong	Diversified	366	3 438	599	1 386	1 455	4 500	28.7
20	32	San Miguel Corporation	Philippines	Food	359	1 984	198	2 234	2 386	32 832	11.4
21	13	The Hong Kong and Shanghai Hotels, Ltd.	Hong Kong	Hotel	339	2 019	43	217	3 048	5 921	29.3
22	31	Formosa Plastic ⁱ	Taiwan Province of China	Chemicals	327	1 906	233	1 491	60	3 645	11.5
23	47	Yukong Ltd.	Korea, Republic of ^b	Petroleum refining	.. ^c	6 412	300	6 901	4	5 898	3.1
24	42	Empresas Ica Sociedad Controladora S.A.	Mexico	Construction	316	3 578	90	1 949	1 569	36 655	5.9
25	30	Wing On International (Holdings) Ltd.	Hong Kong	Diversified	275	1 304	43	399	156	3 175	12.3
26	50	Chinese Petroleum	Taiwan Province of China	Petroleum refining	263	12 942	156	10 075	27	21 780	1.2
27	23	Compania Manufacturera de Papeles y Cartones	Chile	Paper	242	2 077	285	755	1 132	9 325	20.5
28	3	Fraser & Neave Ltd.	Singapore	Diversified	232	2 065	412	823	4 332	6 323	43.3
29	26	Sadia Concordia S/A Industria e Comercio	Brazil	Food	211	1 037	425	1 714	30	32 473	15.1
30	44	Companhia Cervejaria Brahma ⁱ	Brazil	Food	187	1 754	80	1 248	476	9 606	5.0
31	21	Malaysian International Shipping Co., Ltd.	Malaysia	Transport	137	1 758	331	639	286	2 837	23.2

(Box I.1, table 1, cont'd)											
Ranking by:		Corporation	Economy	Industry	Assets		Sales		Employment		Index ^a (Per-cent-age)
Foreign assets	Index ^a				Foreign	Total	Foreign	Total	Foreign	Total	
					(Millions of dollars)						
32	34	Industrias Villares S.A.	Brazil	Diversified	.. ^c	1 361	187	888	264	11 399	11.1
33	2	Hyosung Corporation	Korea, Republic of ^b	Trading	132	461	2 018	2 531	450	1 430	46.7
34	35	Asia Cement Corp.	Taiwan Province of China	Cement	.. ^c	1 365	55	614	200	1 376	11.0
35	20	Embraer - Emp Bras de Aeronautica S.A.	Brazil	Aerospace	.. ^c	1 146	162	261	135	5 829	24.8
36	29	Usiminas - Usinas Siderurgicas de Minas GE ^e	Brazil	Metals	114	3 859	662	2 114	.. ^e	10 944	12.6
37	11	Aracruz Celulose S.A.	Brazil	Paper	.. ^c	2 229	333	374	10	5 109	31.5
38	1	Creative Technology	Singapore	Electronics	104	232	280	292	432	1 261	58.3
39	38	Sam Yang Co., Ltd.	Korea, Republic of ^b	Diversified	102	1 641	88	1 345	820	5 832	8.9
40	24	Ceval Alimentos S.A.	Brazil	Food	.. ^c	1 081	394	1 027	10	10 500	15.5
41	7	CDL Hotels International Ltd.	Hong Kong	Hotel	.. ^c	1 044	200	202	.. ^e	9 000	35.8
42	46	Cia de Acero del Pacifico de Inversiones	Chile	Diversified	39	1 548	.. ^c	611	16	8 993	3.6
43	18	Sampo Corporation	Taiwan Province of China	Electronics	38	71	107	500	20	3 500	25.2
44	27	Cia. Hering	Brazil	Diversified	31	1 370	652	1 623	220	27 280	14.4
45	9	Grupo Sidek	Mexico	Hotel	30	1 666	18	543	8 553	8 829	34.0
46	33	Vitro Sociedad Anonima	Mexico	Non-metallic	.. ^c	5 478	1 056	3 519	.. ^e	38 538	11.2
47	48	Ayala Corporation	Philippines	Food	.. ^c	1 134	22	538	.. ^e	14 809	2.2
48	43	Amsteel Corporation Berhad	Malaysia	Metals	20	1 060	54	901	1 400	18 500	5.1
49	41	Tata Iron and Steel Co.	India	Metals	11	1 904	226	1 212	.. ^e	76 400	6.4
50	49	Korea Electric Power	Korea, Republic of ^b	Utilities	8	26 439	.. ^d	9 376	.. ^e	29 892	2.0

Source: UNCTAD, Division on Transnational Corporations and Investment, based on responses to questionnaires and annual reports.

^a The index of transnationality is calculated as the average of foreign assets to total assets, of foreign sales to total sales and of foreign employment to total employment.

^b The accounting standards of the Republic of Korea do not require the publication of consolidated financial statements including both domestic and foreign affiliates. The figures provided here are estimates of consolidated statements as provided by the companies in response to a survey by UNCTAD, Division on Transnational Corporations and Investment. Depending on the availability of the data on foreign components, the data for business group totals are used.

^c Data on foreign assets are suppressed to avoid the disclosure or not available. In the case of non-availability of the data, they are estimated on the basis of other foreign component ratios.

^d Data on foreign sales are suppressed to avoid the disclosure or not available. In the case of non-availability of the data, they are estimated on the basis of other foreign component ratios.

^e Data on foreign employment are suppressed to avoid the disclosure or not available. In the case of non-availability of the data, they are estimated on the basis of other foreign component ratios.

^f A subsidiary of Jardine Matheson Holdings of Bermuda.

^g Company's name has changed from Goldstar to LG Electronics.

^h A related company of China International Investment and Trust Company (CITIC) of China.

ⁱ Data are for 1994.

Source: UNCTAD, Division on Transnational Corporations and Investment, based on responses to questionnaires and annual reports.

^a The index of transnationality is calculated as the average of foreign assets to total assets, of foreign sales to total sales and of foreign employment to total employment.

^b The accounting standards of the Republic of Korea do not require the publication of consolidated financial statements including both domestic and foreign affiliates. The figures provided here are estimates of consolidated statements as provided by the companies in response to a survey by UNCTAD, Division on Transnational Corporations and Investment. Depending on the availability of the data on foreign components, the data for business group totals are used.

^c Data on foreign assets are suppressed to avoid the disclosure or not available. In the case of non-availability of the data, they are estimated on the basis of other foreign component ratios.

^d Data on foreign sales are suppressed to avoid the disclosure or not available. In the case of non-availability of the data, they are estimated on the basis of other foreign component ratios.

^e Data on foreign employment are suppressed to avoid the disclosure or not available. In the case of non-availability of the data, they are estimated on the basis of other foreign component ratios.

^f A subsidiary of Jardine Matheson Holdings of Bermuda.

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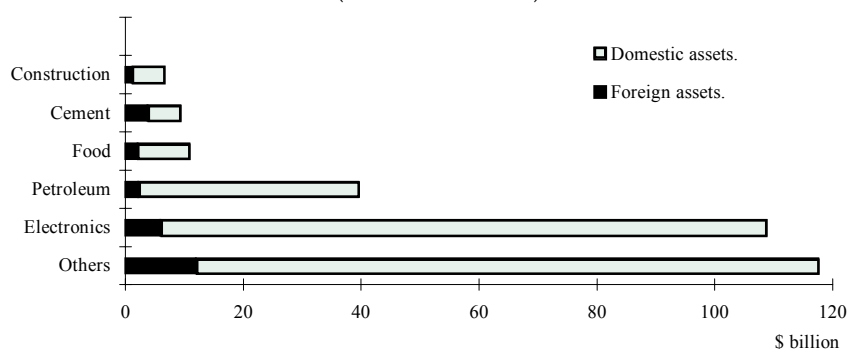
ⁱ Data are for 1994.

(Box I.1, cont'd)

acquisitions, Cemex S.A. has become an influential player in several countries in Asia and Latin America. The growth of its operations abroad has also helped Cemex S.A. to ride out Mexico's exchange rate crisis, with its revenues from abroad offsetting the losses at home from the peso's devaluation.

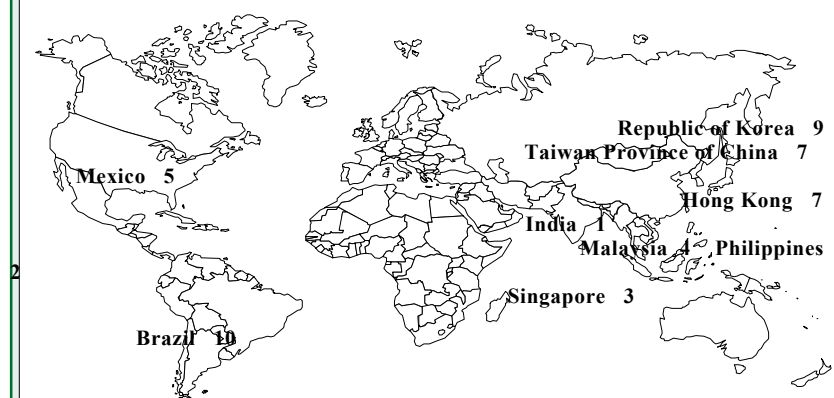
The distribution of foreign assets by industry shows that TNCs based in developing countries invest primarily in services (box figure 2). This reflects, to a certain extent, that services' output as a percentage of GDP for the major developing economies has grown substantially. Even TNCs based in natural resources have successfully diversified into the services sector: for example, Sime Darby, Malaysia's largest plantation firm, has diversified into heavy-equipment trading and engineering, and targets infrastructure development in the growing economies of East and South-East Asia. In contrast, the largest industry by foreign sales is electronics. Transnational corporations from the Republic of Korea rank high in terms of foreign sales. The top three electronics companies -- Samsung, LG Electronics and Daewoo -- produced abroad about 10 per cent of their total output in 1993, and this share is expected to grow at least to 30 per cent by the year 2000.^c

Figure 2. The 50 largest TNCs based in developing countries: assets by industry, 1993
(Billions of dollars)



Source: UNCTAD, Division on Transnational Corporations and Investment.

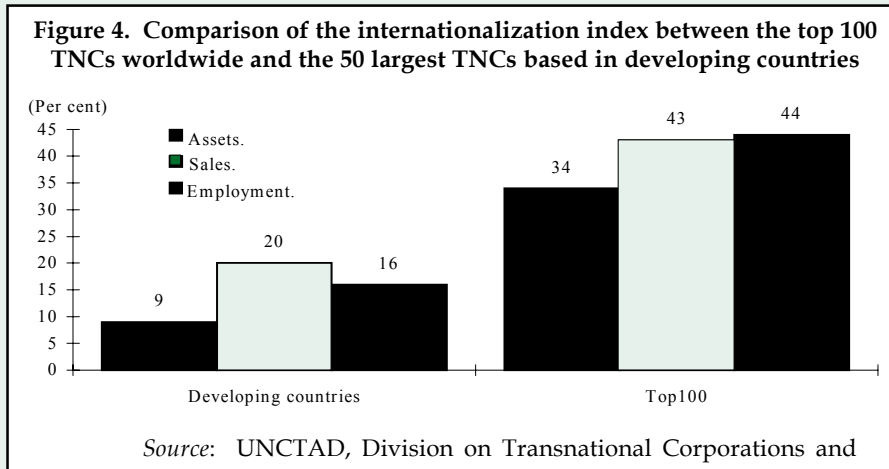
Figure 3. The location of the 50 largest TNCs based in developing economies, 1993



Source: UNCTAD, Division on Transnational Corporations and Investment.

(Box I.1, cont'd)

The top 50 TNCs based in developing countries are considerably less internationalized than the world's top 100 TNCs: the average index of foreign activity of the top 50 TNCs is 13 per cent in comparison with 41 per cent for the world's top 100 TNCs (box figure 4).



Given the low level of internationalization of TNCs from developing countries, there is clearly considerable scope for further growth and expansion of their international activities. The forces of liberalization and globalization are likely to push them precisely in that direction -- at the same time as they develop the ownership specific advantages that are typically required to invest abroad successfully.

a Geri Smith, "Cemex: solid as Mexico sinks", *Business Week*, 27 February 1995.

b Ibid.

c Sohn Jie-Ae, "Korea's big rush abroad", *Business Korea*, 12, 6 (December 1994), pp. 30-32.

Presently, however, the outward FDI stock of developing countries, some \$117 billion at the end of 1993, is still small and constitutes only 5 per cent of the global outward stock. China, Hong Kong,⁹ the Republic of Korea, Singapore and Taiwan Province of China alone accounted for 71 per cent of outward stock and for 90 per cent of outflows from developing countries in 1993. In 1990, the share of developing countries in the inward FDI stock of 58 host countries was, on average, about 6 per cent but, for example, significantly higher in Thailand (40 per cent), Malaysia (41 per cent), Sri Lanka (49 per cent) and China (65 per cent) (UNCTAD, 1993b, pp. 24-25, table II.1).

Most FDI originating in developing countries (to the extent that a sample of countries is indicative) is directed to other developing countries, although developed countries are receiving a growing share of that investment. Data on inward FDI support this: a sample of important host developing countries reported that developing countries accounted for 19 per cent in 1990 while a sample of important host developed countries reported that developing countries accounted for 4 per cent in the same year (UNCTAD-DTCI, 1993a). This overall performance of the developing countries is largely due to high *intraregional* FDI flows in Asia, where the developing countries of the region account for some 37 per cent of FDI inflows in a sample of important countries (table II.3). For example, nearly three-quarters of FDI

implemented in China during the period 1990-1993 originated in Hong Kong, Singapore and Taiwan Province of China (UNCTAD-DTCI, FDI data base). In Indonesia, Malaysia, Philippines and Thailand, one-quarter of FDI inflows during the period 1985-1992 (\$20 billion) was also from these economies (JETRO, 1994, pp. 10-15). Taiwan Province of China and Hong Kong are, respectively, the largest and second largest home countries for FDI in Viet Nam; together, all the Asian newly industrializing economies accounted for 52 per cent of the total approved FDI inflows in that country during the period 1988-October 1994.¹⁰ Singapore became the largest investor in Myanmar with about one-quarter of the total approved FDI (\$1 billion) during the period 1988-March 1994, and some \$100 million worth of FDI from Singapore has been approved by Cambodia.¹¹

Intraregional FDI exists also in Latin America, but it is still small compared to Asia, although it has been boosted by the liberalization of investment and trade policies and the emergence of TNCs from such countries as Chile, Mexico and Venezuela; Chile, e.g., has largely liberalized its outward FDI regime (chapter VII). The North American Free Trade Agreement and its envisaged expansion to Chile (and, potentially, other countries in that

Table I.11. Average annual FDI outflows from developing economies and the world, 1970-1994
(Millions of dollars)

Home region/economy	1970-1979	1980-1984	1985-1989	1990-1994
Developing region/economy, total	304	2 467	8 425	21 857
Africa	36	924	998	832
Nigeria	..	819	839	552
Latin America and the Caribbean, of which:	100	416	713	2 095
Brazil	90	236	212	734
Mexico	2	30	142	185
East, South and South-East Asia, ^a of which:	149	895	5 816	18 507
China	-	90 ^b	671	2 429
Hong Kong	..	355	1 968	10 245
Republic of Korea	10	73	157	1 271
Malaysia	75	245	231	904
Singapore	..	106	325	837
Taiwan Province of China	4	45	2 384	2 640
Thailand	5	2	49	171
West Asia	18	229	890	420
Kuwait	32 ^c	141	438	598
World	27 705	49 523	136 381	215 502
Developing economies as percentage of world	0.3	5.0	6.2	10.1

Source: UNCTAD, Division on Transnational Corporations and Investment, based on International Monetary Fund, balance-of-payments tape, retrieved in June 1995; data from the Organisation for Economic Co-operation and Development Secretariat; national official sources; and own estimates.

^a Includes the Pacific. The total FDI for the subregion for some years is less than the sum of economies listed below due to negative outflows.

^b Annual average for 1982-1984.

^c Annual average for 1975-1979.

region) and MERCOSUR (chapter II) are also expected to play a role in stimulating FDI through the regional restructuring of TNC operations based in -- or operating in -- the member countries. For instance, the number of strategic alliances between Argentinean and Brazilian firms is increasing.¹² There are also signs that FDI between Colombia, Ecuador and Venezuela (members of the Andean Common Market) has been growing in response to the negotiation of a free trade agreement, as well as the liberalization of investment regimes (JETRO, 1994). Venezuela has become a sizeable outward investor (indeed, a net outward investor in 1993), with investments especially in Colombia and Ecuador; similarly, investment outflows from Colombia to Venezuela doubled between 1990 and 1993 to \$50 million (JETRO, 1994). Finally, some 60 per cent of Chile's cumulative outward investments is in Latin America.¹³

As far as *interregional* flows are concerned, the principal direction is towards developed countries, although developing countries in other regions also figure among the recipients. China has become the third largest source country in Peru, with large investments in the mining and petroleum industries.¹⁴ Developing Asian TNCs, in particular, are beginning to set their eyes on developed countries, although TNCs from Latin America (e.g., Mexico) have also invested significantly there, especially in the United States and Western Europe. Asia's share in the total inward stock of the United States increased from 0.8 per cent in 1988 to 1.2 per cent in 1993, while the share of imports into the United States from Asia remained relatively stable between these two years (21 per cent and 23 per cent, respectively) (table I.12). The share of outward investment (stock) from the Republic of Korea going to developed countries rose from one-third in 1980 to more than one-half in the early 1990s, an increase that also took place (from 43 per cent to over 50 per cent) in the case of Taiwan Province of China (UNCTAD-DTCI, FDI database). Similarly, the proportion of Singapore's outward FDI stock in developed countries more than doubled during 1985-1990, from 16 per cent to 35 per cent (UNCTAD-DTCI, FDI database). To illustrate, Samsung (Republic of Korea) plans to invest over \$700 million in an automobile manufacturing plant and another £450 million in an electronics complex in the United Kingdom. The same company has acquired AST Research, a personal computer manufacturer in the United States, for \$378 million.¹⁵ Other examples include Sime Darby (Malaysia), which acquired Lec Refrigeration (United Kingdom) for some \$35 million in 1994; Hyundai (Republic of Korea), which is planning to invest \$1.3 billion in a semiconductor plant in the United States; and Cemex (Mexico) which has investments in the United States and Spain.¹⁶ Furthermore, TNCs from the Asian newly industrializing economies have also increasingly been engaging in strategic alliances with firms from developed countries (Schultz, forthcoming).¹⁷

The prospects of more FDI from developing countries are bright, for at least two reasons. First, as countries develop and their firms acquire more ownership specific advantages, they are in a better position to invest abroad. Secondly, and independently of the level of economic development of a given country, the opportunities and pressures of a liberalizing and globalizing world economy make it more and more necessary for firms to complement their existing portfolio of proprietary assets and managerial capabilities with an appropriate portfolio of international locational assets in order to be competitive with their international rivals. (For an elaboration, see the Introduction to Part Two.) Even low-income countries have

pockets of capabilities, and firms in these pockets possess the strengths to spawn foreign affiliates. At the same time, the country-specific knowledge required to produce abroad -- be it of a regulatory nature or a product-specific nature -- has decreased as economies have become more open and tastes and demand have become more similar, at least in certain areas, thus reducing the barriers to inward FDI. At the same time, these pressures for outward FDI at the level of firms need to be weighed against the constraints that may exist due to macroeconomic considerations -- a subject taken up in chapter VII.

C. Different forms of international transactions

The growth of FDI, including the emergence of developing countries as outward investors, is part of the broader process of internationalization driven by heightened international competition. Firms supply goods and services to foreign markets through trade. They invest abroad for the same reason, as well as to obtain access to factors of production. More broadly, they undertake and organize international production employing a wide variety of modalities of international transactions, including FDI; cross-border intra-firm trade; cooperative inter-firm agreements (such as strategic alliances); non-equity forms of TNC involvement (e.g., licensing, turnkey agreements, franchising, management contracts); and subcontracting. Apart from transactions such as these, which are conducted under the common governance of TNCs, firms also undertake arm's length transactions, especially trade -- until recently the most important form of delivering goods and services to foreign markets. The important thing is that, in their totality, these various modalities are not only used to access international market for outputs, but also to access international markets for inputs for the production process, i.e.,

Table I.12. The importance of developing economies in inward FDI stock and imports of selected developed countries, 1988 and 1993
(Percentage)

Host country	Share of FDI stock from:				Share of imports from:			
	All developing economies		Developing Asia		All developing economies		Developing Asia	
	1988	1993	1988	1993	1988	1993	1988	1993
United States	6.4	6.7	0.8	1.2	36.8	40.5	20.6	23.3
United Kingdom	3.8	2.7 ^a	1.1	1.7 ^a	12.1	13.9 ^a	7.1	8.8 ^a
Japan ^b	4.2	7.6	2.9	4.1	48.7	52.0	31.4	34.7
Germany	2.3	2.1 ^a	0.6	0.6 ^a	14.4	13.8 ^a	6.7	7.6 ^a
France	2.1 ^c	2.0 ^d	0.2 ^c	0.3 ^d	13.8 ^c	15.7 ^d	4.7 ^c	6.2 ^d

Source: UNCTAD, Division on Transnational Corporations and Investment, based on the Division's FDI database; OECD, 1994a and International Monetary Fund, 1994b.

^a 1992.

^b Based on cumulative FDI approvals/notifications for fiscal years.

^c 1989.

^d 1991.

tangible and intangible factors of production, such as technology and technological know-how, skills, natural resources and other natural and created assets that are important for international production (and for which there may not always be international markets). For firms, these various modalities are partly interchangeable (e.g., subcontracting can be a substitute for FDI) and partly complementary (e.g., FDI and trade), being used in accordance with the needs of individual firms. They are interconnected in an overall concern to convert global inputs into outputs for global markets as efficiently and profitably as possible (Buckley, 1989).

Monitoring the magnitude and hence the changing importance of these different modalities is difficult, given the lack of satisfactory data. One indicator of the importance of international production is the worldwide sales of foreign affiliates (“establishment trade”), whose importance exceeds that of exports of goods and non-factor services (table I.13). But this importance varies greatly among countries. In the case of the United States, worldwide sales of foreign affiliates in 1992 were over two and-a-half times the value of exports of goods and non-factor services (table I.14); in the case of Italy, they accounted for only one-third (table I.15).

Table I.13. Forms of international transactions in the world, 1984-1993

(Billions of dollars)

Year	Sales of foreign affiliates ^a	Sales associated with licensing with unaffiliated firms ^b	Intra-firm exports of goods and non-factor services ^c	Exports of goods and non-factor services	Exports of goods and non-factor services excluding estimates of intra-firm exports
1984	2 581	30	816	2 449	1 632
1985	2 400	40	734	2 202	1 468
1986	2 675	50	819	2 458	1 638
1987	3 492	60	971	2 912	1 941
1988	4 090	80	1 109	3 327	2 218
1989	4 640	80	1 202	3 606	2 404
1990	5 089	110	1 399	4 196	2 797
1991	5 373	120	1 482	4 446	2 964
1992	5 235	120	1 646	4 939	3 293
1993	..	..	1 587	4 762	3 175

Source: UNCTAD, Division on Transnational Corporations and Investment.

^a Estimated by extrapolating the worldwide sales of foreign affiliates of TNCs from France, Germany, Italy, Japan and the United States on the basis of the relative importance of these countries in worldwide outward FDI stock. However, the data on sales of foreign affiliates for France are included only after 1988 because of unavailability of the data prior to that year. For Italy the sales data are included only in 1986, 1988, 1990 and 1992.

^b The share for unaffiliated firms' receipts of royalties and fees worldwide is based on the share of unaffiliated firms in the total receipts of royalties and fees for the United States. Sales are estimated using the assumption that royalties and fees, as a proxy for licensing, are 7.5 per cent of total sales associated with them.

^c Estimated on the basis of the assumption, based on United States data, that intra-firm trade accounts for about one-third of total trade. Some intra-firm exports may be included in the sales of foreign affiliates.

Licensing agreements are another relevant indicator. These agreements typically entail an important element of continuous control as they involve the use of the parent firms' technology by the firms purchasing a licence. Assuming that royalties and fees represent an estimated 7.5 per cent of sales associated with licensing (5-10 per cent according to Ehrbar, 1993; Buckley and Smith, 1994), then goods and services delivered to foreign markets by way of licensing agreements have doubled between 1987 and 1992 (table I.13).

Data on the importance of other (partial) indicators of international production are not available. It is, however, indicative that the number of cross-border strategic alliances increased substantially over the past two decades, suggesting that transactions associated with them have increased as well (Hagedoorn and Schakenraad, 1991; Hagedoorn and Duysters, 1994). Strategic alliances in high technology industries (new materials, biotechnology and information technology) increased from an estimated 145 in 1980 to 449 in 1993 (Hagedoorn and Duysters, 1994).

Worldwide sales by foreign affiliates plus sales associated with worldwide licensing with unaffiliated firms as a percentage of world exports (goods and non-factor services) were an estimated 108 per cent in 1992 (table I.13). Again, this share differed considerably between

Table I.14. United States: forms of international transactions, 1986-1993

(Billions of dollars)

Year	Sales of foreign affiliates ^a	Sales associated with licensing with unaffiliated firms ^b	Sales associated with franchising ^c	Intra-firm merchandise exports ^d	Merchandise exports ^e	Merchandise exports excluding intra-firm exports
1986	929	32 ^f	..	83	227	144
1987	1 053	38	1.5	89	254	165
1988	1 195	45	1.8	112	322	211
1989	1 285	53	2.7	130	364	234
1990	1 493	44	3.2	135	394	258
1991	1 542	57	4.4	148	422	274
1992	1 579	52	4.5	163	448	285
1993	1 574	70	5.4	169	465	296

Source: UNCTAD, Division on Transnational Corporations and Investment, based on United States, Department of Commerce, *U.S. Direct Investment Abroad: Operations of U.S. Parent Companies and their Foreign Affiliates* and *Foreign Direct Investment in the United States: Operations of U.S. Affiliates of Foreign Companies*, various issues; and unpublished data.

^a May include sales arising from intra-firm trade. All industries of all foreign affiliates.

^b Estimated for unaffiliated firms on the basis of the assumption that receipts of royalties and fees, as a proxy for licensing, are 7.5 per cent of total sales associated with them.

^c Estimated on the basis that franchising fees are 7.5 per cent of total sales associated with them.

^d Exports of non-bank parent firms shipped to their foreign affiliates and exports shipped by United States affiliates of foreign firms to their parents and their foreign affiliates.

^e Exports of goods and non-factor services are about 40 per cent higher than merchandise exports.

countries: in the case of the United States, it was about 250 per cent in 1993, while in the case of Germany, it was 78 per cent in 1991 (tables I.14 and I.15). These figures do not, however, take into account that (extrapolating from United States data) some one-third of world trade takes place within transnational corporate networks and, therefore, is not of an arm's length nature. Consequently, in order to compare the importance of transactions associated with international production with those that are of an arm's length nature, it is necessary to subtract intra-firm exports from world exports and add them to transactions associated with international production. As a result, the ratios of sales associated with international production to the value of arm's length exports increase to 210 per cent and 213 per cent, respectively, in 1984 and 1992 for the world as a whole (table I.13). In other words, only about one-third of international transactions are not associated with international production. In the case of the United States, whose firms are among the leaders in the internationalization process (and for which better data are available), arm's length transactions are as little as one-fifth of all international transactions (table I.14). In other words, four out of five dollars received for goods and services sold abroad by United States firms are actually earned from goods and services produced by their foreign affiliates or sold to them.

One consequence of these developments is that a large and growing share of international transactions no longer takes place between independent agents governed entirely by market forces, but rather in conjunction with international production organized by associated agents under more or less common corporate governance. Another consequence is that a firm that engages in international transactions using more than one modality is likely to expose itself to a wider range of potential business-related risks. But such diversification can also reduce its vulnerability to risks associated with any single form of international transaction -- i.e., it can increase its resilience to specific shocks -- and it endows it with a portfolio of locational assets that becomes a source of its competitiveness (see Part Two).

Not only does the probability of external shocks increase as markets and the organization of production increasingly become global in nature, but also created assets become more important in the production process. What matters to firms is increasingly not only access to markets for outputs but also access to markets for factors of production. One outcome of this is that, as TNCs expand the range and depth of their international transactions, they help countries to participate more fully and more sophisticatedly in a deeper international division of labour. This is particularly important for the majority of developing countries that currently participate in the world economy primarily through trade and inward FDI. One implication of this for policy makers is that, if they wish to encourage this process, they need to allow -- if not encourage -- their firms to engage in a wide range of international transactions, including outward FDI -- a matter taken up in chapter VII.

Another outcome is that even a market-access concept that includes the various forms of access to (output) markets captures only a part of the process through which firms convert global inputs into outputs for global markets -- namely, the final part of this process, servicing markets. It does not capture that part of the process during which inputs are transformed globally into outputs, i.e., the international production process itself and, in particular, access

Table I.15. Germany, Italy and Japan: forms of international transactions, 1980-1992
(Billions of dollars)

Year	Sales of foreign affiliates			Sales associated with licensing with unaffiliated firms ^a		Intra-firm exports of goods and non-factor services		Goods and non-factor services exports		
	Germany	Italy	Japan	Germany	Italy	Japan ^b	Germany ^c	Italy ^c	Japan	Japan
1980	179	..	157	77	32	14.0	145
1981	181	177	..	215	71	32	95
1982	182	173	..	193
1983	93	158	1983	171	..	195	..	68
1984	205	92	165	184	189	..	290	..
1985	..	206	94	190	1985	192
1986	32	..	219	97	194	1986	237	0.8
1987	98	41	66.1	293	122	226	1987	379
1988	118	49	..	355	148	250	..	349
1989	1.0	131	54	91.6	392	161	292	1989
1990	..	675	1.3	..	1.7	140	59	62.9	419	..
1991	462	63	689	1.3	182	76	100.3	317
1992	1991	478	..	659	1.1	204	75	226
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Sources: UNCTAD, Division on Transnational Corporations and Investments, based on Ministry of International Trade and Industry, *Kaigai Toshi Tokei Soran* and *Wagakuni kigyo no kaigai jigyo Katsudo* (Tokyo: MITI), various issues; Science Technology Agency, *Kagaku Gijyutsu Hakusho* (Tokyo: Ministry of Finance), various issues; Deutsche Bundesbank, *Kapitalverflechtung mit dem Ausland* (Frankfurt: Deutsche Bundesbank), various issues; Deutsche Bundesbank, 1994; and Cominotti and Mariotti, 1994.

^a May include sales arising from intra-firm trade.

^b Estimated in such a way that the ratio of the number of technological agreements with unaffiliated firms to the total number of technological agreements by parent firms is applied to the value of technological exports.

^c Estimated on the basis of the assumption, based on United States data, that intra-firm trade accounts for about one-third of total trade.

to international markets for factors of production that this involves. "Access to markets for outputs and factors of production" rather than "market access for outputs" alone more adequately captures the essential characteristics of the internationalization process. Therefore, the policy implication, this time for international negotiators, is that they need to redefine the parameters of international policy discussions in a manner that captures the entire scope of international production, covering both access to markets for goods and services and access to markets of factors of production.

* * *

Notes

- ¹ For example, direct purchases (net) by foreigners in Mexico's equity market, a component of portfolio equity investment, are estimated at about \$11 billion in 1993 (World Bank, 1995). Probably most of these purchases were undertaken by institutional investors (e.g., mutual funds), and these would not constitute FDI even if the share of foreign ownership exceeded the threshold that qualifies an investment as a FDI.
- ² For a discussion of the data relating to China see chapter II.
- ³ This figure differs from the estimate for 1993 reported in UNCTAD-DTCL, 1994a, due to data revisions.
- ⁴ The country classification for Central and Eastern Europe in this chapter, which follows the definition by the UNCTAD Secretariat as presented in annex tables, is different from that in the section on Central and Eastern Europe in chapter II where countries are regrouped for analytical purposes.
- ⁵ For the 1992 data, see UNCTAD-DTCL, 1994a, table I.2, pp. 6-7.
- ⁶ Data on world sales in electronics were provided by Zentralverband Elektrotechnik und Elektronik-industrie.
- ⁷ The share of foreign to total assets, sales and employment has been calculated for each company. The composite index is the average of the three shares, the weights being set to one. In other words, the index of transnationality = (foreign assets/total assets + foreign sales/total sales + foreign employment/total employment) divided by 3.
- ⁸ Such well-known outward investor economies as Hong Kong, India, Indonesia, Malaysia, Saudi Arabia and the United Arab Emirates do not report FDI outflows and, therefore, are estimated in the investment data reported here. In the cases of Hong Kong and Singapore, a large part of these investments is not by indigenous firms.
- ⁹ Although outward FDI data are not reported by Hong Kong, estimates based on host-country information indicate that Hong Kong is probably the largest foreign investor among developing countries, accounting for more than 20 per cent of the outward stock from developing countries (excluding tax-haven countries) in 1990 (UN-TCMD, 1993b, pp. 24-25 and 27-29, table II.1 and II.3).
- ¹⁰ Viet Nam State Committee for Co-operation and Investment, unpublished data.
- ¹¹ *Asiaweek*, 25 May 1994, p. 44; "Singapore invests in Cambodia", *Financial Times*, 3 March 1995.

- ¹² There were 53 strategic alliances by mid-1993. Examples include a joint venture of Malteria Pampa between Londrina (Argentina) and Brahama (Brazil) and a complementary exchange arrangement of parts and components of agricultural machinery between Deuts Argentina and Angrale (Brazil) (JETRO, 1994, p. 161).
- ¹³ Central Bank of Chile, unpublished data.
- ¹⁴ Examples include the acquisition of a privatized iron ore company, Hierro Peru (re-named Shougang Hierro Peru after the acquisition), for \$120 million in 1992 by Shougang and an oil exploration contract with Petro Peru in 1993 by China State Development Peru Inc., the first exploration investment in that region by China, with investments of \$43 million over the first five years. The sales price of Hierro Peru will eventually reach \$312 million as China has a debt of \$54 million and has the obligation to invest \$150 million in the three years following the acquisition. This acquisition is regarded as a successful privatization case as Hierro Peru's production more than doubled in 1993. See JETRO, 1994.
- ¹⁵ "Samsung to invest \$723 million in new UK manufacturing plant", *Financial Times*, 18 October 1994; "Samsung may assemble excavators", *Financial Times*, 22 December 1994.
- ¹⁶ "The children with the magic powder", *The Economist*, 21 May 1994; "Hyundai builds global role with \$1.3 billion US chip plant", *Financial Times*, 24 May 1995; "Sime Darby looks outside Asia to spread its wings", *Financial Times*, 2 May 1995.
- ¹⁷ For example, Rover (an affiliate of BMW, Germany) and Kia (Republic of Korea) have agreed to develop together a new range of automobile engines. See, Kevin Done, "Korean group in engines deal with Rover", *Financial Times*, 17 October 1994. Also, Samsung (Republic of Korea) is reported to have concluded an agreement to share technology for liquid crystal displays with Fujitsu (Japan). See, Michiyo Nakamoto, "Fujitsu links up with Samsung", *Financial Times*, 7 April 1995. See also Schultz, forthcoming.

CHAPTER II

REGIONAL TRENDS

A. Developed countries

1. Trends in FDI stocks and flows

At the end of 1994, some three-quarters of the world's inward foreign-direct-investment (FDI) stock was accounted for by developed countries, a share that has not changed significantly over the past decade. Nearly all of the world's outward FDI stock is accounted for by developed countries, but the share of developing countries has increased over the past decade -- from around 2 per cent in 1983 to nearly 6 per cent in 1994. A new wave of FDI flows into and from developed countries began in 1993 following the end of the FDI recession: FDI outflows from these countries increased by 13 per cent in 1993, but declined marginally by 2 per cent in 1994, to reach \$189 billion in the latter year. Inflows were also on the rise, advancing by 16 per cent in 1993, another 5 per cent in 1994, for a total of \$135 billion, in that year. Estimates for 1995 indicate a two per cent increase to \$138 billion.

- This wave in inflows primarily reflects the sharp rise in foreign investments in the United States, the largest FDI recipient worldwide in 1993 and 1994. Indeed, transnational corporations (TNCs) are investing more than ever in new or existing businesses in the United States, to establish a presence in its domestic market or to acquire strategic assets, such as technology and know-how. Consequently, after a sharp fall in 1992, the United States experienced a new surge in FDI inflows in 1993 and 1994, reaching nearly \$50 billion in 1994, and producing a stock (on a historical-cost basis) of \$504 billion.

The largest flow into the United States in 1994 was registered by the United Kingdom -- \$12.4 billion. In contrast to inflows, outflows from the United States have been more sensitive to the cyclical downturn of the domestic economy in the early 1990s, and have risen unabated throughout the 1990s -- by 77 per cent in 1993 -- to a record level of \$69 billion in 1993 and continued at a high level of \$46 billion in 1994 -- the second highest record. The size of the United States outward FDI stock (at historical cost) reached \$610 billion in 1994, more than a quarter of the worldwide FDI stock. As a result of these trends, the transnationalization of the United States economy -- reflected in the size of its inward and outward stocks in relation to its GDP (7 per cent and 9 per cent in 1993, respectively) -- has continued to increase. This is the outcome, on the one hand, of a new wave of acquisitions of domestic firms by foreign-based TNCs and,¹ on the other hand, of the implementation of the ongoing strategy of United States TNCs to seek a local presence in large or growing foreign markets. In this context, a special factor is the restructuring of United States TNC operations within NAFTA, which has led to a doubling of the outward stock to Mexico (from \$8 billion in 1989 to \$16 billion in 1994).²

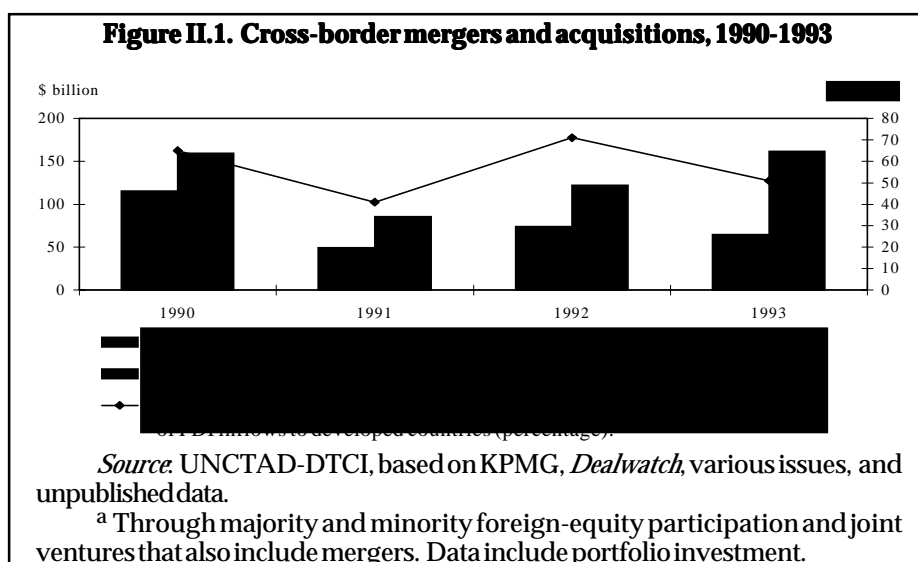
- Despite the end of the decline in its FDI outflows in 1993, Japan's ranking in world FDI outflows fell to fifth place in 1994. With around \$18 billion worth of outflows, Japan is re-emerging as a sizeable outward investor, especially in South, East and South-East Asia. As in earlier years, the new wave of FDI flows from Japan is caused partly by the appreciation of the yen *vis-à-vis* the dollar. Many Japanese firms see a shifting of production overseas, especially to Asia, as a strategy to thwart the loss of competitiveness triggered by the yen appreciation and to fend off trade frictions with other developed countries (Tejima, 1995). One survey indicated that investment in foreign plant and equipment and foreign production is expected to grow by more than 20 per cent in 1995, while the level of domestic production is expected to be stagnant and domestic investment expected to decline.³ Another survey indicates that the ratio of investment in foreign plant and equipment to investment in domestic plant and equipment was estimated to be 23 per cent in all manufacturing industries in 1995 compared with 20 per cent in 1994.⁴ As far as inflows are concerned, their small value -- at \$888 million in 1994, a half of the annual average over the period 1990-1993 -- continues to be a persistent feature of the pattern of transnationalization of Japan, reflecting *inter alia* the high cost of assets in Japan owing to the yen appreciation, the recession of the Japanese economy and divestments by European Union firms in 1993 amounting to \$1.1 billion.⁵
- A number of Western European countries have trailed behind the United States in emerging from the FDI recession. Sizeable increases in FDI outflows were registered only by a few countries in 1993, notably the United Kingdom, but more countries (e.g., Denmark, Finland, Spain and Sweden) recovered from the FDI recession in 1994. However, the record levels of FDI inflows and outflows by European Union members registered in the late 1980s are not expected to be repeated soon, because the restructuring of TNC activities on a European Union-wide basis through FDI appears to have reached a plateau.

The unfavourable economic conditions in the early 1990s had a dampening effect on cross-border mergers and acquisitions -- a TNC strategy for investing abroad that had become especially important in the late 1980s. With these having abated, the value of minority foreign-owned cross-border mergers and acquisitions rose considerably in 1993, pointing to an increasing use by TNCs of alliance-type low-equity associations as a way of penetrating foreign markets (figure II.1).⁶

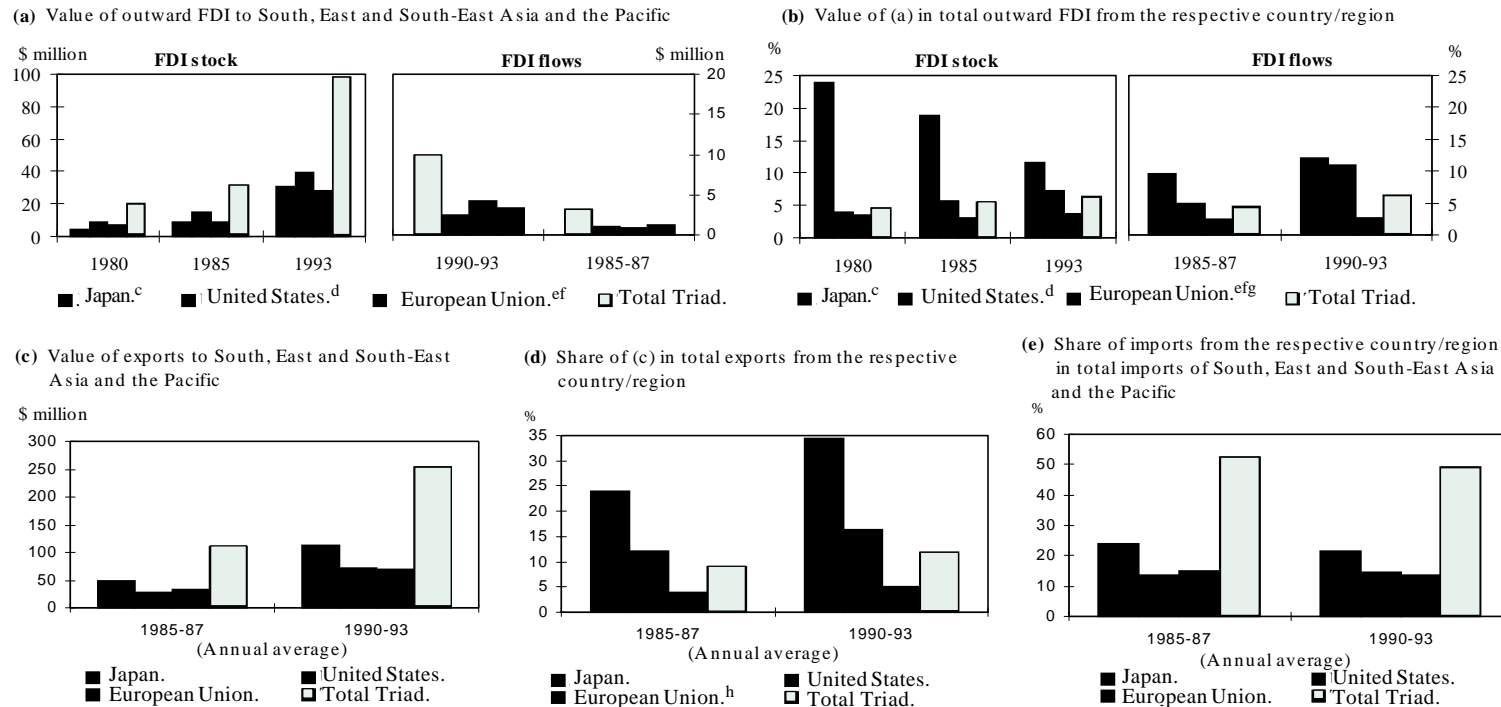
The developed-country share of inward and outward global FDI flows and stocks reflects the importance of these countries in economic activity. Developed countries have accounted for between three quarters and four-fifths of world inward FDI stock and for similar shares of world GDP and world exports, underscoring the attractiveness of large markets to foreign investors. The developed-country share of world outward FDI stock, however, is considerably above its share of world GDP or world exports -- the mirror image of the picture for developing countries (figure I.4).

2. Triad foreign direct investment in South, East and South-East Asia

Asia and the Pacific, and particularly the East and South-East Asia subregion, had emerged as the most dynamic region worldwide in terms of economic performance, with large and growing markets and profitable investment opportunities in manufacturing and services. This had led to an increase in the region's FDI share: (inward) FDI stock in the South, East and South-East Asia and the Pacific region rose from some 7 per cent to 12 per cent of worldwide stock during 1980-1993 (annex table 3), and from 30 per cent to 49 per cent of developing country FDI during the same period. The Triad -- Japan, United States and European Union -- has played the most important role in this buildup of FDI, but the importance of the Triad as a whole is declining, reflecting the considerable role that intraregional developing-country TNCs are assuming (see section II.B). Moreover, FDI in the region has not been accorded equal importance by TNCs based in the different Triad members:



- Japan's FDI stock in the region increased more rapidly than that of the other Triad members during 1980-1993 (figure II.2).⁷ This occurred even though, by the mid-

Figure II.2. Outward FDI and exports from the Triad^a to South, East and South-East Asia and the Pacific,^b 1980-1993

Source: UNCTAD, Division on Transnational Corporations and Investment.

a Japan, United States and the European Union.

b FDI flows for Japan for 1987 and 1990-1993 do not include data for the Pacific islands.

c Estimated, for South, East and South-East Asia and the Pacific, by multiplying the values of the cumulative flows to the region according to FDI approvals for fiscal years ending in March in the case of stocks, and values of annual flows to the region according to FDI approvals in the case of flows for 1985-1986, by the relevant ratios of disbursed to approved/notified FDI in the region. Total outward stocks were estimated in a similar manner using ratios of disbursed to approved/notified FDI for the world as a whole. Data on actual flows to South, East and South-East Asia are available from 1987. Data do not include reinvested earnings.

d Adjusted to exclude FDI in the finance (except banking), insurance, and real estates industries of the Netherlands Antilles.

e FDI stock data relate to Austria, France, Germany, Italy, the Netherlands and the United Kingdom, these countries accounted for 90 per cent of FDI flows to South, East and South-East Asia and the Pacific from 15 European Union member countries in 1990-1993. In the 1980 figure, data (not shown separately) relate to 1982 and for the United Kingdom, to 1981. Data for Austria and the Netherlands (not shown separately) relate to 1984. In the 1985 figure, data (not shown separately) for France and the Netherlands relate to 1987 and for the United Kingdom, to 1984. In the 1993 figure, data for Austria (not shown separately) relate to 1991, and data (not shown separately) for France, Italy and the Netherlands, to 1992. Data for France do not include reinvested earnings.

f FDI flow data relate to the same group of countries plus Denmark, Finland, Portugal and Sweden. In the 1985-1987 average figure, data for Portugal (not shown separately) relate to 1985-1986. In the 1990-1993 average figure, data for Austria (not shown separately) relate to 1992-1993, data for Denmark, Portugal and Sweden (not shown separately), to 1990-1992 and data for Italy (not shown separately), to 1992 only. Data for Denmark, France and Finland do not include reinvested earnings.

g Including, also, intra-European Union FDI.

h Including, also, intra-European Union exports.

1980s, there was a marked shift of FDI by Japanese TNCs towards the developed countries,⁸ particularly the United States and Western Europe; this is reflected in the decline in the share of South, East and South-East Asia and the Pacific in Japan's outward FDI stock. Nevertheless, the region's share in Japan's outward FDI stocks remained well above that share in the outward FDI stocks of the United States and the European Union.

- As far as United States TNCs are concerned, they paid increasing attention to South, East and South-East Asia and the Pacific throughout the 1980s (as reflected in the region's rising share in the United States outward FDI stock figures), and continued to do so during the 1990s (as indicated by flow figures, see figure II.1). There was a growing recognition by United States TNCs of the enormous potential that the fast-growing Asian region represents, a recognition that translated itself into a higher share of total United States FDI outflows being directed to South, East and South-East Asia and the Pacific.
- By contrast, FDI in South, East and South-East Asia and the Pacific accounted for a low (and during 1980-1985, declining) share of the European Union's outward FDI stock, judging from data for seven major TNC home countries (figure II.1). Data for some principal member countries of the European Union provide a further illustration. For example, Germany's 1993 FDI stock in the region (\$4.3 billion) was only about a half of its FDI stock in Spain, with averaged flows to that region during 1990-1993 (\$0.3 billion) being slightly less than one-third of those to that country. France's 1992 FDI stock in South, East and South-East Asia and the Pacific (\$2.3 billion) was similar to the size of its stock in Canada, while its 1990-1993 averaged flows (\$0.3 billion) could be compared to those to Portugal. For the United Kingdom's FDI in the region (\$16.8 billion in the 1993 stock and \$1.3 billion in averaged flows during 1990-1993), the comparable countries were Australia for FDI stock and Sweden for FDI flows (UNCTAD-DTCI, FDI database). In other words, TNCs from the European Union paid relatively limited attention to Asia and the Pacific during the 1980s and the early 1990s. In fact, the European Union's relative share in FDI in South, East and South-East Asia is reported to have declined steeply. Between 1986 and 1992, only 10 per cent of the region's FDI came from the European Union (Commission of the European Communities, 1994, p. 15).

The limited attention paid to South, East and South-East Asia by European Union TNCs reflects the fact that, to some extent, since the mid-1970s developing countries in general have lost importance as a FDI destination for European Union-based TNCs. During the 1980s, European Union TNCs focused mainly on the opportunities offered by the European integration process and, in some cases, the United States market.⁹ More recently attention has focused on Central and Eastern Europe. Furthermore, TNCs from several major European home countries focused, at least until the late 1980s, more on other developing regions than on South, East and South-East Asia and the Pacific.¹⁰ Despite growth of FDI from the European Union to the Asia-Pacific region between the mid-1980s and the early 1990s, the relatively smaller volume

of its outward FDI stock in the region, as compared with that of Japan and the United States, indicates that investors from the European Union are not fully exploiting the growing regional market potential of Asia.

Nor has the low relative importance of FDI in Asia for European Union investors been offset by the relative importance of their exports to Asia (figure II.1), as an alternative vehicle to deliver goods and services to those markets. While the shares of European Union members in the region's total imports remained more or less unchanged during the 1980s and early 1990s, South, East and South-East Asia and the Pacific remained of only limited importance as an export market for European Union firms, accounting for 5 per cent of the value of their exports in 1990-1993. Again, this contrasts with the South, East and South-East Asian and Pacific region's greater and growing importance as a destination for exports from the other Triad members, especially Japan.

There are, however, signs that TNCs from the European Union are changing course: e.g., outward FDI flows from the European Union to South, East and South-East Asia and the Pacific rose both in absolute value and as a share of the European Union's total outward stock and flows in the early 1990s (figure II.1). Data on inward FDI for selected Asian economies such as Philippines and the Republic of Korea confirm this trend (table II.1). Approved inward FDI by European Union TNCs, as reported by Indonesia, Malaysia, Philippines and Thailand combined, increased by 87 per cent in 1992, compared with 47 per cent for United States and 12 per cent for Japanese firms (JETRO, 1994, p. 166).

To sum up, when compared with firms from other Triad members, European Union firms paid less attention, particularly during the 1980s, to South, East and South-East Asia and the Pacific, despite the region's rapidly growing economic importance. The share of the region in FDI and exports from European Union firms remained largely stagnant and, in the case of FDI, at a level below that attained by Japanese and United States TNCs. There are indications, however, of increased interest in investment and trade in South, East and South-East Asia on the part of European Union TNCs. Opportunities are being increasingly seized by TNCs from the region itself, led by those from the newly industrializing economies. In fact, regional TNCs have become serious competitors of firms from all Triad members in the world's most dynamic market.

B. Developing countries

Foreign direct investment has become the single most important component of private external resource flows to developing countries (chapter I). Investment flows into developing countries have been increasing dramatically in the 1990s, with their share in world FDI inflows reaching 37 per cent in 1994 (table II.2). Experiences with FDI are diverse, of course, varying among regions and countries.

Table II.1. The distribution of inward FDI stock and average annual FDI inflows of selected Asian economies by Triad member, 1980-1993

(Millions of dollars and percentage)

Economy	Stock ^a						Inflows (annual average)			
	1980		1985		1993		1985-1987		1990-1993	
	Value	Share of total FDI	Value	Share of total FDI	Value	Share of total FDI	Value	Share of total FDI	Value	Share of total FDI
Newly industrializing economies										
Hong Kong ^b	..	..	1 466 ^c	100 ^c	5 244	100	190	100	160 ^d	100 ^d
European Union	..	..	182 ^c	12 ^c	647	12	33	17	14 ^d	9 ^d
Japan	..	..	308 ^c	21 ^c	1 788	34	84	44	97 ^d	61 ^d
United States	..	..	788 ^c	54 ^c	1 474	28	80	42	4 ^d	2 ^d
Republic of Korea	1 866 ^e	100 ^e	3 634 ^f	100 ^f	11 209	100	419	100	1 034	100
European Union	123 ^e	7 ^e	241 ^f	7 ^f	2 220	20	31	7	360	35
Japan	1 026 ^e	55 ^e	1 902 ^f	52 ^f	4 466	40	224	54	226	22
United States	491 ^e	26 ^e	1 073 ^f	30 ^f	3 259	29	120	29	333	32
Singapore	6 211	100	12 115	100	38 584 ^g	100 ^g	11 908	100	.. ^h	.. ^h
European Union	2 024	33	2 914	24	9 265 ^g	24 ^g	3 556	30	.. ^h	.. ^h
Japan	679	11	1 549	13	2 568 ^g	7 ^g	1 763	15	.. ^h	.. ^h
United States	1 219	20	2 931	24	6 813 ^g	18 ^g	3 213	27	.. ^h	.. ^h
Taiwan Province of China	2 718	100	5 160	100	17 705	100	964	100	1 689	100
European Union	173	6	376	7	1 648	9	129	13	158	9
Japan	505	19	1 182	23	5 056	29	278	29	518	31
United States	952	35	1 932	37	4 716	27	311	32	412	24
ASEAN ⁱ										
Indonesia	10 274	100	15 353	100	67 625	100	1 047	100	8 999	100
European Union	851	8	2 672	17	9 967	15	269	26	1 205	13
Japan	3 462	34	5 009	33	13 937	21	329	31	1 379	15
United States	437	4	974	6	3 701	5	123	12	450	5
Malaysia	6 462 ^e	100 ^e	8 510	100	34 091	100	818 ^j	100 ^j	5 508	100
European Union	1 720 ^e	27 ^e	2 264	27	5 842	17	84 ^j	10 ^j	837	15
Japan	1 135 ^e	18 ^e	1 602	19	7 435	22	284 ^j	35 ^j	1 142	21
United States	413 ^e	6 ^e	604	7	3 586	11	65 ^j	8 ^j	709	13

/...

(Table II.1, cont'd)

Economy	Stock ^a						Inflows (annual average)			
	1980		1985		1993		1985-1987		1990-1993	
	Value	Share of total FDI	Value	Share of total FDI	Value	Share of total FDI	Value	Share of total FDI	Value	Share of total FDI
Thailand	981	100	2 221	100	13 918	100	259	100	2 050	100
European Union	156	16	350	16	1 484	11	24	9	210	10
Japan	285	29	622	28	4 579	33	100	39	602	29
United States	322	33	721	32	2 412	17	69	27	311	15
Philippines	1 225	100	2 589	100	4 389	100	121	100	329	100
European Union	114	9	349	14	748	17	15	12	71	22
Japan	206	17	362	14	890	20	12	10	111	34
United States	669	55	1 961	57	1 937	44	79	65	55	17
China	5 721 ^c	100 ^c	15 616 ^k	100 ^k	57 172	100	2 048	100	11 631	100
European Union	779 ^c	14 ^c	1 299 ^k	8 ^k	1 105	2	113	6	1 895	16
Japan	333 ^c	6 ^c	1 117 ^k	7 ^k	5 203	9	245	12	782	7
United States	966 ^c	17 ^c	2 463 ^k	16 ^k	5 237	9	312	15	830	7
Total above ^l	35 458	100	65 654	100	249 936	100	17 230	100	31 320	100
European Union	5 940	17	10 648	16	32 928	13	4 198	24	4 744	15
Japan	7 630	22	13 654	20	45 923	18	3 130	18	4 808	15
United States	5 469	15	12 947	19	31 136	13	4 328	25	3 101	10

Source: UNCTAD, Division on Transnational Corporations and Investment, FDI database.

^a Data for China, Hong Kong, Indonesia, Republic of Korea, Malaysia and Thailand are estimated on the basis of cumulated inflows. Data for China, Indonesia, Malaysia, Republic of Korea, Taiwan Province of China and Thailand are on an approval basis.

^b Inward stock (book value) and inflows in manufacturing only.

^c 1984.

^d 1990-91.

^e 1981.

^f 1986.

^g 1991.

^h Geographical breakdown of FDI inflows is available only up to 1989.

ⁱ Including Indonesia, Malaysia, Philippines and Thailand. Singapore is included in the newly industrializing economies.

^j 1987 only.

^k 1987.

^l Not including countries for which data are not available.

1. Asia and the Pacific

(a) Trends for South, East and South-East Asia and the Pacific

South, East and South-East Asia and the Pacific is the most important developing country region for FDI, accounting for nearly a half of the total developing country FDI stock (table II.3). In fact, the FDI stock in that region more than doubled between 1988 and 1993, an increase unrivalled by any other developing country region. Investment-flow figures show that the region is further building its lead: FDI flows to developing economies in South, East and South-East Asia and the Pacific reached an estimated \$59 billion in 1994, a considerable increase from \$32 billion in 1992 (annex table 1). Among other factors, this increase reflects the fact that South, East and South-East Asia continued to perform best among developing country regions in terms of GDP and export growth rates, as well as external indebtedness. The subregion's sustained economic growth and development, in fact, led to a doubling of its share in world FDI flows between the first half of the 1980s and the early 1990s, from 9 per cent to 19 per cent (table II.2). The agreement reached by the Asia-Pacific Economic Co-operation forum's Ministerial Meeting (11-12 November 1994) "to complete the achievement of our goal of free and open trade and investment in Asia Pacific no later than the year 2020" is another step towards improving the investment climate in South, East and South-East Asia.¹¹

Another trend in the region is the growth of intraregional FDI within South, East and South-East Asia, especially from the newly industrializing economies of the region. Indeed, the share of nine Asian economies (China, Hong Kong, Indonesia, Malaysia, Philippines, Republic of Korea, Singapore, Taiwan Province of China and Thailand) in the total inward FDI stock in those same nine economies increased from 25 per cent in 1980 to 37 per cent in 1993 (table II.3). The growing importance of FDI originating within Asia is particularly evident in the inward investment of China, Hong Kong, Indonesia, Philippines and Thailand (as well as lower-income economies such as Lao People's Democratic Republic, Myanmar and Viet Nam) (UNCTAD-DTCI, FDI database), but not in the newly industrializing economies, except Hong Kong. Intraregional FDI, moreover, appears to be increasing in importance for the region's home economies as well. For example, firms from the Republic of Korea had invested 11 per cent of its total outward FDI stock approved by 1987 in South, East and South-East Asia and the Pacific;¹² that share had increased to 48 per cent by 1993 (Bank of Korea, 1991 and Republic of Korea, Economic Cooperation Bureau, 1994). One-half of that country's approved outward FDI flows in 1993 (\$1.8 billion in total) and 41 per cent of that in the first half of 1994 (\$1.6 billion in total) went to South, East and South-East Asia, especially China, Indonesia and Viet Nam.¹³ In the case of Taiwan Province of China, the ASEAN countries accounted for 35 per cent of total Taiwanese FDI in 1992 (\$2 billion out of \$5.6 billion), a significant rise from 7 per cent in 1980 (\$2.9 million out of \$42 million) (Taiwan Province of China, 1995a).

Within these overall trends, countries performed unevenly with respect to FDI inflows in the early 1990s. The economies that did best in 1993 were China, especially, but also Indonesia and the Philippines, while Hong Kong and the Republic of Korea showed minor declines in FDI.

Some countries (Afghanistan, Bangladesh, Nepal and most of the Pacific economies) continued to attract little FDI, and others (Malaysia, Singapore) a remarkably large volume (annex table 1). Viet Nam, which was opened to FDI in the late 1980s, has become an attractive host country (box II.1). The Pacific continued to receive relatively little FDI, together accounting for only

Table II.2. FDI inflows and stock in developing countries, by region, 1981-1994

(Billions of dollars and percentage)

Region	Annual average inflows			Inflows		Stock	
	1981-1985	1986-1990	1991-1993	1993	1994 ^a	1993	1994 ^a
Developing countries ^b							
Value	19.6	26.2	56.3	73.4	84.4	500.9	583.6
Share of the world total	34.1	16.5	31.5	35.2	37.4	24.1	25.2
Africa							
Value	1.7	2.8	3.1	3.0	3.1	50.2	53.1
Share of the world total	3.0	1.8	1.7	1.4	1.4	2.4	2.3
Share of developing-country total	8.7	10.8	5.5	4.1	3.6	10.0	9.1
Latin America and the Caribbean							
Value	6.8	8.5	17.6	19.9	20.3	167.6	186.2
Share of the world total	11.9	5.3	9.8	9.5	9.0	8.1	8.0
Share of developing-country total	34.9	32.3	31.3	27.1	24.0	33.5	31.9
West Asia							
Value	6.0	0.9	1.4	1.3	1.4	33.1	34.5
Share of the world total	10.5	0.6	0.8	0.6	0.6	1.6	1.5
Share of developing-country total	30.7	3.5	2.5	1.8	1.7	6.6	5.9
East, South and South-East Asia							
Value	4.9	13.8	33.6	48.5	59.1	246.0	305.1
Share of the world total	8.5	8.7	18.8	23.3	26.2	11.8	13.2
Share of developing-country total	24.9	52.5	59.7	66.1	70.0	49.1	52.3
The Pacific							
Value	0.1	0.2	0.3	0.3	0.3	2.4	2.7
Share of the world total	0.2	0.1	0.2	0.1	0.1	0.1	0.1
Share of developing-country total	0.7	0.7	0.6	0.4	0.4	0.5	0.5
Memorandum:							
Least developed countries							
Value	0.3	0.6	0.9	0.8	0.9	9.7	10.6
Share of the world total	0.5	0.4	0.5	0.4	0.4	0.5	0.5
Share of developing-country total	1.3	2.2	1.5	1.1	1.0	1.9	1.8
Developing countries excluding China							
Value	18.8	23.4	42.0	45.8	50.6	443.7	492.6
Share of the world total	32.7	14.7	23.4	22.0	22.4	21.3	21.2
Share of developing-country total	95.9	89.1	74.5	62.5	60.0	88.6	84.4

Source: UNCTAD-DTCI, based on International Monetary Fund, balance-of-payments tape, retrieved in June 1995; data from UNCTAD-DTCI, FDI database; and the Organisation for Economic Co-operation and Development secretariat.

^a Estimates.

^b Includes developing countries in Europe (Gibraltar, Malta and former Yugoslavia).

Table II.3. Intraregional FDI stock among selected economies in South, East and South-East Asia, 1980 and 1993 ^a

(Millions of dollars and percentage)

Hostregion/economy		Home region/economy							
		Newly industrializing economies		ASEAN ^b		China		Total	
		1980	1993	1980	1993	1980	1993	1980	1993
Newly industrializing economies									
Hong Kong ^c	Value	43	134	46	94	..	565	89	793
	Share	2.9	2.6	3.1	1.8	..	10.8	6.1	15.1
Korea, Republic of ^d	Value	67	437	..	..	..	..	67	437
	Share	3.6	3.9	..	..	..	..	3.6	3.9
Singapore ^e	Value	845	2 743	650	2 554	..	..	1 495	5 297
	Share	13.6	7.1	10.5	6.6	..	..	24.1	13.7
Taiwan Province of China	Value	584	2 757	235	805	..	..	820	3 562
	Share	21.5	15.6	8.7	4.5	..	..	30.2	20.1
Subtotal	Value	1 539	6 072	931	3 453	..	565	2 471	10 090
	Share	12.6	8.3	7.6	4.7	..	0.8	20.2	13.9
ASEAN ^b									
Indonesia	Value	1 196	17 234	72	280	..	70	1 268	17 584
	Share	11.6	25.5	0.7	0.4	..	0.1	12.3	26.0
Malaysia ^d	Value	2 353	11 506	18	1 392	..	205	2 371	13 102
	Share	36.4	33.7	0.3	4.1	..	0.6	36.7	38.4
Philippines	Value	67	442	-	14 ^f	..	..	67	456
	Share	5.5	10.1	-	0.3 ^f	..	..	5.5	10.4
Thailand	Value	181	4 370	16	72	-	24	198	4 466
	Share	18.5	31.4	1.7	0.5	-	0.2	20.2	32.1
Subtotal	Value	3 797	33 551	106	1 765	..	299	3 904	35 607
	Share	20.0	28.0	0.6	1.5	..	0.3	20.6	29.7
China ^g	Value	2 989	45 161	26	391	..	..	3 015	45 552
	Share	52.3	79.0	0.5	0.7	..	..	52.7	79.7
Total above	Value	8 326	84 784	1 064	5 602	..	864	9 390	91 249
	Share	22.6	33.9	2.9	2.2	..	0.3	25.4	36.5

Source: UNCTAD-DTCI, based on UNCTC, 1992b; and official national sources.

^a Data relate to FDI stocks or cumulative FDI flows. Percentages in the table indicate the share of the subregion/ country in total inward FDI in each of the economies. Data for China, Indonesia, Malaysia, Republic of Korea, Taiwan Province of China and Thailand are on an approval basis.

^b Including Indonesia, Malaysia, Philippines and Thailand. Singapore is included in the newly industrializing economies.

^c Only manufacturing. Data are as at end-1984 and end-1993.

^d Data under 1980 are for 1981.

^e Data under 1993 are for 1991.

^f Only Malaysia.

^g Data under 1980 are for 1984.

5 per cent of the region's FDI flows during 1991-1993. This picture reflects not only differing stages of economic development of the countries in the region -- ranging in annual per capita income from \$19,700 (Singapore) to \$145 (Nepal) in 1993¹⁴ and with differing rates of economic growth -- but also some underlying factors peculiar to this period, especially the slow growth of major industrial countries (especially Japan in 1992 and 1993), and increasing competition for FDI among countries of the region, including countries newly opened to FDI.

(b) China and competition for foreign direct investment

China has been particularly successful in attracting FDI, accounting for over three-quarters of the increase in flows into the region during 1991-1994. With an inflow of \$34 billion in 1994 -- more than three times as much as that during 1992 -- China has become the second largest recipient of FDI in the world since 1993. In addition, China ranked as one of the largest outward investors among developing countries in the 1990s (box II.2). However, for both inward and especially outward FDI, several factors call for careful interpretation of the FDI

Box II.1. Viet Nam: reforms result in a surge of FDI

Viet Nam has emerged as one of the most promising host countries for FDI in South-East Asia. By July 1995, foreign investors had pledged to invest \$16.2 billion.^a The surge in FDI was initiated by the economic reform process, the "doi moi". In its wake, a favourable legal and regulatory framework for foreign investors has emerged through liberalization. The Government has adopted legislation on FDI protection together with legislation allowing foreign investors to acquire real estate in their own right.^b To further promote high priority investment, incentives, such as tax holidays, have been adopted.

The major attraction of Viet Nam for foreign investors is its fast growing domestic market, expected to grow at an annual rate of 7 per cent until 2005 (EIU, 1995). For 1995, growth is predicted at 19 per cent (EIU, 1994, p. 9). Given the country's population of 70 million and current trends in economic growth rates, Viet Nam holds the potential to become one of the region's major markets. Viet Nam's endowment in natural resources, including oil and minerals, further added to the interest of foreign investors. Viet Nam also has a favourable human resource base. The work force is relatively skilled, and the cost of labour is among the lowest in the world.

Asian firms have been the most prominent investors, with firms from Taiwan Province of China and Hong Kong leading the way (see accompanying table). Japanese firms are rapidly moving in and are expected to increase drastically their presence over the coming years. In fact, in the first half of 1995, Japan was the largest home country with approved investment worth \$754 million.^c Manufacturers such as Sharp and Sony Corporation are either planning or have already started up assembly plants. According to a recent survey, Japanese investors rate Viet Nam the most attractive place to invest on a long-term perspective after China, and before countries such as Malaysia, Singapore and the United States (Tejima, 1995, p. 93).

The 1994 lifting of the United States embargo and the recent normalization of diplomatic relations between the two countries has not yet fully exerted a positive effect on investors from that

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(Box II.1, cont'd)

country. By July 1995, 42 United States projects had been licensed, representing a total contract commitment of \$700 million (see accompanying table). The reluctance of United States investors to enter the market can be explained partly by the lack of most-favoured-nation status for Viet Nam and partly by worries about the strength of the legal infrastructure. Instead, the lifting of the embargo appears to have had an encouraging effect on Japanese investment activity.

Major European investors have also begun to move in. The biggest single foreign investment in 1994, a \$233 million cement plant, was made by the Swiss firm Holderbank Financière. In addition, car makers such as Renault and BMW have received licences to start production.

To enable the country to absorb the surging FDI flows, the Government has embarked on programmes to upgrade the country's infrastructure. In this regard, it also encourages foreign investors to invest in infrastructure related projects. As a result, over a third of all FDI so far has taken place in infrastructure related projects. Hotels, office buildings and industry parks are being built with foreign capital. With a booming tourist market and high commercial rents, real estate projects have become attractive investment projects.

Origin of foreign investors: ten largest home economies, 1988-1995^a

Economy	Number of projects licensed	Total invested capital (Million dollars)
Taiwan Province of China	215	3 131
Hong Kong	177	2 212
Japan	110	1 599
Singapore	105	1 445
Korea, Republic of	125	1 391
Australia	49	775
United States	42	701
Malaysia	41	666
France	66	619
Switzerland	14	494
Others	296	3 208
All countries	1 240	16 241

Source: State Committee for Cooperation and Investment.

^a As of July 1995.

Foreign investors have also been the key players behind Viet Nam's rapid growth in telecommunications. A few years ago there were no direct telephone links with the outside world -- today all major cities can communicate with all countries worldwide. OTC Australia is the major force behind this improvement, but Alcatel of France and the American firm AT&T as well as small firms from the Republic of Korea, Hong Kong, Malaysia and Singapore have also been involved (EIU, 1994, p. 25).

Source: Information provided by Centre Franco-Vietnamien de formation à la gestion.

^a Data provided by Viet Nam's State Committee for Cooperation and Investment.

^b Paul Gauntlett, "Doing Business is a costly affair", *Financial Times*, 8 December 1994.

^c Edward A. Gargan, "U.S. firms plunge into Vietnam", *International Herald Tribune*, 15-16 July 1995, p. 13.

Box II.2. China's leap outward

China was one of the largest outward investors among developing countries in the 1990s. By the end of 1994, over 900 Chinese TNCs had established over 4,600 foreign affiliates in 130 countries, with estimated accumulated FDI outflows ranging between \$5.2 billion^a and \$16 billion^b (see box). China's FDI outflows averaged \$2.4 billion annually during the period 1990-1994 (box figure 1).

The two major motivations for China's TNCs to invest abroad are access to foreign markets and a stable supply of resources. A few large conglomerates in technology-intensive industries such as aviation, astronautics and electronics have established foreign affiliates, but such advanced technology-seeking projects have been few in number. Trading has accounted for over 50 per cent of total FDI outflows. Although large in total value, the average size of Chinese foreign affiliates in trade and other services is small. Conversely, resource-seeking foreign affiliates (minerals and forestry in the Western Hemisphere and Australia and ocean fisheries in Africa and Latin America) are fewer in number but larger in scale, and accounted for approximately 30 per cent of total FDI outflows up to 1994. The manufacturing sector accounts for a relatively small share of total outward FDI (approximately 15 per cent), and this investment is directed mainly to Africa and Asia and the Pacific. Most Chinese FDI in manufacturing is motivated by the need to circumvent trade barriers. There is little incentive for efficiency-seeking outward investment since China itself has an ample supply of low-cost, productive labour and inexpensive land. North America accounted for the largest regional share of China's outward FDI (32 per cent) in the non-trade sector (box figure 2).

Hong Kong has absorbed a significant portion of China's total outflows. It has been used by some Chinese TNCs as a springboard for furthering their transnationalization objectives. For example, Fujian Enterprise (Holdings) Ltd. and Guangdong Enterprise (Holdings) Ltd.,

China's FDI data

The two main sources of data on China's outward FDI are the IMF and Ministry of Foreign Trade and Economic Cooperation (MOFTEC), which is responsible for the administration of outward FDI. The data collection and estimation methods of these two institutions give rise to large discrepancies in the outward FDI values reported (see the accompanying table).

Comparison of MOFTEC and IMF/SAFE estimates on Chinese outward FDI, 1992-1994

(Millions of dollars)

Collecting agency	1992	1993	1994
MOFTEC	220	120	81
IMF/SAFE	4 000	4 400	2 000 ^a

The IMF FDI estimates for China are based upon sample data collected by the State Administration of Foreign Exchange Control (SAFE) from its bureaus located in various provinces. The main advantage of the IMF/SAFE data is that they represent actual capital movements, and cover equity capital, reinvested earnings, and other direct investment, such as intercompany loans. The main weaknesses of these estimates are that they are based on a fairly limited sample and that they do not provide a breakdown either sectorally or geographically.

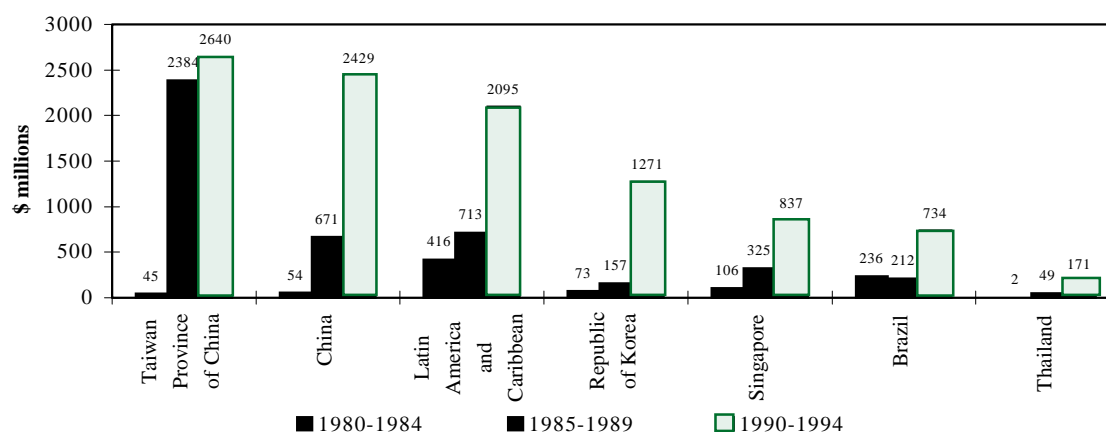
MOFTEC data are based upon approval figures for initial investments rather than actual outflows. In addition, MOFTEC does not screen all outward FDI. Specifically, reinvested earnings, FDI by foreign affiliates in third countries, intercompany loans, FDI by privately-owned Chinese TNCs, foreign affiliates located in China, and FDI in financial services (which is screened by the People's Bank of China) are not included in MOFTEC's screening process. In addition, numerous small investment projects have simply escaped the screening process. As such, the MOFTEC data significantly underestimate outward FDI in so far as they exclude several important sources of outward investment.

Source: Zhan, 1995.

^a IMF/SAFE unpublished data.

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(Box II.2, cont'd)

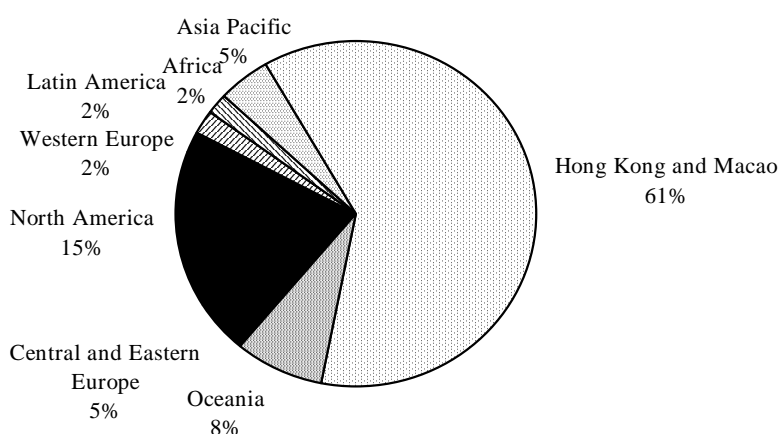
Box figure 1. Annual average FDI outflows from selected developing countries and regions, 1980-1994

Source: UNCTAD, Division on Transnational Corporations and Investment, FDI database.

have established foreign affiliates in other countries from their Hong Kong foreign affiliates. The attractiveness for Chinese TNCs of using regional headquarters in Hong Kong for outward FDI relates to its geographical and cultural proximity to China and the much lower levels of administrative control exercised by the Government of China with respect to Chinese companies operating in Hong Kong.

Hong Kong-based Chinese TNCs that belong to ministries of the Government of China or provincial and municipal authorities also constitute an important Chinese investment presence in Hong Kong. For example, China Merchants Ltd. (involved in transportation, ship-building and repairing, hotels, manufacturing and infrastructure investments, retailing, banking and insurance) is owned by the Ministry of Communication, China Resources, one of China's largest services companies, is owned by the Ministry of Foreign Trade and Economic Cooperation (MOFTEC) and the Bank of China Hong Kong (owned by the Bank of China) is the second largest bank in Hong Kong.

Since the beginning of the 1990s, Chinese TNCs have sought to raise foreign capital by listing their shares on the Hong Kong stock exchange

Box figure 2. Geographical distribution of China's outward FDI, 1979-1993

Source: Xing, 1994.

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data (box II.3). Excluding flows into China, the region enjoyed only a marginal increase of \$300 million in FDI inflows, to obtain \$21 billion in 1993, an amount, however, still somewhat larger than that attracted by Latin America and the Caribbean that year. During the first eight months of 1995, China further improved its performance, receiving \$22 billion in FDI, an increase of 10 per cent over the same period in 1994; during the first five months, however, approval figures declined by 26 per cent,¹⁵ perhaps foreshadowing a decline of FDI flows further on in 1995.¹⁶ Given the size of its economy and its rapid growth and natural and human resource endowments, the country will most likely continue to maintain its position as one of the largest FDI host countries in the world.

China's "open-door" policy and attractiveness to foreign investors has, of course, intensified competition for FDI in Asia, with possible implications for FDI flows to other host countries in the region. In the aggregate, FDI flows into developing economies of South, East and South-East Asia excluding China grew fairly substantially during the early 1990s as compared with the late 1980s (figure II.2). However, the levels of FDI flows to China and their growth rate during 1992-1993 were substantially higher than those to any other country in the region, while a number of countries of the region experienced a decline of inflows. Liberalization measures implemented or introduced in 1993 and 1994 in countries such as Indonesia and Thailand may have been partly a response to the apprehension that some of the new investments might have been made in other parts of Asia.¹⁷ However, the scope for investors to substitute actual or potential FDI in one host country by FDI in another country depends largely on the type of FDI as well as the sector or industry concerned (assuming, of course, that all countries permit such investment). The following factors need to be considered in this connection:

- *Market-seeking FDI.* A significant portion of FDI in South, East and South-East Asia is of the market-seeking type that is unlikely to shift as long as there are profitable opportunities for production in a host country's market. The sheer size and income

(Box II.2, cont'd)

and through the use of various debt instruments. Since many Chinese state-owned enterprises cannot meet the listing requirements of the Hong Kong exchange, especially international accounting and reporting standards, some of them have either acquired companies that are already listed in the exchange, acquired non-listed companies that satisfy the listing requirements and subsequently listed these, or have established holding companies in Hong Kong that meet the requirements. Some of these funds have been used to support FDI projects in China, highlighting a direct link between outward and inward FDI. Outward FDI, in these cases, has been a means for Chinese TNCs to overcome domestic capital scarcity.

Source: Zhan, 1995.

^a MOFTEC, *Almanac of China's Foreign Trade and Economic Cooperation*, various years (Beijing: MOFTEC).

^b IMF, balance-of-payments tape, retrieved in June 1995.

Box II.3. Round-tripping and over-valuation in Chinese FDI

Chinese policy-makers have recently implemented measures that will serve to reduce two problems related to inward and outward FDI data in the 1990s: over-valuation and round-tripping.

* * *

In general, about 70 per cent of FDI inflows into China are "in kind", that is, equipment and technology; translating the amount of these investments into cash tends to overvalue the amount of FDI. Over-valuation relates to discrepancies in the face value and the real value of assets that TNCs actually bring in to their Chinese affiliates. The motives behind over-valuation include a larger share of dividends *vis-à-vis* local partners; lower taxes arising from larger capital expenditures and depreciation credits; and more management control, reflecting the higher equity share of foreign investors *vis-à-vis* their local partners.

In 1994, the State Administration for Import and Export Inspection (SAIEI) investigated 5,570 FDI projects. These investigations revealed that the actual value of equipment in foreign affiliates was \$1.8 billion, about 19 per cent lower than the \$2.23 billion that had been contractually committed to.

Over-valuation reduces the potential contribution of FDI to the development of the Chinese economy. It lowers tax revenues for the Government as well as the share of revenues accruing to the local partners in joint ventures with TNCs. SAIEI began to investigate suspected cases of over-valuation in 1991. When the problem continued to persist, the Government stepped up its efforts to discourage over-valuation. SAIEI and the Ministry of Finance jointly promulgated the "Administrative Procedures for Appraising Foreign Invested Property" in early 1994 and began to monitor more closely the fulfillment of contractual commitments with respect to the actual value and quality of equipment in FDI projects. Although less than 10 per cent of in kind FDI projects were inspected in 1994, the greater attention paid to this issue by the Government is likely to reduce the incidence of over-valuation.

* * *

Round-tripping involves the circular flow of capital out of China (in most cases to foreign affiliates of Chinese TNCs) and the subsequent "re-investment" of this "foreign" capital in China for the purpose of benefiting from fiscal entitlements accorded to foreign investors. Round-tripping is therefore a form of "system escape" (see box VII.15), whereby Chinese investors avoid the regulatory regime governing domestic investment by channelling capital through foreign affiliates and thereby bringing this capital under the more favourable regime governing foreign investment. One estimate suggested that round-tripping inward FDI accounted for 25 per cent of China's FDI inflows in 1992 (Harrold and Lall, 1993, p. 24).

Round-tripping gives rise to an inefficient use of scarce resources by Chinese TNCs. It retards the commitment of domestically generated capital to productive uses, requires expenditures on the international networks through which round-tripping capital flows, and diverts the attention of Chinese managers away from "real" competitiveness enhancing initiatives. Policy reform aimed at equalizing the treatment of domestic and foreign capital has substantially reduced the incentive for round-tripping, in particular the ongoing reduction of tax incentives for FDI and, more generally, the gradual movement towards a national treatment-based regulatory regime governing investment. Furthermore, provinces and cities are no longer allowed to provide their own incentives

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growth of many countries in South, East and South-East Asia have started to generate a consumption boom for goods and services. This points to a large market-oriented FDI potential that is not restricted to the newly industrializing economies alone. In India, for example, the potential for market-oriented FDI is enormous, especially as the effects of FDI liberalization are taking hold: FDI approvals rose dramatically from \$165 million in 1990/1991 to \$4 billion in 1993/1994, although actual inflows are still under \$1 billion a year (box II.4).¹⁸ Also, large-scale infrastructure-related FDI has been picking up in response to liberalization in such industries as power and telecommunications. Malaysia and Thailand have reached income levels at which it has become profitable to establish automobile manufacturing facilities for domestic (and foreign) markets.¹⁹ Indeed, recent data on FDI approvals suggest that considerable increases in FDI flows to ASEAN countries may be in the offing: in the case of Indonesia and Thailand, FDI approvals grew by 186 per cent and 190 per cent, respectively, in 1994; in the Philippines, FDI approved by the Board of Investment increased by 329 per cent in 1994; and in Malaysia, FDI approvals were expected to double in 1994.²⁰ There may, of course, eventually be significant discrepancies between approved and actually realized FDI, but these data suggest that TNCs are in a buoyant mood regarding the ASEAN subregion.

Furthermore, the services sector is attracting more and more FDI flows, especially in the newly industrializing economies.²¹ Given the non-tradability of most services, markets can only be reached by FDI which, therefore, is difficult to divert. For example, in the Republic of Korea, the share of the services sector in total inward approved FDI stock was 37 per cent in 1994, compared with about one-quarter in 1981; in Taiwan Province

(Box II.3, cont'd)

or preferential treatment to foreign investors. That round-tripping has become less common is suggested by the fact that FDI inflows increased from \$28 billion in 1993 to \$34 billion in 1994, while FDI outflows decreased from \$4.4 billion in 1993 to \$2 billion in 1994.^a

* * *

Over-valuation and round-tripping are examples of how weak or distorting regulatory regimes governing FDI can give rise to efficiency losses and a sub-optimal contribution of FDI to the development process. They also highlight factors that have served to distort data on FDI flows in and out of China, as well as FDI data for countries used as round-tripping "bases". The policy response by the Government will likely lead to a reduction of both overvaluation and round-tripping; as a result, future Chinese FDI flows, as well as aggregated developing country flows for the Asia and Pacific region, need to be interpreted with caution because changes resulting from more realistic estimates will make comparisons with earlier periods and the identification of the "real" trend during the 1990s more difficult.

Source: Zhan, 1995.

a UNCTAD-DTCI, FDI database.

Box II.4. The experience of India: infrastructure paves the way for FDI

The Government of India initiated a dramatic liberalization of the regulatory regime governing inward FDI in 1991 with the implementation of the new economic policy. The initial reforms included the abolition of the mandatory industrial licensing system, the opening of areas in which foreign participation was previously excluded, and the establishment of the Foreign Investment Promotion Board (FIPB), whose mandate is to streamline the approval process for inward FDI. Since 1991, a series of more specific liberalization measures have pushed the liberalization process even further as presented in the accompanying table.

Evolution of India's regulatory environment for inward FDI, 1991-1995

Year	Description of measures adopted / industries liberalized
1991	<ul style="list-style-type: none"> o Abolishment of the mandatory licensing system. o Opening of areas previously closed to foreign investors, including power generation. o Establishment of the Foreign Investment Promotion Board.
1992	<ul style="list-style-type: none"> o Movement to partial convertibility of the rupee (current account). o Adoption of Export Import Policy, involving a phased-in reduction of both tariffs and quotas.
1993	<ul style="list-style-type: none"> o Full ownership allowed in certain industries previously closed to or restricted for foreign investors. o Adoption of the national treatment principle. o Financial industry partially opened to FDI. o Rupee becomes fully convertible (current account).
1994	<ul style="list-style-type: none"> o Telecommunications industry opened to FDI. o Mining industry opened to FDI.
1995	<ul style="list-style-type: none"> o Cable television networks opened to FDI.

Source: UNCTAD, Division on Transnational Corporations and Investment, based on various Indian Government publications.

These reforms have generated increased investor confidence. Realized annual FDI flows increased from \$155 million in 1991 to \$947 million in 1994. Actual FDI in the first four months of 1995 amounted to \$708 million. The reforms have also had the effect of shaping the sectoral distribution of inward FDI. Between 1991 and January 1995, 33 per cent of approvals were for infrastructural FDI projects (including oil, power, transport, and hotels/tourism), 27 per cent were in manufacturing (including food, electronics, chemicals and machinery), and 13 per cent were in metals (India, Ministry of Industry, 1995). The bulk of FDI is, therefore, in activities considered as priorities by the Government.

Detracting from these developments, the liberalization of India's regulatory regime for inward FDI has not been without problems. One of these is related to the decentralized nature of the regulatory environment for FDI. This issue became manifest when the incumbent administration in Maharashtra was defeated in state elections in March 1995 by a coalition which fulfilled its promise to cancel at least part of the \$920 million (phase 1) Dabhol power project undertaken by Enron Development Corporation of the United States in August 1995 (in September 1995 the State Government announced its willingness to renegotiate the project). The contractual terms for some other "fast track" power projects have also been renegotiated. CMS Energy (United States) had to re-open negotiations on two other power projects, worth a combined \$500 million.^a These projects

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(Box II.4, cont'd)

have come to be regarded by some observers as test cases of the Government's ability to maintain the momentum of the liberalization process.

While these incidents could have a negative impact upon investor confidence, they appear to represent project-specific problems rather than a reversal of the Government's commitment to liberalization. Indeed, state governments have supported the economic reform policy and have undertaken investment promotion missions abroad. Furthermore, the Government has continued to liberalize policies related to inward FDI, with special focus on incentive packages for the infrastructure sector. For example, both basic and value-added services in the telecommunications industry have been thrown open to FDI and several major international telecommunications companies have entered the Indian market (including Nynex, AT&T, Telstra and Sinawatra). The importance of FDI in this industry is underscored by the fact that investment requirements up to the year 2000 are expected to be in excess of \$40 billion.

While FDI in infrastructure is of great importance for India's development effort, eventually FDI in consumer products can be expected to play a more important role. Expenditures on consumer goods have increased dramatically (13 per cent annual growth between 1981 and 1991), and their composition has been changing. A growing proportion of expenditures has been on durables such as consumer electronics (30 per cent annual growth), automotive and other transport equipment (15 per cent annual growth), and household appliances (15 to 30 per cent annual growth). By the turn of the century, it is estimated that India's middle class will include over 9.4 million households earning \$9,000 per annum.^b Recently announced FDI projects aimed at meeting growing consumer demand include the signing of a joint venture between Ford and Mahindra & Mahindra (one of the world's largest tractor manufacturers) in 1994.^c Indian automotive production is forecast to double to 624,000 units by the year 2000, with Daewoo, Mercedes, Volkswagen, General Motors, Fiat, Peugeot, Ford, and Honda all planning investments.^d

Several other recent policy reforms could accelerate FDI flows in consumer product industries. First, the reforms of India's intellectual property legislation and the country's accession to the WTO intellectual property agreement will boost investor confidence, especially in industries where brand name recognition and the ability to protect intellectual property rights play an important role in determining corporate performance. The partial liberalization of the financial services sector, which will allow foreign investment in consumer oriented credit facilities, will also make India a more attractive host country for TNCs that produce consumer products. For example, following the 1993 reforms of the financial sector, GE Capital, a subsidiary of General Electric Company, entered into a joint venture arrangement with the Housing Development Finance Corporation to establish a consumer finance unit. The availability of consumer credit represents an important factor in allowing the consumer market to expand into more expensive consumer durables such as large household appliances and automobiles.

India's potential as a host country for FDI has long been recognized. The 1991 reforms have begun to turn this potential into realized FDI. Recent problems encountered by foreign investors appear to be more reflective of isolated backlashes against rapid liberalization than of a return to

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of China, the share of services in FDI stock increased from 21 per cent in 1980 to 32 per cent in 1993 (Republic of Korea, Ministry of Finance and Economy, 1995; Taiwan Province of China, Investment Commission, 1995b).

- *Natural resource-seeking FDI.* Natural-resource-seeking FDI, another important portion of FDI in several countries of the region, is also largely location-specific. In addition to such FDI in established resource-abundant host countries such as Indonesia, Malaysia, Papua New Guinea and the Philippines, new entrants such as Viet Nam and Myanmar have begun to attract FDI in the primary sector, and this can be expected to grow.
- *Export-oriented manufacturing FDI.* The situation differs, however, with respect to FDI in export-oriented manufacturing based on cost considerations. To the extent that locational advantages -- especially regarding labour costs -- differ or change, this can have an impact on such FDI, and can work to the advantage of China (and, for that matter, other low-cost countries in the region). Indeed, it appears that TNC activities are gradually being restructured in Asia, with export-oriented labour-intensive manufacturing activity gradually shifting from the more advanced of the developing countries in the region to the less advanced ones (see also chapter V). For example, in the Republic of Korea, average annual FDI inflows into the textile and clothing industries declined from \$16 million during 1989-1992 to \$5 million during 1993-1994 on an approval basis. Counterbalancing that, a number of Asian countries are increasingly attracting FDI in capital-intensive industries. For example, average annual flows to the chemical industry in the Republic of Korea increased from \$24 million during the period 1982-1986 to \$189 million during 1987-1991, maintaining further almost the same level during 1992-1994 (Republic of Korea, Ministry of Finance and Economy, 1995). Investment policies of countries in the region also reflect a recognition of this shift in locational advantages; countries such as Malaysia and Singapore are becoming more selective with respect to the kind of FDI they seek to attract, now putting an increased focus on its technological content.

(Box II.4, cont'd)

protectionist policies. To the extent that the Government has announced plans to further liberalize the regulatory environment with a view to attracting more FDI, India, with the second largest population in the world, ranked as the sixth largest economy in 1992 using purchasing power parities, and projected to become the fourth largest economy by the year 2020,^f stands to become one of the world's leading host economies for FDI.

Source: UNCTAD, Division on Transnational Corporations and Investment.

^a Frank Gray, "More troubles for U.S. investors in Indian power plant projects", *Financial Times*, 23 June 1995.

^b John Griffiths, "Car production set to double by year 2000", *International Herald Tribune*, 3 July 1995.

^c "Financial Times Survey: Maharashtra", *Financial Times*, 19 June 1995, p. 8.

^d Griffiths, *ibid.*; and Mark Nicholson, "Hinduja plans Indian car joint venture", *Financial Times*, 2 May 1995, p. 7.

^e "Survey: the global economy", *The Economist*, 1-7 October 1994, p. 4.

Mention needs to be made of a special factor in relation to China: about three-quarters of FDI inflows come from economies with predominantly ethnic Chinese populations, such as Hong Kong, Macao, Singapore and Taiwan Province of China, and there are substantial flows also from Chinese-family enterprises in Indonesia, Malaysia and Thailand. Firms from those economies may have certain advantages in investing in China, e.g., better knowledge of market conditions and, as a result, may have a special edge in attracting FDI from these economies compared to others lacking such links (Yu, 1994); such investment may not be forthcoming for other countries in the first place. But the advantage of ethnicity should not be overstated since individual FDI projects would not be undertaken unless they promised to be profitable *per se*; indeed, several major ethnic Chinese enterprises have decided not to invest in China for such commercial reasons.

To sum up, several types of FDI do not lend themselves easily to shifting between locations, and this is one important reason for expecting continued growth of FDI in Asian and Pacific countries other than China. To the extent that FDI has shifted, this is likely to have been relatively limited and, in most cases, accompanied by industrial upgrading. In any event, the amount of FDI available to a region is not a fixed quantity. The pattern of flows to the region suggests, moreover, that a process of adaptation is under way in response to the changing locational advantages and capabilities of countries for hosting FDI in different industries and activities.

(c) Foreign direct investment in West Asia²²

West Asia has attracted only small amounts of inward FDI (figure II.3), in spite of being a large region of about 205 million inhabitants with a combined GDP of \$630 billion in 1993.²³ These amounts are very unevenly distributed: in 1993, Egypt, Israel and Turkey accounted for about 72 per cent of total FDI inflows, and had a similar share in total outward FDI from the region. When amounts of FDI are adjusted to the size of the economy, the variance among countries is even larger: Oman, Israel and Turkey received, in 1993, \$8.6, \$8.5 and \$5.4 FDI, respectively, for each \$1,000 GDP, while in Islamic Republic of Iran, Iraq, Saudi Arabia and Syrian Arab Republic the corresponding figures were very small; \$1.5, \$0.03, \$0.7 and \$0.01, respectively.²⁴

i. Investment opportunities

Recent years have witnessed significant political changes in West Asia, in particular, the end of the war in Lebanon and the prospects for peaceful relations between Israel and all its neighbours. This is expected to facilitate economic growth, intraregional trade and FDI activity; particularly that geared to the region as a whole.

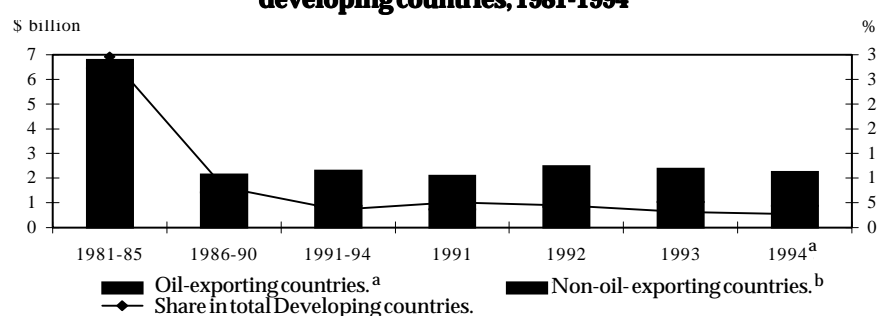
- Egypt is rich in several resources, such as fertile soil (and hence has a developed food-processing sector); cotton; and tourist attractions. In addition, it has a large supply of skilled professional and technical labour at competitive wages. Moreover, the Government

of Egypt has a long standing open-door policy to TNCs. Major opportunities for export-oriented investment (aided by various incentives (Brindle, 1995)) exist in the food, textile, furniture and oil-related industries. The climate for FDI in these industries is much improved since the Government encourages such investment, and demand is rising in neighbouring countries (EIU and UNIDO, 1994). In addition, Egypt has the potential to become a major pharmaceutical producer in West Asia, a market that is expected to be worth nearly \$5.6 billion in 1997 (EIU and UNIDO, 1994). Major opportunities for market-oriented FDI lie in the construction industry. A large number of infrastructure projects is currently planned, such as the expansion of water systems and sanitary drainage facilities, tourism facilities, ports and the Suez Canal. Egypt also has an ambitious programme for the development of Sinai, the North-Western Coast, Lake Nasser and the Red Sea; the limited technological capabilities of domestic firms require foreign participation in these projects (EIU and UNIDO, 1994).

- Several factors make Israel an attractive investment location, especially for export-oriented investment: it has an abundance of highly educated and skilled labour, available at relatively low cost; it has a surplus of scientists and engineers; it is the only country in the world that has free trade agreements with the European Union, the European Free Trade Association and the United States (and it is currently negotiating additional free trade agreements with Canada, Turkey and several countries in Central and Eastern Europe). In addition, the Israeli economy is booming. Economic growth has averaged about six per cent per annum over the past five years, making Israel one of the world's fastest growing economies (Album, 1995a). Domestic investment opportunities include the Government's overall infrastructure programme of more than \$6 billion, with many projects likely to be open to foreign investors (Lubetzky, 1994). Indeed, foreign investors are already attracted to Israel. For example, Intel conducts one-third of its global R&D activities in Israel, and a host of other large TNCs have, or are about to, set up business in Israel (including IBM, Siemens, Volkswagen, Accor and Cable & Wireless (Album, 1995a)).

- Jordan offers foreign investors political stability, well developed infrastructure, an efficient stock market (Amman has the most developed stock exchange in the region, with a market capitalization of \$3.8 billion in 1993

Figure II.3. FDI inflows to West Asia and the share of West Asia in developing countries, 1981-1994



Source: UNCTAD, Division on Transnational Corporations and Investment, based on International Monetary Fund, balance-of-payments tape, retrieved in June 1995.

^a Estimates.

^b Oil-exporting countries include: Bahrain, Islamic Republic of Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates; and non-oil-exporting countries include: Cyprus, Jordan, Syrian Arab Republic and Yemen.

(Wilson, 1994)) and an efficient banking sector (Album, 1995b). Indeed, the World Bank considers Jordan to be an emerging market, and several of the world's largest investment houses appear to agree (Album, 1995b). Its large pool of talented workers -- that, due to high unemployment, is available at costs that are very competitive even by West Asian standards -- suggests an additional attraction.

- Although Lebanon's economic leadership -- especially as a financial centre for the whole region -- was largely destroyed during the war, its locational advantages are likely to re-emerge. As an investment location, Lebanon is also abundant in highly educated people, who earn low wages by, e.g., European standards. It is currently negotiating a bilateral agreement that will give it favourable access to the European Union market, Lebanon, unlike Israel, is already an integral part of West Asia, thus offering easier access to the other Arab countries in the region. In addition to its traditional strength in financial and transit-trade services,²⁵ Lebanon also has certain advantages in other services, such as insurance, tourism and other trade-related services. Indeed, a few Japanese and United States' banks have recently established affiliates in Beirut, for the first time since the war disrupted Beirut's financial markets in the early 1980s, and Citibank has announced that it will reopen its Beirut office in 1995 (Martin, 1995a). Investors are being attracted because of prospects for high returns offered under Lebanon's long-term development plan, "Horizon 2000", which calls for a combined investment of \$60 billion to be made by both the public and private sectors between 1995 and 2007 (Martin, 1995b). While at present FDI inflows to Lebanon are quite small (a mere \$26 million in 1993 (annex table 1)), its future is promising.

But investment opportunities also exist in other countries (box II.5), and most countries in the region have in fact adapted special policies designed to encourage FDI inflows, particularly by liberalizing their FDI policy frameworks.²⁶ At the centre of these efforts are privatization programmes, pursued at different speeds in most countries in the region.²⁷ Another key ingredient in these policies is the establishment of export processing zones. Given the large potential of many countries in the region as export platforms, this approach may hold some promise.

ii. Prospects for enhancing investment cooperation in the region

The prospects for peace can be expected to encourage FDI in the region. Moreover, for a number of projects, cooperative approaches may be possible to attract both market-seeking investment and investors who desire to use these countries as export platforms. The following are examples:

- Regional economic integration, providing for freer trade and investment flows, could create a large market attractive to foreign investors. In the area of FDI, more modest arrangements would reduce barriers to inward and outward FDI among countries of the region, to encourage firms to take advantage of complementarities. For example, Israel and its neighbours could reduce inward and outward FDI barriers *vis-à-vis* each other,

creating, so to speak, a free investment area. Israel's access to the markets of most developed countries, relatively low labour costs and special customs arrangements such as a free investment area could encourage intraregional FDI flows as well as inflows from outside the region.

- Specific projects could be identified that, by their very nature, involve several countries, are capital intensive and are beneficial for all participants. One such project is the "Red Sea Riviera", linking Egypt, Israel and Jordan in a tourism triangle (Album, 1995a). Another area where several countries could collectively mobilize resources is in joint transport projects.

Box II.5. Investment opportunities in West Asia

The countries in West Asia vary significantly in respect of the investment opportunities they offer. This variance reflects differences in market size, availability of natural resources, economic structure, etc.. On the basis of the main factors determining countries' investment potential -- the size of the market and resource endowments (obviously, particularly important for the region) -- it is possible to divide the countries in the region into four broad groups, corresponding to the investment opportunities they offer:

- *Small oil economies.* Bahrain, Kuwait, Oman, Qatar and the United Arab Emirates. This group consists of countries with small populations and high income, very rich in natural resources (primarily oil). The factors that make them attractive for investment -- in spite of their small size -- include the following:
 - Availability of natural resources, primarily oil. In 1994, more than a half of OPEC's crude oil production was concentrated in these countries,^a and there are plenty of potential fields.^b Some of the countries in this group are also abundant in other natural resources, many of them ready for commercial exploitation by private investors.^c Oman, for instance, is very rich in a wide variety of industrial minerals and rocks.^d
 - They are relatively stable, both economically and politically, and they have a well developed infrastructure.
 - Their governments pursue liberal foreign trade and investment policies, allow foreign ownership and freedom to repatriate profits and fees and provide a range of investment incentives (Karshenas, 1994).

The creation of diversified non-oil economic sectors is the central goal of the economic policies of the Governments of these countries (Farzin, 1993). Transnational corporations can play a role, particularly through technological and managerial know-how.

- *Large oil economies.* Islamic Republic of Iran, Iraq and Saudi Arabia. Similar to the first group, more than 90 per cent of the exports of these countries consists of petroleum-based exports (World Bank, 1994), but unlike the first group, these countries have a more differentiated

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- Special attention needs to be given to furthering the prospects for closer cooperation between the Palestinian Territory, Israel and other countries in the region, e.g., by combining Palestinian labour and know-how with technology and capital from the region. (UNCTAD, 1994c). In this connection, particular attention could be given to the creation of industrial zones in the Palestinian Territory that utilize the advantages offered by the Israel and Palestinian common customs zone. (The Palestinian Territory has preferential access to the European Union and the United States, with the latter being in the process of examining whether complete duty free access should be offered.)
- Lebanon deserves special attention for two related reasons. First, it can provide a bridge between foreign investors and Arab countries in the region. (For instance, an international

(Box II.5, cont'd)

production structure. This is due to the larger size of their economies, more abundant agricultural land and labour resources, and a longer industrialization experience (Karshenas, 1994). These countries have received only small amounts of FDI, partly because of limited interest in such investment, and the resulting policies which restrict foreign ownership. For example, while the laws of most of the oil-exporting countries permit 100 per cent ownership of production facilities by foreign companies, in Islamic Republic of Iran majority local ownership is being required in new ventures. If policies change, the supply of cheap labour and natural resources and the large size of domestic markets should create a considerable potential for FDI.

- *Large non-oil economies:* Egypt, Syrian Arab Republic and Turkey. Petroleum accounts for a small share in the domestic production of this group and is used mainly for domestic consumption. These countries are characterized by a higher degree of diversification, both as regards the structure of production and foreign trade. Both Turkey and Egypt have attracted significant amounts of FDI: accumulated FDI stock had reached \$4.4 billion and \$12.7 billion, respectively, in 1994 (annex table 3). Until recently, most foreign investors were attracted to Turkey because of the size of its market and the protection offered to investors. Turkey is proceeding towards a customs union agreement with the European Union which, when concluded, would reduce trade barriers between Turkey and the European Union. As a result, Turkey provides foreign investors favourable access to the European Union market.
- *Small non-oil economies:* Cyprus, Israel, Jordan, Lebanon, Palestinian Territory and Yemen. These economies are characterized by small size and relative scarcity of natural resources. With the exception of Israel, FDI inflows to these countries have been very modest. While, in relative terms, Cyprus stands out as the largest host country in the Middle East (\$16.3 FDI per \$1,000 GNP in 1993), the absolute amount is very small.

^a M. Kielmas, "Does OPEC have a future?", *Middle East Economic Digest*, 20 January 1995, pp. 12-14.
^b "Iraq: rich pickings beckon from Baghdad", *Middle East Economic Digest*, 20 January 1995, pp. 14-15.
^c E. Blair, "Aluminium rides the price rise wave", *Middle East Economic Digest*, 3 March 1995, pp. 2-4.
^d "Oman makes the most of minerals", *Middle East Economic Digest*, 20 January 1995, pp. 36-37.

hotel chain has recently established itself in the country, with a view to creating further affiliates in the region.) Second, its locational advantages as a financial and business centre could turn Lebanon into a focal point for foreign investors seeking to serve the whole region. The reopening of the Beirut stock exchange is a major step in this direction (Martin, 1995a). A reconstruction programme, internationally supported, could turn Lebanon into a growth pole for the entire region.

- There may be considerable scope for expatriate investment in the region (Wilson, 1994). According to some estimates, for example, Syrian Arab Republic alone has about \$60 billion in expatriate holdings (Shahin, 1995). Other countries have a similar or even higher potential that could be tapped if the conditions for investment are improved.

As indicated, there is FDI potential in West Asia. Perhaps international and regional organizations, representatives of interested governments in the region and representatives of the international business community could establish a forum to discuss concrete opportunities for FDI, especially of a regional nature, and to examine the conditions under which they could be pursued successfully.

2. Latin America and the Caribbean

(a) Trends

By 1994, the FDI stock in Latin America and the Caribbean had reached \$186 billion, which makes this region the second most important one for TNCs in the developing world. Inflows exceeded \$19 billion in 1993, and \$20 billion in 1994 (table II.3).²⁸ The standstill with respect to regional inflows masks the divergent experiences of individual countries in the region, particularly, with respect to privatization-related inflows. Significant decreases in some countries, such as Argentina, have been offset by large increases in others, such as Peru. As such, FDI proved much more stable than other forms of private capital flows, which declined significantly in 1994 from their 1993 levels (ECLAC/UNCTAD, 1995a, p. 4). However, the distribution of FDI flows into Latin America remains highly concentrated in a handful of countries: Argentina, Brazil, Chile, Colombia, Mexico and Venezuela accounted for 71 per cent of the region's FDI inflows between 1988 and 1994. Argentina (\$6.3 billion) and Mexico (\$4.9 billion) were the principal recipients of FDI inflows in 1993 (table II.4). Flows to Chile more than doubled, (with FDI in mining and chemicals being the driving force). Flows to the Caribbean remained low, accounting for 4 per cent of flows to the region as a whole in 1993 and 3 per cent in 1994.²⁹

The financial crisis in Mexico at the turn of 1994 raised the question whether the precipitous decline in portfolio equity investment is likely to be paralleled by a similar drop in FDI flows to Mexico -- and perhaps to the region as a whole. Indeed, to the extent that the financial crisis has had an impact on the country's economic growth and stability, FDI flows directed to the weakened domestic market are likely to decline (box II.6). At the same time, the high degree of integration between the United States and Mexican economies at the level

of production has a stabilizing effect. Furthermore, the devaluation of the Mexican peso creates new opportunities for export-oriented investment and lowers the price foreign investors have to pay to acquire domestic assets (including assets that may be privatized). Transnational corporations based in North America may take this opportunity to deepen their regional production networks, while non-NAFTA-based TNCs may seek to gain better access to the NAFTA market. In some cases, FDI by non-NAFTA-based TNCs may also be motivated by the need to meet the tough NAFTA rules of origin in industries such as automobiles, consumer electronics, textiles and apparel and machinery. Indeed, during the first two months of 1995, authorized FDI inflows to Mexico were \$3.7 billion, a fourfold increase over authorized flows during the first two months of 1994 (Mexico, SECOFI, 1995, table 4). This reflects the longer term strategic considerations that underly the investment decisions of TNCs, as opposed to the short-term, and often speculative, factors that affect international portfolio capital movement. Provided that macroeconomic stability can be maintained, Mexico remains one of the most attractive FDI locations in the region.

Privatization programmes have played an important role in increasing FDI in the region. For the seven largest recipients of FDI, privatization-related flows accounted for 17 per cent of total FDI inflows during 1989-1993 (table I.6), despite some of these countries having had only very limited privatization programmes:

- Mexico and Chile have moved beyond the stage during which privatizations contribute significantly to FDI flows. In Chile, privatizations accounted for one-tenth of FDI inflows in 1989, but they fell to zero thereafter (table II.4). In Mexico, privatizations peaked in 1991, accounting for 17 per cent of total FDI inflows. During 1992-1993, privatizations accounted for less than 1 per cent of Mexican inward FDI.
- In Argentina and Peru, privatization programmes have accounted for the lion's share of recent FDI inflows (table II.4). In fact, they contributed significantly to Argentina becoming the region's single largest host country in 1993 in terms of inflows. Estimated privatization-related inflows to Peru in 1994 were almost six times the country's total inflows in 1993 (ECLAC/UNCTAD, 1995b, p. 9).
- Brazil has not yet implemented a consistent privatization programme; expectations are, however, that this will begin in 1995, with telecommunications having been opened by the middle of the year. If this should occur on a large scale, and is open to foreign investors, FDI inflows are likely to increase substantially. In 1994, Brazil owned 28 of the 50 largest Latin American public companies, ranked by sales (América Economía, 1995a, p. 54). By comparison, Mexico had privatized over \$20 billion of assets by the end of 1994 and Argentina \$16 billion, whereas Brazil had only privatized \$6 billion (ECLAC/UNCTAD, 1995c, table III.1), despite its much greater potential in this area.

Mainly as a result of privatization programmes, the number of foreign affiliates among the 500 largest companies in Latin America, ranked by sales, increased from 138 to 151 between 1990 and 1993 (with the number of state enterprises falling from 105 to 72). The share of

Table II.4. FDI flows into selected countries in Latin America and the Caribbean, 1988-1994^a

(Millions of dollars)

Country	1988	1989	1990	1991	1992	1993	1994 ^b	Annual average ^c
Mexico	2 879	3 174	2 632	4 762	4 933	4 901	4 432 ^d	3 959
Regular FDI	1 956	2 785	2 432	3 956	4 842	4 901	..	3 479
Debt conversions	868	389	85	19	-	-	..	227
Privatization	55	-	115	787	91	-	..	175
Argentina	1 147	1 028	1 836	2 439	4 179	6 305	1 200	2 591
Regular FDI	807	869	305	465	518	694	..	610
Debt conversions	340	159	886	20	1 512	2 984	..	984
Privatization	-	-	645	1 954	2 149	2 627	..	1 229
Brazil	2 969	1 267	901	972	1 580	802	2 241	1 533
Regular FDI	882	321	618	850	1 485	752	..	818
Debt conversions	2 087	946	283	68	95	50	..	588
Privatization	-	-	-	54	-	-	..	9
Chile	1 027	1 289	590	623	711	891	2 533 ^d	1 095
Regular FDI	..	67	235	663	743	941	..	530
Debt conversions	..	1 107	355	-40	-32	-50	..	268
Privatization	..	115	-	-	-	-	..	23
Colombia	203	576	500	574	790	950	1 504	728
Regular FDI	203	576	500	522	790	950	..	590
Debt conversions	-	-	-	-	-	-	..	-
Privatization	-	-	-	52	-	-	..	9
Venezuela	89	213	451	1 916	692	372	993	675
Regular FDI	39	30	148	159	608	347	..	222
Debt conversions	50	183	303	258	70	25	..	148
Privatization	-	-	-	1 499	14	-	..	252
Peru	26	59	41	-7	127	349	2 695	470
Regular FDI	26	59	41	-7	-13	60	695	123
Debt conversions	-	-	-	-	-	-	..	-
Privatization	-	-	-	-	140	289	2 000 ^e	347
Costa Rica	122	101	163	187	262	285	245	195
Regular FDI	116	..	..	184	..	..	..	150
Debt conversions	..	..	..	..	..	..	..	..
Privatization	6	..	..	3	..	..	..	5
Dominican Republic	106	110	133	145	180	183	169	147
Regular FDI	..	..	..	..	..	..	..	..
Debt conversions	..	..	..	..	..	..	..	..
Privatization	..	..	..	..	..	..	..	..
Trinidad and Tobago	63	149	109	169	178	379	242	184
Regular FDI	..	..	..	..	..	..	..	..
Debt conversions	..	..	..	..	..	..	..	..
Privatization	..	..	..	..	..	..	..	..
Jamaica	-12	57	138	133	142	78	118	93
Regular FDI
Debt conversions
Privatization

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foreign affiliates in the total sales of the 500 largest companies increased from 24 per cent to 29 per cent over the same period (table II.5). The principal economic significance of the growing number of foreign affiliates among the largest 500 lies in the access to markets and resources that they generate for the economies in which they are located. For example, of the \$4 billion increase of exports achieved by the 200 largest exporters in Latin America between

(Table II.4 cont'd)

Country	1988	1989	1990	1991	1992	1993	1994 ^b	Annual average ^c
Guatemala	330	76	48	91	94	149	111	128
Regular FDI	..	..	..	..	..	..	..	..
Debt conversions	..	..	..	..	..	..	..	..
Privatization	..	..	..	..	..	..	..	..
Paraguay	8	13	76	84	137	111	111	77
Regular FDI	..	..	..	..	..	..	..	..
Debt conversions	..	..	..	..	..	..	..	..
Privatization	..	..	..	..	..	..	..	..
Ecuador	80	80	82	85	95	115	98	91
Regular FDI	79	71	..	..	..	..	..	75
Debt conversions	1	9	..	..	..	..	..	5
Privatization	..	..	..	..	..	..	..	..
Honduras	48	51	44	52	48	35	45	46
Regular FDI	34	24	13	35	32	..	..	28
Debt conversions	8	..	24	16	..	..	..	16
Privatization	6	27	7	1	16	..	..	11
Bolivia	-10	-24	27	52	93	122	89	50
Regular FDI	-56	..	..	..	-130	..	..	-93
Debt conversions	46	..	..	..	..	..	..	46
Privatization	..	..	..	..	223	..	..	223
Total FDI for above countries	9 075	8 219	7 773	12 277	14 241	16 027	16 826	12 062
Average FDI per country	567	514	486	767	890	1 002	1 052	754

Source: UNCTAD, Division on Transnational Corporations and Investment, based on ECLAC/UNCTAD, 1995b; and UNCTAD-DTCI, FDI database.

^a Data on debt conversions and privatizations are sourced from national governments. However, due to differences in the calculation of these data, they are not strictly comparable across countries. In addition, major tax havens are not included in this table due to the particular characteristics of a large share of capital flows to these countries. For example, Bermuda, if included, would rank as the third largest FDI recipient in terms of annual average over the period 1988-1994, with \$1.8 billion.

^b Estimates. Projections by the national governments for Argentina, Brazil, Chile, Colombia, Mexico and Peru.

^c The annual averages for regular FDI, debt conversions and privatizations are calculated according to the number of years for which data are available, and therefore do not always add up to the annual averages for total FDI.

^d During the publication process of this report, the data for 1994 was significantly revised to \$7,978 million for Mexico and \$1,795 million for Chile by International Monetary Fund.

^e This figure represents FDI flows related to the privatization of the Peruvian telecommunications sector and, as such, underestimates privatization-related inflows (box II.8).

Box II.6. The response of TNCs to the Mexican peso crisis

The peso crisis began on 18 November 1994, when shaky investor confidence resulted in a \$1.7 billion one-day run on the peso.^a On 20 December, the Government devalued the peso by 13 per cent and implemented a series of measures to stabilize the Mexican economy, including the negotiation of a \$38 billion rescue package with the United States and the International Monetary Fund.

The opening of the Mexican economy in the 1980s, and subsequent commitments to further liberalization in the North American Free Trade Agreement, led to its rapid international integration at the level of production geared to the local markets. While the increased amounts of short term capital inflows that accompanied Mexico's liberalization constituted one of the underlying reasons for the crisis (with volatile mutual funds supplanting commercial banks and international institutions as principal sources of finance), the deeper integration of the economy at the level of production mitigated the adverse impact of the crisis. The automobile industry, which has been particularly active in developing regional production networks, is an example to show that deeper integration can stand such a devaluation crisis.

- The crisis dramatically reduced domestic demand, which in turn has caused TNCs to reduce production. For example, several automotive producers have either stopped or reduced production: Volkswagen initiated plant shutdowns for two weeks each month beginning April; Nissan shut down its operations for two weeks in April and all of May and June; and Ford shut down its production in June. The "Big Five"^b produced almost 70 per cent fewer vehicles for the domestic market in the first six months of 1995 than they did in 1994 (accompanying table).
- Conversely, production destined for international markets has benefitted from the crisis. The share of output of the Big Five destined for export markets increased from 55 per cent in the first six months of 1994 to 82 per cent in the same period in 1995 (accompanying table). More significantly, the absolute volume of output destined for export markets increased from 244,000 to 298,000 units over the same periods, an increase of 22 per cent.

In contrast with the crisis of 1981 (when international integration at the level of production was minimal and Mexico's external economic ties were largely limited to financial commitments), the crisis of 1994/95 will probably not have as adverse an impact upon the economy, partly because deeper levels of international integration at the level of production have allowed TNCs in Mexico first, to become internationally competitive, and second, to compensate for declining domestic sales through exports. For example, whereas automotive production declined by over 30 per cent between 1982 (at the outset of the debt crisis) and 1983, estimates for 1995 are for a decrease in production of only 10 per cent over 1994 levels.^c Thus, while the impact of the financial crisis on the economy, including the reduction in output and employment, should not be underestimated, FDI and TNC exports have probably helped minimize the cost of the crisis to the economy.

Furthermore, the combination of falling asset prices, increased competitiveness of Mexican exports resulting from the devaluation, and the return of relative stability to the Mexican economy could combine to increase FDI by export-oriented TNCs, including their suppliers. To the extent that TNCs continue to view Mexico as an attractive location for their foreign affiliates, the stability as a host country that integration at the level of production contributed during the crisis will be further enhanced.

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(Box II.6, cont'd)

Mexican automotive production by the "Big Five", January to June, 1994 and 1995^a
(Units of output and percentage)

Name of manufacturer	Destination of production	January-June 1994		January-June 1995		Percentage change in production, January-June 1994-1995
		Units	Share of total	Units	Share of total	
Chrysler	Cars produced for the domestic market	27 150	35	6 070	17	-78
	Cars produced for export	51 085	65	29 046	83	-43
	Total production	78 235	100	35 116	100	-55
Ford	Cars produced for the domestic market	19 390	21	5 226	5	-73
	Cars produced for export	70 849	79	110 493	95	56
	Total production	90 239	100	115 719	100	28
General Motors	Cars produced for the domestic market	25 224	34	10 671	15	-58
	Cars produced for export	50 018	66	59 536	85	19
	Total production	75 242	100	70 207	100	-7
Nissan	Cars produced for the domestic market	48 773	65	24 780	52	-49
	Cars produced for export	25 921	35	23 213	48	-10
	Total production	74 694	100	47 993	100	-36
Volkswagen	Cars produced for the domestic market	79 727	63	16 693	18	-79
	Cars produced for export	46 241	37	76 168	82	65
	Total production	125 968	100	92 861	100	-26
"Big Five" total	Cars produced for the domestic market	200 264	45	63 440	18	-68
	Cars produced for export	244 114	55	298 456	82	22
	Total production	444 378	100	361 896	100	-19

Source: Automotive News, 24 July 1995, p.9.

^a The "Big Five" includes Chrysler, Ford, General Motors, Nissan, and Volkswagen.

a David Wessel, Paul B. Carrol and Thomas P. Vogel Jr., "Picking up pieces", *Wall Street Journal*, 6 July 1995, p.1.

b Chrysler, Ford, General Motors, Nissan and Volkswagen.

c Charles Ramirez, "Mexico sales tumble 81.6 percent in June", *Automotive News*, 24 July 1995, p.9.

1991 and 1993, foreign affiliates contributed \$3 billion; foreign affiliates in Mexico alone produced more than a half of all exports by foreign affiliates among the top 200 exporters from the region in 1993 (table II.6).

Although privatizations are distinct events with an immediate and noticeable impact on FDI flows when foreign investors participate, the flows involved are not necessarily one-off occurrences (box II.7). In many cases, the contractual arrangements specify further capital commitments to be undertaken subsequent to the original purchase, sometimes stretching over years. Furthermore, to the extent that privatized firms are profitable, they will generate reinvested earnings, which over time can become substantial and account for a considerable proportion of inflows. At the same time privatizations can also be followed by disincentives. In other words, the impact of privatization can extend far beyond the initial transaction.

Table II.5. The importance of foreign affiliates in the 500 largest companies in Latin America, by sales, 1990 and 1993

(Billions of dollars and percentage)

Country	1990			1993		
	Foreign affiliates	Total in list of 500	Foreign affiliates' share in the largest 500	Foreign affiliates	Total in list of 500	Foreign affiliates' share in the largest 500
Argentina						
Number of companies	16	49	3.2	28	76	5.6
Value of sales	8	27	2.5	21	44	5.1
Brazil						
Number of companies	85	291	17.0	70	242	14.0
Value of sales	49	151	15.1	59	172	14.3
Chile						
Number of companies	5	21	1.0	10	31	2.0
Value of sales	1	13	0.3	3	17	0.7
Colombia						
Number of companies	7	23	1.4	7	26	1.4
Value of sales	2	7	0.6	2	12	0.5
Mexico						
Number of companies	21	75	4.2	32	96	6.4
Value of sales	17	87	5.2	31	128	7.5
Venezuela						
Number of companies	3	24	0.6	3	18	0.6
Value of sales	1	34	0.3	1	32	0.2
Other countries						
Number of companies	1	17	0.2	1	11	0.2
Value of sales	1	8	0.3	2	8	0.3
Latin America						
Number of companies	138	500	27.6	151	500	30.2
Value of sales	78	325	24.0	120	413	29.1

Source: ECLAC/UNCTAD Joint Unit on Transnational Corporations, based on América Economía, 1995a and 1995b.

(b) Extending NAFTA: foreign direct investment integration in the Americas?

Well before the creation of NAFTA, foreign affiliates in Mexico had begun a fundamental restructuring process, which was accompanied by substantially increased FDI flows from the United States and Canada to Mexico. Between 1989 and 1994, United States FDI stocks in Mexico increased by 125 per cent, from \$8.3 billion to \$16.4 billion, while Canadian FDI flows increased fivefold over the same period.³⁰ This increase involved not only existing affiliates but also new entrants; in fact, a half of the foreign firms that operated in Mexico by 1994 had arrived since 1989 (ECLAC/UNCTAD, 1995b, p. 28). At the same time, Mexican FDI stocks in the United States reached \$1.2 billion by 1993, and almost doubled to \$2.2 billion in 1994.

Table II.6. The importance of foreign affiliates in the 200 largest companies in Latin America, by exports, 1991 and 1993

(Billions of dollars and percentage)

Country	1991			1993		
	Foreign affiliates	Total in list of 200	Foreign affiliates' share in the largest 200	Foreign affiliates	Total in list of 200	Foreign affiliates' share in the largest 200
Argentina						
Number of companies	7	30	3.5	5	28	2.5
Value of exports	1	5	1.5	1	5	1.4
Brazil						
Number of companies	37	95	18.5	30	92	15.0
Value of exports	5	15	7.6	5	18	7.0
Chile						
Number of companies	4	10	2.0	7	13	3.5
Value of exports	1	5	1.5	1	5	1.4
Colombia						
Number of companies	5	10	2.5	4	11	2.0
Value of exports	1	3	1.5	1	3	1.4
Mexico						
Number of companies	12	43	6.0	12	37	6.0
Value of exports	7	21	10.6	10	23	14.3
Venezuela						
Number of companies	-	3	-	-	3	-
Value of exports	-	13	-	-	13	-
Other countries						
Number of companies	-	9	-	2	16	1.0
Value of exports	-	4	-	1	3	1.4
Latin America						
Number of companies	65	200	32.5	60	200	30.0
Value of exports	16	66	24.2	19	70	27.1

Source: ECLAC/UNCTAD Joint Unit on Transnational Corporations, based on América Economía, 1995a and 1995b.

Box II.7. Post-privatization FDI in Latin America

Investment subsequent to the original purchase of a state enterprise by a foreign investor is often sizeable. Although systematic data on post-privatization investment are not available, information on firm-level experiences with post-privatization investment highlights the significance of these flows. As the accompanying table and the three cases on privatizations in the telecommunications industry indicate, post-privatization commitments are not always formalized but sometimes implicit in specific performance targets.

Examples of post-privatization investment commitments in Latin America
(Millions of dollars and percentage)

Country	Year	Company privatized	Foreign investor	Initial commitment (A)	Total additional commitments ^a (B)	Index (B)/(A) (Percentage)
Mexico	1992	Siderugica del Balsas, S.A. de C.V.	..	25	195 ^b	780
Mexico	1990	Telefonos de Mexico	Southwestern Bell (United States)	500	500	100
Peru	1994	CPT and Entel Peru	France Telecom (France)	2 000	1 000-1 200	50-60
Peru	1993	Cerro Verde	Telefonica de España (Spain)			
			Cyprus Climax Corp. (United States)	37	485	1 312
Peru	1992	Hierro Peru	Shougang Corporation (China)	120	150	125
Peru	1992	Quellaveco	Mantos Blancos (the Chilean subsidiary of Anglo-American Corp. of South Africa)	12	560	4 667
Venezuela	1992	Companiade Telefonos de Venezuela	GTE, AT&T (United States)	1 900 ^c	1 200 ^c	63 ^c
			Telefonica de España (Spain)			

Source: UNCTAD-DTCI, based on Sader (1994), Edward E. Whitacre, Jr., "Keys to success: privatization in the telecommunications industry", *Latin Finance: Privatization in Latin America, 1994*, Supplement, March 1994, pp. 20-23; Aurelio Garcia-Miro and Steven Murphey, "Telefonica's Peruvian connection," *Business Latin America*, 14 March 1994, pp. 1-2; "From monopoly to competition in Venezuelan telecommunications", *Latin Finance Supplement 1993*, pp. 21-23.

^a Represents equity investment.

^b Represents a commitment to take responsibility for previously incurred debt obligations.

^c Including domestic investors.

In 1990, the Government of Mexico sold a controlling interest in Telefonos de Mexico (Telmex), Mexico's national telecommunications company, to a consortium involving Southwestern Bell (based in Texas), France Telecom and Grupo Carso (a domestically-based consortium). Southwestern Bell's original investment was approximately \$500 million. In 1991, less than one year after the original investment, Southwestern Bell doubled its original investment to almost \$1 billion for a 10 per cent equity stake in Telmex. More generally, the post-privatization investment programme for Telmex amounted to one of the most ambitious in telecommunications history. Following privatization, the number of access lines was increased by 42 per cent and has been projected to increase by 10 per cent per annum. Furthermore, investment plans as of 1994 were for the complete replacement of analog lines with a digital network by the end of the decade. In the case of Telmex, the Government has actively sought to encourage post-privatization investment by foreign participants by providing a favourable regulatory regime and specific tax incentives.^a

/...

(Box II.7, cont'd)

Peru has had one of the most active privatization programmes of any Latin American country during the Presidency of Alberto Fujimori since 1990. Estimates for 1994 indicate that at least 70 per cent of FDI flows were accounted for by privatizations (table II.4). The largest privatization scheme in Peru (and one of the largest for Latin America) involved the sale of 35 per cent governing stakes in Compañía Peruana de Telefonos (CPT) and Entel Peru, the country's domestic and long distance carriers, respectively. The winning bid of \$2 billion came from a consortium headed by Telefonica de España. Even though the initial investment in this particular case is very large (representing around 5 per cent of GDP), Telefonica de España made commitments in its bid of \$1 to \$1.2 billion additional investment to be made subsequent to the original purchase. In addition to this monetary commitment, Telefonica accepted certain performance requirements, which could lead to follow-up investments exceeding the post-privatization capital commitment. For example, Telefonica agreed to expand the system from 2.4 lines per inhabitant to 6 or 7 lines per inhabitant, to add 1 million new lines and to upgrade 200,000 existing lines. Rates must also be trimmed by 2 per cent per annum until these approximate international standards are reached. In return, Telefonica receives a five year monopoly in the Peruvian market.^b

A third example consists of the \$1.9 billion privatization of the Compañía de Telefonos de Venezuela (CANTV). Follow-up investments in 1992-1993 totalled \$1.2 billion (data on the specific share of this increase accounted for by foreign investors are not available). Annual average capital investment was only \$50 million during the three years prior to the privatization. While, in this case, it is not known whether these follow-up investments were part of the original purchase agreement, this privatization is also characterized by a combination of capital commitments and performance goals. Future plans for the privatized facility include 450,000 new digital lines, 280,000 new customers, 5,000 new public telephones and the replacement of 12,000 existing ones. By the end of the decade, projected additional investments in the privatized company are expected to total \$6 billion.^c

These examples highlight three features of privatizations involving FDI:

- Foreign direct investment in privatizations is not necessarily a one-off event, but can be the first stage of a process involving substantial post-privatization investments. In the three examples and the table, the available information indicates that post-privatization investment in the years following the initial purchase will be several times as large as the original investment.
- The source of post-privatization FDI flows can be either contractual in nature (e.g., Telefonica de España's commitment to invest a further \$1 to \$1.2 billion), or they can be motivated by government policies that encourage additional investment flows (e.g., Mexican tax incentives).
- While it is often not known whether formal performance requirements are included in privatization schemes involving foreign investors, the public commitment of foreign investors to specific performance targets suggests that such requirements also characterize privatization agreements and, by extension, could also imply additional post-privatization investment flows.

^a Edward E. Whitacre, "Keys to success: privatization in the telecommunications industry", *Latin Finance: Privatization in Latin America, 1994*, Supplement, March 1994, pp. 20-23.

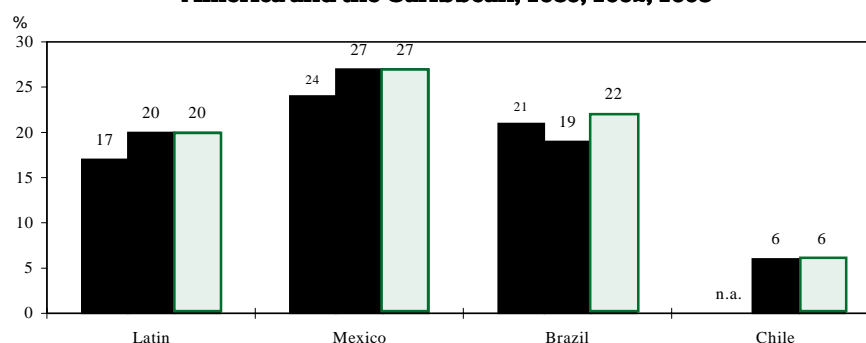
^b Aurelio Garcia-Miro and Steven Murphey, "Telefonica's Peruvian connection", *Business Latin America*, 14 March 1994, p. 1-2.

^c "From monopoly to competition in Venezuelan telecommunications", *Latin Finance Supplement 1993*, pp. 21-23.

(In contrast, the stock of FDI from the rest of Latin America (excluding tax havens) in the United States decreased from \$4.9 billion to \$4.6 billion between 1993 and 1994.³¹) The result has been a more intense integration of Mexico with the United States at the level of production, which has been led by the automobile, electrical machinery and electronic equipment industries (UNCTC, 1992a). It has been characterized by the reorganization of corporate networks through which foreign affiliates in Mexico have become fully integrated into a regional production structure. As a result, over a quarter of the trade between Mexico and the United States is undertaken on an intra-firm basis, a share that has increased over time (figure II.4).³² The deepened integration of the Mexican and North American economies has had a distinctly manufacturing flavour, with foreign manufacturing affiliates shifting from a stand-alone, domestic market orientation towards a regionally integrated production system. This investment-led integration provided a major impetus for the NAFTA negotiations which, in turn, reinforced the regional production integration already taking place by assuring investors that the liberalization of Mexican trade and investment regulations would continue.

Chile's prospective integration into NAFTA is similar to that of Mexico in one respect: FDI inflows increased substantially beginning in the mid-1980s. In 1993, average annual inflows of FDI from the United States and Canada accounted for 62 per cent of total FDI flows into Chile (as compared with 73 per cent for Mexico) (ECLAC/UNCTAD, 1995b, p. 28). Total inflows in Chile for 1994 were over \$2.5 billion. During 1990-1993, FDI as a share of gross domestic capital formation was an average of 8.6 per cent in Chile, compared with 6.6 per cent in Mexico, and 7.2 per cent for Latin America as a whole (UNCTAD-DTCI, FDI database). Unlike the situation in Mexico, however, FDI by Chilean firms in NAFTA countries has been negligible,³³ and FDI by United States and Canadian TNCs has not been led by manufacturing but rather by natural resource firms (especially in minerals, cellulose, wood pulp and fruits): in 1994, 65 per cent of United States FDI stock in Mexico was in manufacturing while the equivalent figure for Chile was only 8 per cent.³⁴ Consequently, United States and Canadian FDI in Chile has not given rise to the same depth of integrated production as between the United States and Mexico. This is reflected in the fact that the share of Chile's intra-firm trade for majority-owned foreign affiliates with the United States was 6 per cent in 1993, whereas the average for Latin America as a whole was 20 per cent. Mexico has the highest intra-firm trade share (27 per cent) of the major FDI recipients in the region in 1993 (figure II.4).

Figure II.4. Share of intra-firm trade of United States majority-owned foreign affiliates in total trade between the United States and Latin America and the Caribbean, 1989, 1992, 1993



Source: UNCTAD, Division on Transnational Corporations and Investment, based on United States, Department of Commerce, Bureau of Economic Analysis, unpublished data; and IMF, 1994b.

a Preliminary.

Thus, while Chile's investment integration through TNCs with the North American economy is substantial, it is largely one-way in nature (United States and Canadian FDI in Chile) and not as strong as in the case of Mexico. (However, Chilean FDI in the rest of Latin America has been substantial; box II.8.) Consequently, the less advanced integration of production systems exercises less pressure to move institutional arrangements further. This, in turn, is reflected in the less active and less broad-based support that North American TNCs have given to Chile's accession as compared with the expansion of the Canada-United States Free Trade Agreement to include Mexico. But even at the present time, integration at the production level augurs well for Chile's becoming a member of NAFTA, although Chile's accession will be more of a policy-led nature than in the case of Mexico. The plans for a Free Trade Area of the Americas outlined during the Summit of the Americas in Miami in December 1994 were a step in that direction.³⁵

Although FDI integration with North America has been much slower in the rest of Latin America and the Caribbean, there are some indications that this process is beginning to gather momentum. Investment flows from Latin America to the NAFTA members have increased, although from a very low level: in 1991, FDI flows from Latin America accounted for 0.3 per cent of total flows into the United States and 2.4 per cent for Mexico; in 1994, Latin America's share in the United States increased to 1.3 per cent and to 4.2 per cent in Mexico.³⁶ Furthermore, Canadian and United States firms have accounted for approximately a half of the region's FDI stock (table II.7), and the increase in the Latin American share (excluding Mexico) of outward United States FDI flows from 16 per cent to 19 per cent between 1990 and 1994³⁷ suggests that the region is becoming more attractive to United States TNCs in the 1990s, as it emerges from its "lost decade".

The current trend towards regional trade and investment liberalization (through agreements such as MERCOSUR -- box II.10), combined with competitive pressures for TNCs to integrate production on a regional or global basis, could lead TNCs based in North America, as well as regionally-based TNCs, to reorganize their Latin American operations to achieve the levels of efficiency that they have already achieved in Mexico. Some Latin American companies have already begun to pay closer attention to other countries in the region, with MERCOSUR becoming a testing ground for their ability to compete outside the boundaries of their home countries (while still remaining shielded from international competition within the borders of MERCOSUR). Most of these investments are market-driven. For example, Brahma, a large brewing company from Brazil, is expanding its production facilities within the region through investments in Argentina; in Brahma's decision to invest abroad, MERCOSUR played a facilitating role by helping to reduce administrative procedures and costs.³⁸ Investment from Brazil in Latin America is currently concentrated in other MERCOSUR members: Argentina (automobile parts and components, foodstuffs), Paraguay (alloyed steel) and Uruguay (financial services). In turn, FDI from Uruguay in Brazil nearly tripled between 1991 (\$5 million) and 1992 (\$14 million). The number of strategic alliances between Argentina and Brazilian firms is also increasing.³⁹

Box II.8. Chilean outward FDI

Chile is one of the most active outward investors in Latin America. Between 1990 and 1994, Chilean outward FDI flows increased dramatically from \$8 million to \$876 million. As of 30 April 1995, the stock of Chilean outward FDI was estimated at \$2 billion.^a Of this, 61 per cent was located in South America, 25 per cent in Central America and the Caribbean, 11 per cent in Europe, and 1 per cent in North America (including Mexico). Among individual host countries, Argentina is the largest recipient, accounting for 43 per cent of total stocks in Latin America and the Caribbean, or 38 per cent of total Chilean outward FDI stocks. Much of this investment has been associated with Argentina's privatization programme in 1992, when \$6.1 billion of assets were privatized in Argentina. Likewise, as Peru's privatization accelerated in recent years (over \$2 billion in privatized assets in 1994) Chilean investors have become more active in Peru; Bolivia is also likely to become an important host country in 1995 as its privatization programme accelerates.

At the sectoral level, 56 per cent of Chilean outward FDI stock as of 30 April 1995 was in financial services, insurance, real estate and other services, 17 per cent in transport and communications, and 10 per cent each for manufacturing and energy. Flow data for the first four months of 1995 show that financial services continue to dominate Chilean outflows (56 per cent), but also highlight the growing importance of FDI in mining (13 per cent of flows in the first four months of 1995, versus only 3 per cent of total outward FDI stock in mining). Flow data also indicate a slight increase in the importance of manufacturing in Chilean outward FDI over the historical trend, with 12 per cent of flows in the first four months of 1995 going to this sector.^b

The lead taken by Chile among Latin American economies in terms of outward FDI reflects the opening of the economy to international competition and imports since the 1970s (the policy of *apertura*).^c While *apertura* placed great pressure on Chilean firms, those that survived are now competitive against international benchmarks and are actively seeking to expand their markets through FDI (see accompanying table). The strength of the peso against the dollar is an additional motivation for the Government to actively encourage outward investment. (By mid-1995, the peso appreciated by 20 per cent in real terms over the previous 12 months, and foreign exchange reserves exceeded \$15 billion.)^d Yet, the competitiveness of Chilean firms remains the primary factor behind their outward orientation.

In many instances, Chilean companies have entered into partnerships with TNCs from developed countries either to acquire or establish foreign affiliates in Latin America. Chilean companies have joined forces with Banque National de Paris (France), ING Bank (Netherlands), Nissan (Japan), Hydro Ontario (Canada), Telefonica de España (Spain), Procter and Gamble (United States), and Coca Cola (United States), among others. These alliances with Chilean TNCs are suggestive of the strategic interests that TNCs from developed countries have identified in forming alliances with companies that are familiar with the region's markets. Chilean TNCs have used their knowledge of regional markets and new market opportunities associated with regional trade liberalization to attract strategic partners.

^a Economic and Financial Report, Banco Central de Chile, preliminary figures.

^b Ibid.

^c Matt Moffett, "Chilean firms blaze cross-border trails", *Wall Street Journal*, 7 November 1994, p. A11.

^d Banco Central de Chile, *ibid.*

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(Box II.8, cont'd)

Recent FDI projects by Chilean TNCs
(Millions of dollars)

Chilean TNC	Acquisition details	Year	Value
Banco O'Higgins SA	43.5 per cent stake in Buenos Aires-based Banco Popular SA.	1995	..
Medeco SA	Controlling interest in Guillermo Decker SA	1995	..
	Establishment of joint venture in Peru.		..
Maderas & Sinteticos SA	Establishment of particleboard plant in Corcordia, Argentina	1994	45
Embotelladora Andina SA	Acquisition of Rio de Janeiro Refrescos	1994	120
AFP Provida SA	Joint venture in pension fund management in Colombia	1994	..
Chilgener/Chilquinta/Pacifico	Electrical utilities acquire 60 per cent of Central Puerto electricity generation company from Government of Argentina	1992	92
Endesa/Dnersis/Chilectra	Electrical utilities acquire 60 per cent stake in Central Costanera electricity generation company in Buenos Aires from Government of Argentina	1992	90

Source: Matt Moffett, "Chilean firms blaze cross-border trails", *Wall Street Journal*, 7 November 1994, p. A.11.

Table II.7. Share of Canadian and United States FDI in Latin and Central American FDI stocks, by country, 1975-1993

(Percentage)

Country	1975	1980	1985	1990	1992	1993
Argentina	44 ^a	42	46	45 ^b	..	..
Bolivia	56	71	75	72	..	..
Brazil	38	32	36	34	36	37 ^c
Chile	50	60	53	47	47	49
Colombia	58	58	67	72	69	..
Ecuador	65	54	54	54	52 ^d	..
El Salvador	43	49	50	49	45	..
Guatemala	56	46	29	..	..	..
Mexico	76	71	69	64	63	64
Panama	85	88	84	81	76 ^e	..
Paraguay	..	..	17 ^f	14 ^g	..	..
Peru	62	59	54	50	44	..
Venezuela	63 ^h	65	59	55	52 ^e	..
Group average ⁱ	58	58	53	53	54	50

Source: UNCTAD-DTCI, based on data provided by ECLAC/UNCTAD Joint Unit on Transnational Corporations.

a 1976.

b 1989.

c The share for Brazil is based on data up to 30 June 1993.

d Estimated.

e 1991.

f 1984.

g 1988.

h 1977.

i Beyond 1990 the comparability of the series is significantly reduced because of the unavailability of host-country data.

Box II.9. MERCOSUR and the development of intraregional production networks

The liberalization of trade between the MERCOSUR signatories would result in a market of 200 million people and output of \$700 billion.^a Intra-MERCOSUR trade grew by 250 per cent between 1990 and 1993, while trade between MERCOSUR and the rest of the world grew by 29 per cent over the same period. Furthermore, intraregional exports as a share of total exports increased from 8.8 to 19.9 per cent (Di Filippo, 1994). Transnational corporations have led this intraregional trade boom, accounting for 65 per cent (\$4.2 billion) of intraregional manufacturing exports in 1993 (Di Filippo, 1994). The largest component of this trade has been from Brazil to Argentina.

With respect to FDI, intraregional trade liberalization is giving rise to MERCOSUR-based production networks, as TNCs rationalize their operations (Argentina, Ministerio de Economía y Obras y Servicios Públicos, 1992 and ECLAC/UNCTAD, 1995b.). Investment integration has been particularly prominent in the chemicals, manufacturing, automotive, energy and food industries. For example, Toyota Motor Company is investing \$100 million in a plant that will produce 20,000 pick-up trucks per year in Argentina, of which approximately half are destined to be exported to Brazil, and for which most of the parts will be imported from Brazil.^b In addition, local parts suppliers to the automotive original equipment manufacturers are beginning to regionalize in order to serve better the needs of their customers' production networks. For example, Iochpe-Maxion, a Brazilian automotive parts manufacturer, has established a production facility in Argentina to supply better General Motors in Argentina.

Since many manufacturing industries in the MERCOSUR economies have been nurtured behind highly protectionist, import-substitution regimes, they are inefficient by international standards, and economic resources have been diverted from areas of comparative advantage. Under the MERCOSUR agreement the production networks of many industries remain predominantly intraregional due to continued restrictions on interregional trade. Furthermore, the MERCOSUR timetable involves a transition period during which international competitive pressures are gradually increased in order to avoid sudden social dislocation. Thus, intraregional barriers to trade continue to act as an impediment to the realization of economies of scale in some industries. For example, the current MERCOSUR automotive agreement restricts intraregional imports and also stipulates balanced trade between Brazil and Argentina in vehicles and automotive parts. Automotive manufacturers will enjoy unrestricted trade or a common tariff only from the year 2000.

That the MERCOSUR seems likely to serve as a vehicle for wider liberalization in the long run is highlighted by the fact that Chile entered negotiations to become an associate member of the agreement in 1995. Chilean FDI stocks in Argentina up to the end of April 1995 totalled \$767 million -- more than one-third of the country's total outward FDI stock.^c Should Chile, one of the region's most open and dynamic economies, eventually become a member of both the NAFTA and MERCOSUR, the stage could be set for much wider hemispheric trade and investment links.

^a MERCOSUR includes Argentina, Brazil, Paraguay and Uruguay.

^b Patrick McCurry, "Four nations = one market", *Financial Times*, 25 January 1995, p. 14.

^c Banco Central de Chile, unpublished data, 1995.

In 1993, each of the 40 largest TNCs (ranked by sales) in Latin America had, on average, operations in three Latin American countries. The 17 United States TNCs in the top 40 accounted for 50 per cent of the group's total sales in 1993 (ECLAC/UNCTAD, 1995c, table III.1). Therefore, the already existing substantial FDI stock in Latin America and the Caribbean controlled by North American TNCs could become a dynamic force for overall economic integration in the Western Hemisphere. A positive first step in this direction are regional liberalization initiatives, such as MERCOSUR, that will allow TNCs to rationalize operations in the hemisphere and will reduce impediments to deeper and wider international production networks.

* * *

The integration of the Western Hemisphere -- as envisaged by the Enterprise-for-the Americas initiative -- requires not only integration at the policy and institutional levels, but also (and perhaps even more so) integration at the levels of markets and production. Integration at the level of production is fostered by a combination of FDI liberalization (which allows TNCs to locate production facilities according to efficiency criteria) and trade liberalization (which allows TNCs to move intermediate and finished products freely throughout their production networks). Increased production integration, in turn, is complemented and further encouraged by institutional and policy arrangements. Extending NAFTA beyond its current membership could be facilitated if subregional integration arrangements, such as MERCOSUR, not only serve to eliminate internal barriers to economic transactions but also reduce external barriers, since the latter represent the principal impediment for TNCs to integrate and expand their NAFTA-based production networks throughout the hemisphere.

3. Africa ⁴⁰

(a) Trends

With \$53 billion of accumulated FDI stock in 1994, Africa is the developing country region that has received least attention from TNCs (figure II.5). Investment inflows have remained within the \$2 - \$4 billion range since the late 1980s. Since flows into the developing countries as a whole have increased considerably, Africa's share in the developing country total has declined from 11 per cent in 1986-1990 to 6 per cent in 1991-1993 and to 4 per cent in 1994 (figure II.5). Reflecting this, the share of Africa in the total stock of developing countries declined from 14 per cent in 1985 to 9 per cent in 1994, although the FDI stock grew in absolute terms, owing to positive FDI inflows. The oil-exporting countries of the region continue to dominate inward FDI, accounting for about two-thirds of its stocks and flows (figure II.5).

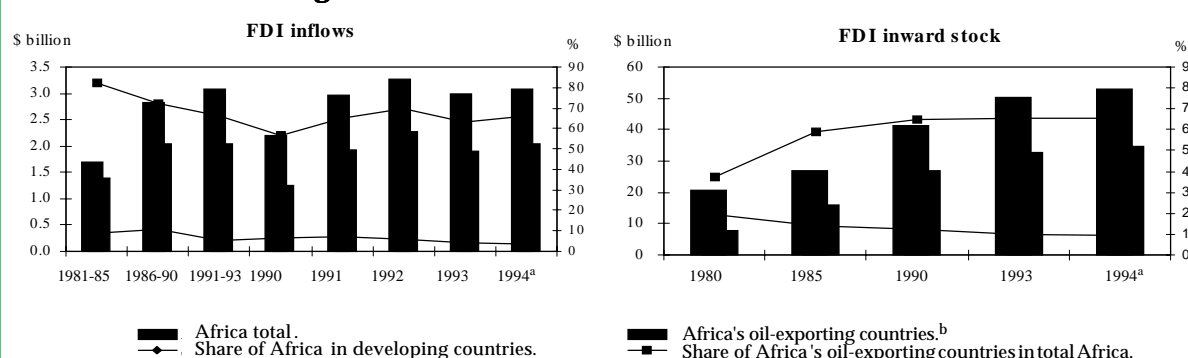
Low FDI inflows and an almost total absence of portfolio equity investment flows distinguish Africa from other developing regions where FDI has risen to become the largest component of net external resources inflows. Africa, and especially sub-Saharan Africa, continues to rely on grants and official loans, which constitute the bulk of its external resources inflows, while FDI accounted in 1993 only for about 12 per cent of the total (UNCTAD-DTCI, 1994b).

(b) Investment opportunities

In spite of the small investment flows to Africa, it is not correct to perceive Africa as a location with poor investment opportunities. Grouping together 54 countries unavoidably conceals a complex diversity of economic performance and factors determining FDI flows, which in many cases are similar to those in other developing countries that do receive sizeable FDI inflows. Disparities exist among African countries in terms of market size and growth, natural resource endowments, entrepreneurial and institutional capabilities, social and economic infrastructure, political stability and economic policies. This heterogeneity inevitably leads to differences in FDI performance and potential.

If standardized FDI inflows (FDI inflows per \$1,000 of GDP or per capita) are taken as a measure of FDI performance (figure II.6), then Africa includes, apart from countries attracting large absolute amounts of FDI inflows, a number of other countries that have done very well in terms of attracting FDI inflows relative to the size of their economies. In other words, not only does a potential exist but it has also translated into investment in several countries. The annual average FDI inflows that these latter countries received during the period 1991-1993 per \$1,000 of GDP were considerably above the average for African countries (\$9.2), and above the average for developing countries (excluding Turkey) (\$14.0). Other countries on this list are also high performers in terms of the absolute size of inflows. The performance of such countries as Angola, Namibia, Nigeria and the Seychelles is linked to specific locational advantages based on natural resources (oil and tourism). As the analysis of the key FDI determinants in the next section suggests, some of the countries that already are good FDI performers, either in absolute or relative terms, may still have unexploited FDI potential, in some cases perhaps even a large one. Such a potential exists, and also has not yet been tapped in several other African countries.

Figure II.5. FDI inflows and stock in Africa, 1980-1994



Source: UNCTAD, Division on Transnational Corporations and Investment, based on International Monetary Fund, balance-of-payments tape, retrieved in June 1995; and Organisation for Economic Co-operation and Development estimates.

^a Preliminary estimates.

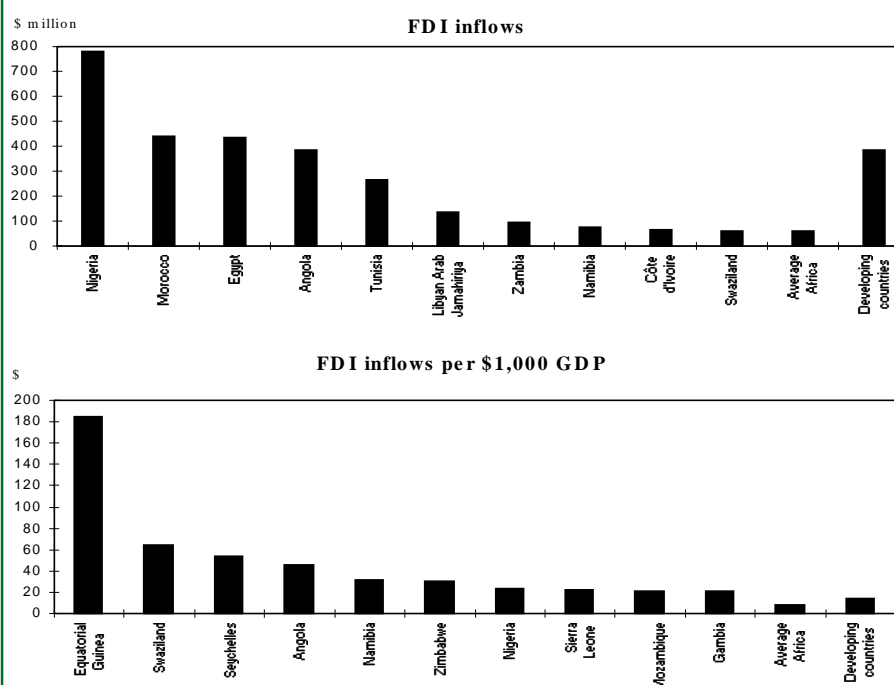
^b Oil exporting countries in Africa include Algeria, Angola, Cameroon, Egypt, Gabon, Libyan Arab Jamahiriya, Nigeria and Tunisia.

i. Potential at the country level

Factors such as level of development (as measured by GDP per capita), market size (in terms of total GDP or size of population) and market growth (GDP growth rates in constant prices) are important determinants of the locational decisions of TNCs (UNCTC, 1992c). Naturally, there are a number of other factors that determine FDI flows such as the availability of natural resources, the quality of the infrastructure, the cost and productivity of labour and, not least, policies that are favourable to FDI. Any analysis of FDI potential has to start from the first three of these determinants because they reflect economic fundamentals. The analysis in this section is, therefore, based on the assumption that potential for more FDI exists if an African country is comparable or does better on these determinants in relation to other African or other developing countries and yet, at the same time, receives less FDI than those countries. This potential can, of course, vary by sector, *inter alia*, because of the presence of privatization programmes that may facilitate entry possibilities into specific markets.

Table II.8, comparing the key economic FDI determinants with standardized FDI inflows in African countries and other developing countries, permits a basic assessment of the FDI potential in African countries. For each of the four FDI determinants shown in the table, countries are divided into two groups. The first group includes developing countries (including African countries) with a **high** value of the FDI determinant indicator and a **high** value of FDI inflows per \$1,000 of GDP, i.e., a value above the \$14.0 average for all developing countries (excluding Turkey). The second group consists of African countries with a **high** value of the indicator and with a **low** value of FDI inflows. While the first group denotes countries already exploiting their FDI potential, the second group comprises African countries with unexploited FDI potential (i.e., low performers in terms of attracting FDI inflows). The difference between the size of average FDI inflows in these two groups of

Figure II.6. The ten largest host countries to FDI inflows in Africa, by absolute and relative size of inflows, 1991-1993 average



Source: UNCTAD, Division on Transnational Corporations and Investment, based on International Monetary Fund, balance-of-payments tape, retrieved in June 1995; Organisation for Economic Co-operation and Development estimates; and data from the UNCTAD Secretariat.

Table II.8. The FDI potential in African countries, 1991-1993

<i>Developing countries (including African countries) utilizing their FDI potential^a</i>			<i>African countries with unexploited FDI potential^a</i>		
<i>Determinant: GDP per capita^b</i>					
Economy	GDP per capita (Dollars)	FDI/GDP (Dollars per \$1,000 GDP)	Economy	GDP per capita (Dollars)	FDI/GDP (Dollars per \$1,000 GDP)
Vanuatu	1 135	142.1	Lesotho	716	11.7
Singapore	19 723	126.4	Botswana	2 866	10.5
Malaysia	3 348	84.8	Gabon	4 377	10.2
Grenada	2 413	83.1	Mauritius	2 850	5.5
Swaziland	1 111	64.9	Djibouti	815	3.7
Dominica	2 761	59.7	Libyan Arab		
Seychelles	6 153	53.3	Jamahiriya	8 922	3.0
Trinidad and Tobago	3 551	48.3	Congo	976	1.7
Angola	847	45.3	Senegal	722	1.4
Costa Rica	2 317	36.8	Cape Verde	878	0.5
Jamaica	1 592	33.2	Algeria	1 752	0.2
Namibia	1 717	31.0	Cameroon	802	-3.6
Belize	2 569	30.8			
Dominican Republic	1 108	21.8			
Malta	7 598	21.4			
Fiji	2 222	20.0			
Indonesia	745	19.4			
Argentina	7 566	19.2			
Chile	3 160	18.7			
Tunisia	1 705	18.3			
Thailand	2 148	17.6			
Paraguay	1 452	17.0			
Venezuela	2 830	16.9			
Cyprus	9 229	16.3			
Morocco	1 057	15.9			
HongKong	16 515	15.5			
Mexico	3 815	15.2			
Average	2 542	25.8	Average	2 026	2.0
<i>Determinant: total GDP (at current prices)^c</i>					
Economy	GDP (Billion dollars)	FDI/GDP (Dollars per \$1,000 GDP)	Economy	GDP (Billion dollars)	FDI/GDP (Dollars per \$1,000 GDP)
Singapore	49	126.4	Egypt	36	12.1
Malaysia	57	84.8	Libyan Arab		
China	453	31.7	Jamahiriya	45	3.0
Indonesia	90	19.4	Algeria	45	0.2
Argentina	225	19.2			
Chile	40	18.7			
Thailand	111	17.6			
Venezuela	58	16.9			
HongKong	91	15.5			
Mexico	320	15.2			
Average	149	27.7	Average	42	4.6

(Table II.8, cont'd)

<i>Developing countries (including African countries) utilizing their FDI potential^a</i>			<i>African countries with unexploited FDI potential^a</i>		
<i>Determinant: GDP growth rate^d</i>					
Economy	Growthrate (Percentage)	FDI/GDP (Dollars per \$1,000 GDP)	Economy	Growth rate (Percentage)	FDI/GDP (Dollars per \$1,000 GDP)
Costa Rica	5.6	36.8	Botswana	4.6	10.5
Namibia	3.8	31.0	Benin	4.1	4.8
Nigeria	4.1	23.5	Mauritius	5.4	5.5
Dominican Republic	4.2	21.8	Ghana	4.5	3.1
Malta	4.9	21.4	Uganda	4.2	0.7
Mozambique	6.6	20.5	Sudan	4.9	-
Indonesia	6.6	19.4			
Tunisia	5.1	18.3			
Venezuela	5.3	16.9			
Cyprus	4.1	16.3			
Hong Kong	5.0	15.5			
Honduras	4.3	13.9			
Range/average	3.8-6.6	18.7	Range/average	4.1-5.4	3.5
<i>Determinant: commodity exports^e</i>					
Economy	Commodity exports (Percentage)	FDI/GDP (Dollars per \$1,000 GDP)	Economy	Commodity exports (Percentage)	FDI/GDP (Dollars per \$1,000 GDP)
Seychelles	56	53.3	Egypt	54	12.1
Trinidad and Tobago	64	48.3	Gabon	95	10.2
Angola	99	45.3	Liberia	65	7.8
Zambia	85	29.9	Mauritania	52 ^f	3.6
Nigeria	96	23.5	Libyan Arab Jamahiriya	96 ^g	3.0
Chile	56	18.7	Congo	86	1.7
Venezuela	86	16.9	Togo	67 ^h	1.3
			Zaire	73	0.5
			Algeria	97 ^f	0.2
			Sudan	56 ^{fh}	-
			Mali	66	-1.0
			Cameroon	65	-3.6
Average	82	21.9	Average	88	3.7

Source: UNCTAD, Division on Transnational Corporations and Investment, FDI database; and UNCTAD, 1993.

^a The borderline between countries with FDI potential and those utilizing their FDI potential is \$14.0 FDI inflows per \$1,000 GDP, the average for all developing countries (excluding Turkey). Data on FDI/GDP are in dollars per \$1,000 GDP. FDI inflows and GDP data are annual average in 1991-1993.

^b Countries with GDP per capita above \$700. Data on GDP per capita are for 1993.

^c Countries with average GDP for 1991-1993 above \$36 billion.

^d Countries with an annual growth rate in 1991-1993 above the developing country average of 3.7 per cent, but below the highest rate of an African country, 6.6 per cent.

^e Countries with the share of exports of agricultural raw materials, fuels, ores and metals in total exports above 50 per cent in the early 1990s.

^f Data do not include agricultural raw materials.

^g Data do not include ores and metals.

^h Data do not include fuels.

countries delineates, broadly speaking, the existing potential. The third and largest group of African countries is not included in the table. It consists of countries where the low value of the indicators corresponds with a low or very low value of FDI inflows. When looking at individual FDI determinants in these countries, their low level of development (measured by GDP per capita) typically goes hand in hand with the small size of their markets (measured by total GDP). Only those countries from within this group that have high growth rates are likely to improve on the first two determinants, if their growth rates are higher than the growth rates of their populations.

Importantly, the number of countries with FDI potential is quite sizeable. They are grouped on the right side of table II.8, combining (as explained earlier) high values of the FDI determinant indicators with an average of FDI inflows below that for the developing countries as a group (and in a number of cases even below the average for Africa). The size of this group varies depending on the variable:

- Looking at the level of development, 11 African countries at the middle level of development (that is, with a GDP per capita higher than \$700), including Libyan Arab Jamahiriya and Gabon, both with a higher than middle-level income, underperform in terms of FDI flows per \$1,000 of GDP, even if some of them already receive sizeable absolute amounts of FDI inflows. These countries received, during the period 1991-1993, an annual average of only \$2.0 inflows per \$1,000 GDP, compared to \$26.0 inflows per \$1,000 GDP received by their 21 counterparts from non-African developing countries and compared to \$21.5 inflows per \$1,000 GDP of six high-performing countries in Africa at a similar level of development.
- The market-size variable shows three African countries with FDI potential, if the size of GDP equal to or above \$36 billion is taken as an indicator of a relatively large market. These countries, although having an average market size (\$42 billion) larger than the average for all developing countries, receive average inflows amounting to less than one-third of the average inflows received by developing countries. They are lagging much more behind 10 developing countries that score higher on the market-size determinant.
- The market-growth variable produces six African countries underperforming in terms of FDI to GDP inflows and 12 countries within a similar range of growth rates performing above average in terms of FDI (four of them are African countries).
- If specific locational advantages in natural resources are taken as a key FDI determinant, measured by a share of commodities in exports that is above 50 per cent, Angola, Nigeria, the Seychelles, Zambia and three other developing countries score high on both this determinant and the size of FDI flows they receive, while 12 African countries show unexploited FDI potential.

In a number of countries, this unexploited potential is especially strong, as they score high on more than one determinant and below the average of all developing countries as regards

average FDI inflows: Libyan Arab Jamahiriya and Algeria (scoring on three determinants) and Botswana, Cameroon, Congo, Egypt, Gabon, Mauritius and Sudan (two determinants). In addition, there are 12 African countries with some potential, scoring high on one FDI determinant.

Among countries already exploiting their FDI potential, the relatively low FDI-to-GDP ratios prevailing in Tunisia and Morocco (\$18 and \$16 per \$1,000 of GDP, respectively), combined with the \$1,705 per capita GDP and a relatively high rate of economic growth in the former and \$1,057 per capita GDP in the latter (table II.8), augur well for further increases in FDI inflows relative to GDP in these countries.

This is, of course, only a rough assessment of the FDI potential of African countries, and it is limited to basic economic FDI determinants only, in particular excluding political factors. It is only meant to do two things: to underline the need to differentiate when looking at the African continent and, hence, to examine investment opportunities in each country separately, and, at least when considering some basic FDI determinants, to point out that an unexploited FDI potential seems to exist in a number of African countries.

ii. Potential at the sector and industry levels

An analysis at the sector and industry levels can provide further hints about FDI potential because the aggregate data do not necessarily capture some specific, sectoral locational advantages:

- *Primary sector.* As Africa is rich in natural resources, more than half of FDI in Africa, not surprisingly, has traditionally been oriented towards resource-based activities, to a much greater degree than FDI in other developing regions. It is in mining of high-value minerals and petroleum where Africa is particularly prominent as a host to FDI (Cantwell, 1991) and where great potential for future FDI exists. Reserves of oil and gas are large, particularly in Nigeria and Angola, and exploration activities have high success rates compared to other regions (Cockcroft and Riddell, 1991); it is widely believed that important deposits are likely to be discovered in other parts of Africa.⁴¹ Africa also has important deposits of high-value minerals such as gold and diamonds. Namibia has large reserves of uranium. Guinea alone holds about three-quarters of the world's known bauxite reserves. Of course, the mere availability of natural resources is not a sufficient condition for FDI to occur. Other conditions include demand in relation to supply, prices and the costs of exploration and extraction. Where the potential for profitable investment exists, TNCs have a key role to play in helping host countries to exploit it.
- *Manufacturing.* Africa's abundance of natural resources gives it also a certain locational advantage for FDI in certain types of manufacturing, which -- to the extent that it takes place -- appears to be much more resource-related than FDI in manufacturing in Asia or Latin America (Cantwell, 1991). Most attractive in this regard are some metal

processing activities, textiles, paper and wood products, some food and drink-processing, products of natural rubber and building materials (Cantwell, 1991). Additional sources of potential advantages for export-oriented FDI include low-cost labour in a number of countries and preferential access of most African countries to the markets of the European Union (via the Lomé Convention and special association agreements), the United States (via the Generalized System of Preferences) and South Africa (via the Southern African Development Community (SADC)). Possibilities of even closer integration of the countries of northern Africa with the European Union would provide additional impetus to FDI in this subregion. Finally, to the extent that competition from domestic producers is weak, market-seeking FDI in many African countries may be particularly profitable -- although in such cases the host economies may not benefit as much as they could if markets were competitive.

- *Services.* The non-tradability of most services means that investment in this sector is directed overwhelmingly towards domestic markets. Demand for many services is growing fast in Africa while local supply is limited (Cantwell, 1995a). Most African countries have a shortage of the highly educated employees essential to these industries. In capital-intensive services (e.g., telecommunications, modern hotels, transportation), capital shortages create serious constraints. In these cases there are considerable opportunities for foreign investors, especially since many service industries were closed to them until recently. Only about 30 per cent of the FDI stock in Africa in the late 1980s was in services; this was roughly equivalent to the proportion in Latin America, but well below the proportion in Asia (Cantwell, 1995a).
- *Tourism* deserves special attention. The African continent offers a rich variety of tourist attractions, some of them (e.g., beaches, eco-tourism) similar to those offered by other countries (and therefore competing with them), others specific to Africa, facing little or no competition (e.g., safari tourism). While some of this potential is already being exploited, a large part of it still awaits investment in tourism infrastructure. Zimbabwe illustrates the dimensions of this potential. Since 1989, tourism in that country has grown at an annual rate of over 10 per cent, attracting in 1993 some 880,000 visitors. Receipts from this sector (including spillovers) during the same year were estimated to have reached almost 5 per cent of Zimbabwe's GDP.⁴² Only a part of the tourism-related demand for goods and services (e.g., lodging, food and catering, transportation, communication, car rentals) is met by domestic suppliers -- the remaining gap could be filled by foreign investors. While a few large TNCs, mainly in the hotel industry, are already active in Africa (e.g., Hilton, Intercontinental and Sheraton), generally via non-equity arrangements, most of the FDI potential in this area is still unexploited.
- *Infrastructure* is another area that holds promise, and FDI in this area is particularly encouraged by governments. The scale of the work required usually rules out local suppliers; at the same time, many of these projects involve large amounts of unskilled labour. In addition, project finance or co-finance is, in many cases, available from international financial institutions such as the World Bank or the European Investment Bank (whose participation, moreover, reduces the investment risk).

iii. Potential at the firm level

A major indicator of investment potential at the firm level is the profitability of foreign affiliates: for in the final analysis what matters most for firms is that investment opportunities are profitable. Given the unfavourable image of Africa as an investment location, including a perception that it is relatively risky to invest there, one would expect a rather poor average profitability of FDI or, at best, wide fluctuations -- i.e., periods of high profits followed by periods of high losses. The data (tables II.9 and II.10) show, however, that such a perception is wrong: the FDI that has taken place is highly profitable, and consistently so; in fact, in many respects, the profitability of FDI in Africa compares favourably with FDI in other regions:

- Income from United States FDI in Africa has been positive, showing a slow upward trend between 1980 and 1993 (table II.9). Judging from FDI income, Africa was a much better place to invest for United States investors than, for example, the United States was for French and German TNCs which, in most of the years during the 1982-1992 period, suffered losses on their FDI in the United States. While United States FDI in Africa generated \$8.6 billion of cumulated FDI income during that period, German TNC income from the United States investment was only \$0.4 billion, while French investment brought a cumulated loss of over \$2 billion.⁴³
- In most years during the 1980-1993 period, the rate of return in Africa was higher than the average for all developing countries (table II.10). It was also far higher than that in Latin America and the developed countries as a whole for all years except two. The only region that outperformed Africa during most of this period was Asia (South, East and South-East Asia and the Pacific). However, as the rate of return in Asia declined, while that in Africa remained at a relatively high level during the 1990s, Africa has become the region with the highest rates of return on FDI.
- As a consequence of the relatively higher profitability of FDI, Africa's importance as a source of FDI income for United States TNCs was proportionately higher during the period 1982-1993 than its share in the outward stock of the United States FDI (except for 1986) (UNCTAD-DTCI, 1995a, table 16, p. 75).
- Over time, the rate of return in Africa has been quite stable. From its lowest point in 1986 it displayed a general trend towards growth. The same cannot be said about the rate of return in developed countries, which was not only much lower than that in Africa during most years from 1980 to 1993, but also declined during the early 1990s.
- Finally, high rates of return translate into profitable foreign affiliates. For example, the average United States foreign affiliate in Africa generated a higher amount of investment income in 1992 than the average affiliate in Europe and almost twice as much as an average affiliate in Canada (table II.9). In addition, contrary to the trend for all countries, income per affiliate in Africa has tended to increase during the early 1990s compared with late 1980s.

Table II.9. United States total FDI income in Africa and income per affiliate by region, 1982-1993

(Millions of dollars and percentage)

Region/country	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
A. Total FDI income in Africa												
Value	524.0	799.0	1 089.0	972.0	123.0	823.0	873.0	653.0	739.0	985.0	1 014.0	1 012.0
Share of Africa in total FDI income	2.1	2.9	3.6	3.4	0.4	2.0	1.7	1.2	1.3	1.9	2.1	1.8
Share of Africa in total FDI stock	2.0	1.9	2.1	1.9	1.5	1.4	1.3	0.8	0.7	0.8	0.7	0.8
B. Income per affiliate^a												
Developing countries	1.36	0.55	0.82	1.02	1.02	1.57	1.65	2.49	3.14	3.02	3.57	..
Africa	0.86	1.28	1.81	1.76	0.54	1.53	1.75	2.38	1.96	2.62	2.64	..
West Asia	3.32	1.26	2.04	1.06	2.07	1.34	2.35	2.35	4.58	4.19	3.61	..
Other Asia ^b	2.39	2.32	2.59	2.37	1.80	2.69	2.78	2.57	3.71	3.19	3.73	..
Latin America	0.88	-0.26	-0.08	0.38	0.70	1.16	1.11	2.46	2.88	2.88	3.59	..
Developed countries	1.00	1.23	1.26	2.32	2.80	3.78	3.40	3.00	3.38	2.85	2.22	..
Canada	1.23	2.44	2.51	2.08	2.60	3.62	3.79	3.41	2.43	1.66	1.42	..
Europe	1.00	0.96	1.08	2.67	2.95	3.99	3.41	3.02	3.85	3.27	2.36	..
Others	0.78	0.95	0.69	1.17	2.40	3.04	2.95	2.54	2.24	2.13	2.40	..
All countries	1.16	1.04	1.13	1.86	2.14	2.99	2.78	2.84	3.25	2.89	2.57	..

Source: UNCTAD, Division on Transnational Corporations and Investment, based on United States, Department of Commerce, *U.S. Direct Investment Abroad: Operations of US Parent Companies and Their Foreign Affiliates* (various issues); *U.S. Direct Investment Abroad: Benchmark Survey 1982 and 1989*, and *Survey of Current Business* (various issues) (Washington, D.C.: Government Printing Office).

^a Non-bank United States affiliates of non-bank parent firms except for 1982 and 1989 covering all United States affiliates of all United States parent firms.

^b South, East and South-East Asia and the Pacific.

Table II.10. Rates of return on United States FDI, by region, 1980-1993
(Percentage)

Region/country and sector	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Developing countries	24.3	23.0	17.4	14.5	17.0	14.0	12.0	13.5	14.3	18.2	17.3	15.8	16.8	16.8
Africa - total	41.3	26.4	12.4	19.2	25.4	21.7	2.9	19.7	20.3	17.5	24.2	30.6	28.5	25.5
Primary ^a	50.8	31.7	17.4	21.9	30.7	25.5	0.3	17.4	11.6	14.2	22.8	35.4	29.3	28.8
Manufacturing	17.9	13.9	8.1	4.5	8.5	12.1	9.7	29.8	44.3	20.4	15.2	11.5	19.7	17.9
Services ^b	17.4	13.0	18.6	21.5	14.0	3.6	9.3	20.0	40.5	19.8	26.9	12.9	22.9	21.3
Others	..	17.1	-73.5	-0.5	2.9	17.0	23.6	89.1	112.1	98.5	48.0	26.8	49.9	16.4
West Asia	-16.5	74.9	47.8	15.9	19.4	9.4	11.9	11.5	20.7	18.4	30.8	22.6	19.7	15.3
Other Asia ^c - total	44.4	40.7	30.6	28.3	29.6	21.1	16.9	24.0	24.8	24.7	27.0	23.8	22.5	20.4
Primary ^a	86.6	70.5	45.5	38.4	35.2	26.4	17.1	21.9	21.4	30.4	47.0	42.6	29.8	25.3
Manufacturing	19.2	19.5	16.3	21.8	21.8	19.6	20.5	27.1	29.0	23.6	20.7	14.2	18.6	19.1
Services ^b	29.4	25.2	27.4	21.6	21.4	15.1	12.8	24.1	23.1	21.4	20.9	21.1	21.0	19.6
Others	..	..	..	19.0	-5.5	20.9	24.9	17.6	30.5	23.3	23.8	34.8	30.9	14.0
Latin America - total	18.8	15.8	11.2	6.9	7.9	9.3	10.8	9.1	9.7	16.0	13.0	12.1	14.1	15.1
Primary ^a	21.5	19.6	10.8	7.8	0.2	12.4	16.0	5.1	7.5	7.8	15.0	19.7	16.4	13.9
Manufacturing	15.8	11.6	3.2	0.1	6.5	10.9	11.2	13.8	18.1	23.0	14.8	13.0	16.7	25.0
Services ^b	21.0	19.5	31.0	83.5	9.7	4.0	9.6	7.6	5.0	13.0	11.7	10.7	12.5	10.7
Others	13.7	8.0	-1.3	5.0	4.5	2.0	1.8	2.5	3.1	11.5	12.2	13.5	14.1	10.8
Developed countries	16.6	11.7	9.2	12.3	13.6	12.7	13.4	14.6	16.1	14.2	13.7	10.2	8.0	8.7
Canada	13.7	9.4	6.3	11.9	13.1	11.1	10.0	10.3	12.0	10.3	7.2	4.6	3.8	5.8
Europe - total	17.9	11.9	10.5	12.8	14.3	14.0	14.6	16.4	17.6	15.9	16.1	12.4	8.6	9.4
Primary ^a	31.3	24.9	14.0	21.0	22.2	18.1	15.7	13.6	17.0	11.8	24.1	20.1	8.8	11.1
Manufacturing	13.3	6.2	9.1	11.1	2.7	13.7	15.9	18.3	20.0	19.5	18.6	13.4	9.8	10.7
Services ^b	15.4	11.5	10.4	9.4	7.8	12.2	12.8	15.7	15.1	14.1	13.0	10.4	8.0	2.5
Others	18.8	9.1	5.4	13.7	1.4	5.9	8.3	8.2	11.7	7.4	6.9	3.6	3.2	2.5
Other developed countries ^d	17.0	15.9	8.7	10.8	4.2	10.3	14.3	14.3	16.5	12.2	10.1	7.8	10.0	8.8
All countries	18.5	14.7	11.4	12.9	14.3	12.8	12.6	14.1	15.5	15.0	14.3	11.6	10.2	10.8

Source: UNCTAD, Division on Transnational Corporations and Investment, based on United States, Department of Commerce, *Survey of Current Business*, various issues (Washington, D.C.: Government Printing Office).

^a Only petroleum.

^b Trade, banking, finance and other services.

^c South, East and South-East Asia and the Pacific.

^d Australia, Israel, Japan, New Zealand and South Africa.

As would be expected, most of the profits from FDI in Africa are generated in the primary sector. Rates of return are highest in petroleum, although profitability in both the manufacturing and services sectors is quite considerable, as also when compared to profitability of FDI in these sectors in Latin America and Asia. Judging from fluctuations in the rates of return, the most risky investments in Africa are “other industries”; these include mining, agriculture and public utilities, where years of large losses or no profits are interspersed with years of high profits.

iv. Privatization

Privatization programmes can provide the link between the potential at country and industry levels and concrete investment opportunities at the firm level. As discussed in this chapter, the experiences of Latin America, and also those of Central and Eastern Europe, show that, to the extent that foreign participation in privatization programmes is permitted, TNCs use privatization as a vehicle for fast entry into host country markets. Another attraction of such programmes for TNCs is that even though they may require the restructuring of acquired companies and/or additional investments, they can provide profitable investment opportunities. In addition, by buying a company, TNCs also buy its market share in international and local markets. As has become evident from the preceding analysis of key FDI determinants, some of these attractions of privatization programmes exist in Africa in a limited number of countries.

To date, African privatization programmes -- with some exceptions -- are still rudimentary. They are undertaken on a visible scale in no more than ten countries (Sader, 1994). The primary sector is prominent in most programmes, including not only mining and petroleum but also agricultural projects and, specifically, large plantations of agricultural raw materials. Foreign participation is sought in infrastructural projects, including public utilities, especially telecommunications, water supply and electricity and, in some countries, air transportation. In all these cases, experienced firms are being sought with access to investment resources, technology and skills; on the other hand, TNCs typically have not yet been allowed to participate in the privatization of large state monopolies in these industries. In the manufacturing sector, there is little to be privatized as the industrial base in most African countries is small.⁴⁴

(c) Policies to improve investment conditions

Governments in Africa have made many efforts during the past ten years to increase their attractiveness to foreign investors. These efforts have included far-reaching domestic economic policy reforms (usually at high social cost) and the liberalization of the FDI regulatory framework, including the simplification of administrative procedures applicable to foreign investors, the conclusion of bilateral investment protection and promotion treaties and accession to various multilateral treaties facilitating FDI flows.⁴⁵

All these efforts have led to a recognizable improvement of investment conditions in Africa, although more can and needs to be done to realize the investment opportunities that exist in Africa. As the continent comprises a great variety of political and economic country

situations, no single prescription for action to improve investment conditions would be appropriate. Answers are country-specific. Some governments will have to make efforts to restore or maintain economic and political stability, as a general precondition for increased FDI. Others will have to continue with the liberalization of FDI policies and increase the efficiency of administrative procedures, learning from best practices elsewhere. Still others, with favourable indicators of FDI potential but receiving FDI below their potential, will need to review their regulatory frameworks, focus on promotion efforts and look at ways of attracting TNCs to particular projects. Finally, a small group of countries in Africa may be able to pay increased attention to policies aimed at upgrading the quality of FDI they receive, e.g., by focusing on the improvement of the skills of their labour force or on the upgrading of infrastructure.

One quick way of improving investment conditions in many African countries is to utilize privatization programmes. To benefit from privatization-related FDI, existing programmes need to be improved and perhaps new programmes launched. In some cases, this may require the establishment of a broader political consensus, to end the stop-and-go nature of some of these programmes, to make them more transparent and expand them to include a wider variety of firm sizes and industries, representing a balanced portfolio of profitable and less successful companies (box II.10). Including only loss-making firms, for example, while excluding profitable firms will certainly not make a privatization programme attractive. The attractiveness of programmes could be further increased in some countries by linking them to debt-equity swaps.

The outside world has supported the efforts of African countries to improve investment conditions by helping in the implementation of structural adjustment programmes and increasing official grants and loans (from \$14 billion in 1986 to \$19 billion in 1993) (World Bank, 1993a and 1995). Further assistance, however, is required -- especially in terms of debt-forgiveness and upgrading infrastructure -- in order to improve investment conditions for both domestic and foreign investors. For example, although various debt-relief schemes have been in place for African countries since the 1980s, Africa's external debt as a percentage of GDP remained at a high level, with 58.8 per cent in 1994, a level more than double that in Latin America and Asia.⁴⁶ More seriously, some African countries are effectively insolvent with debt service obligations far in excess of their servicing capacity through exports. The continuing debt problem prolongs balance-of-payments difficulties which, in turn, make it difficult to ease profit-remittance regulations -- an indispensable element of any good investment climate. In addition, excessive debt service obligations put unreasonable strains on the public sector budget and complicate the task of governments in providing basic social services and macroeconomic stability.

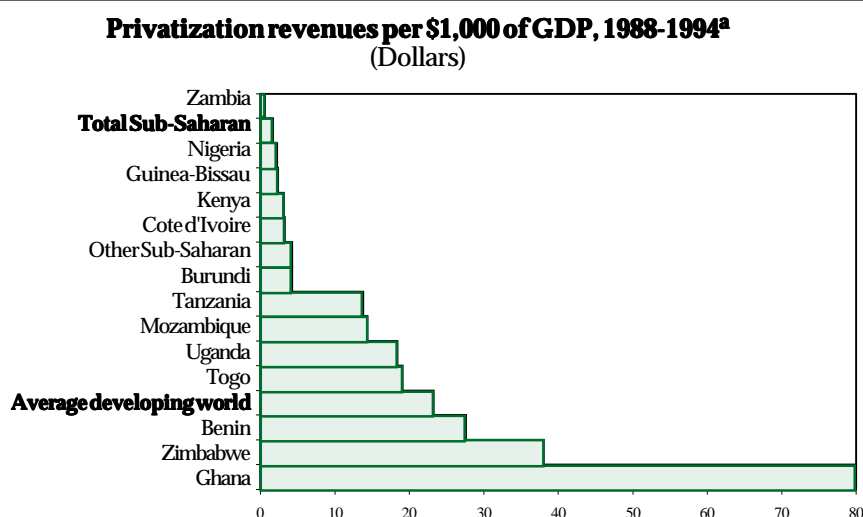
An important new factor that may influence prospects for FDI in Africa is the emergence of South Africa as a politically stable and economically dynamic country. First, South Africa may serve as an example for conflict resolution in other countries plagued by internal political conflict and may thus help them achieve the basic requirement of any good investment climate, i.e., political stability. Second, South Africa itself has a potential to attract sizeable inflows of

Box II.10. Privatization in Sub-Saharan Africa

Most Sub-Saharan African countries are still in the start-up phase of their reform programmes, initiated to stimulate private sector development. Of the total sales receipts of about \$113 billion from privatizations in developing countries during the period 1988-1994, only about \$1.4 billion stem from sales in Sub-Saharan Africa. Moreover, the bulk of these revenues are accounted for by privatizations during the last two years of this period. This substantial increase in sales revenue during 1993 and 1994 relative to that of previous years might be taken to indicate that privatization programmes in the Sub-Saharan African region are starting to show results. In fact, it mainly reflects the sale of two particularly large assets: a joint venture begun in 1993 with France's Elf Aquitaine for the development of an oil field in Nigeria worth \$500 million, and proceeds from the international public offer of Ghana's Ashanti Goldfields for about \$400 million in 1994.

Overall, privatization remains limited in most countries in the region and is confined mainly to small and medium-sized enterprises. In relative terms, while sell-offs in the developing countries as a group resulted in average revenues per \$1000 of GDP of over \$23 during 1988-1994, sales in Sub-Saharan Africa amounted to only slightly over \$1.7 per \$1000 of GDP. Only three countries in the region had average sales values above the developing world average. In Ghana this was only due to the sizeable sale in 1994 (accompanying figure).

The reasons for the slow progress of privatization in the region are complex. Governments, even in countries such as Ghana, Mozambique, or Nigeria, with reasonably well-functioning and sizeable privatization programmes, are hesitant to relinquish larger, strategic enterprises. The cautious approach of governments towards privatization reflects the fact that in many low-income countries public enterprises typically play a dominant role in the domestic economy, accounting for a substantial share of the country's employment, GNP and debt. Thus, privatization raises numerous concerns, the reconciliation of which is often difficult. Governments typically find it necessary to evaluate carefully the pros and cons of privatization and monitor closely individual sales at all stages of the process, since they can have serious implications. The valuation of companies also often takes significantly longer in Sub-Saharan Africa than in other regions.



Source: World Bank, Privatization database.

a Preliminary estimates for 1994.

Note: The average value for sub-Saharan Africa excludes South Africa. Calculated using GDP figures for the period 1988-1993.

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FDI. Third, if such inflows materialize and contribute to the acceleration of economic growth, then South Africa could well become a regional growth pole, and itself become a home country for FDI in the countries of southern Africa. (Some South African companies are already looking to invest elsewhere in the region, with the Government taking a more liberal attitude towards allowing outward FDI in that region.) In addition, it could become a dynamic market for export-oriented FDI in neighbouring countries linked to South Africa by free trade agreements.

The message from this analysis is clear: it is time to stop thinking about Africa as a continent without investment opportunities. Contrary to the common perception, FDI in Africa can be profitable, and at a level above the average of that of foreign affiliates in some other developing country regions. In particular, there is an exceptional endowment of natural resources. Firms wishing to benefit from the existing opportunities should, therefore, consider African countries as investment locations. At the same time, the governments in the region have to make every effort to maintain or restore economic and political stability, as a general precondition for increased FDI.

* * *

The experience of different developing country regions and of the countries within them differs with respect to their success in attracting FDI. The sharp increase in FDI flows to developing countries during the 1990s has been confined to Asia and the Pacific (especially China) and to Latin America and the Caribbean. Flows to Africa have remained largely unchanged in absolute terms and even decreased as a proportion of the developing country total FDI. Furthermore, within the Asia-Pacific as well as the Latin American and Caribbean regions, countries have performed unevenly with respect to FDI inflows. This reflects mainly different

(Box II.10, cont'd)

Foreign investors -- major actors in private sector development -- in many cases do not have equal access to privatization programmes. Potentially interested buyers often face non-transparent processes, bureaucratic delays and unpredictable decision-making. Instances have occurred where sales decisions made after a lengthy and difficult process have been reversed for political considerations. Consequently, foreign investors may turn away, given that the region is already seen as less attractive as an investment location (UNCTAD-DTCI, 1995a).

The result is that, in many cases, governments experience difficulties in finding a reasonable number of bidders. Privatization agencies are often in the situation of having only one or two interested parties, which almost invariably results in direct negotiations, rather than competitive tenders. With this comes the danger of sales prices being low, and the potential for increasing criticism of privatization policies. Thus, many privatization programmes in the region stagnate, effectively blocking an important mode of entry for foreign direct investment in the region.

Source: World Bank, Foreign Investment Advisory Service.

underlying economic factors that are major determinants of FDI flows, including per capita income and its growth, market size, and availability of natural and human resources. Since the general trend in the majority of developing countries has been towards more liberal policies regarding FDI, the diversity of experience suggests that liberalization may be a necessary condition, although not in itself sufficient for attracting FDI.

In line with the differences in experience, policy implications for countries also vary. Some countries need to make efforts to restore or maintain economic and political stability, as a general precondition for increased FDI. Others may need to continue with the process of liberalization of FDI regimes, harmonize FDI policies with policies for trade and technology, and/or improve administrative frameworks related to FDI, while generally ensuring an open and stable policy environment. Still others, particularly those with indicators of an FDI potential in excess of actual flows, could focus on promotional efforts, especially for attracting TNCs to particular projects. Finally, some countries may be able to shift towards policies for upgrading the FDI that they receive, by improving their human resource and infrastructural capabilities as well as by becoming more selective with respect to the kind of investments that they encourage.

C. Central and Eastern Europe

Progress in macroeconomic reform is leading to a recovery in economic growth and the emergence of a burgeoning private sector in countries of Central and Eastern Europe (CEE).⁴⁷ The participation of FDI in this process has been important, but mostly in a supportive manner, with this role varying greatly from country to country. There has been little so far to justify either fears of developing countries of a diversion of flows into CEE, or CEE hopes for rapid inclusion into the worldwide division of labour brought about by the activities of TNCs. At the same time, however, the impact of TNCs and their foreign affiliates may have been greater than what the volume of investment flows would suggest, at least in the more industrially advanced countries in the region (UNCTAD-DTCI, 1994a). Furthermore, in these countries foreign affiliates, in many ways, constitute bright spots of their economies -- owing largely to their well-above-average performance, their export orientation and their concentration in modern sectors of economic activity.

1. Trends in inward FDI

Total FDI flows into Central and Eastern Europe reached \$6.3 billion in 1993 (table II.11) and an estimated \$6.5 billion in 1994 (about the magnitude of 1993 flows into Argentina), increasing the region's FDI stock to an estimated \$22 billion (or 5.2 per cent of the region's GDP) as of the beginning of 1995. The growth of inflows (which had already been far below expectations) has slowed down due to lingering economic recession in some countries of Western Europe (the main source of investment inflows), combined with the slow transition towards a market economy. The FDI stock has been invested in an estimated 55,000 foreign affiliates. Compared with developing countries and regions, however, the FDI stock in CEE remains marginal, being not larger than the stock in Argentina (figure II.7).

The gap between investors' commitments and the actual implementation of investments in the region continues to be high. It appears that, on average, only about a half of all registered FDI projects have, so far, actually started operations. In countries like Belarus and Estonia, the divergence between the implementation

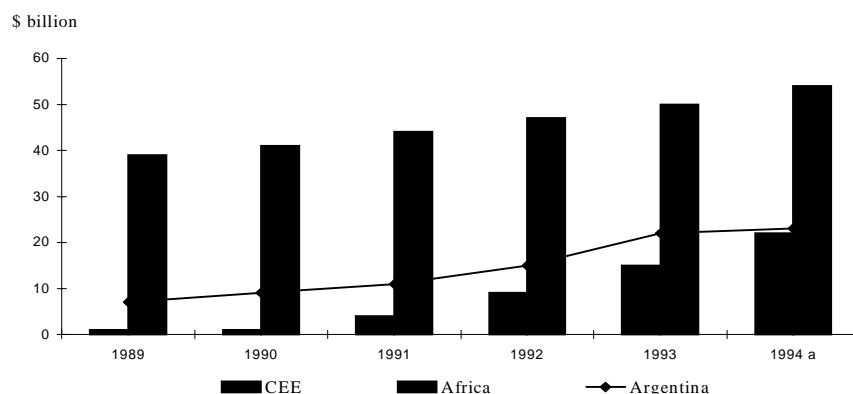
of FDI projects and FDI commitments is even greater (34 and 20 per cent, respectively), whereas Hungary, for example, reported 75 per cent of the foreign affiliates registered in its territory in operation in 1994 (ECE, 1994a). While this difference can partially be explained by the incremental nature of some FDI projects, it is also a reflection of the fact that many investors implement their projects only very cautiously due to the uncertain economic and political environment in some countries. In the case of some FDI commitments that have not yet been implemented (e.g., the enormous planned Chevron investment in the Kazakh oil industry and, indeed, many other big energy projects in the former USSR), there may be specific reasons for the delay (e.g., determining pipeline routes).⁴⁸

Inflows of FDI into CEE continued to be unevenly distributed. Some of the countries of the region have become relatively large recipients of FDI, while others have yet to emerge as significant host countries. In absolute terms, three clusters have emerged:

- The Visegrád countries: the Czech Republic, Hungary and Poland, which together accounted for 69 per cent of the region's stock in 1994.
- The "next-tier" countries: Bulgaria, Estonia, Kazakhstan, Romania, the Russian Federation, Slovakia, Slovenia, Ukraine and the Federal Republic of Yugoslavia, which together account for 29 per cent of the stock.
- Those with negligible FDI, such as Albania, Belarus, Latvia, Lithuania, the Republic of Moldova, the Caucasian Republics and Uzbekistan (2 per cent in total) (table II.11).

Obviously, the uneven distribution of inflows reflects the wide variety of countries comprising the group: relatively industrialized countries with well-established ties to Western Europe like Hungary and predominantly primary-commodity producers in Central Asia like Kazakhstan; large economies like the Russian Federation and small economies like Albania. It is also a reflection of the differing speed and success of these countries in approaching a stable,

Figure II.7. FDI stock in CEE, Africa and Argentina, 1989-1994



Source: UNCTAD, Division on Transnational Corporations and Investment, FDI database.
a Estimates.

Table II.11. FDI inflows into Central and Eastern Europe and their importance in the economy, 1989-1994
(Millions of dollars and percentage)

Country	Inflows						Stock ^a		Stock distribution, 1994 (Percentage)	Average FDI inflows per capita (Dollars)	Average FDI inflows as percentage of GFCF	FDI stock as percentage of GDP, 1993
	1989	1990	1991	1992	1993	1994	1993	1994				
Albania	..	..	-1	20	58	53	77	130	0.6	7.7 (1991-93)	..	0.2
Belarus	..	..	..	7	10	6	17	23	0.1	0.8 (1992-93)	..	..
Bulgaria	..	4	56	42	55	300	157	457	2.1	4.4 (1990-93)	2.1 (1990-93)	0.3
Former CSFR ^b	257	207	600	1 103						22.6 (1989-91)	0.6 (1993)	..
Czech Republic ^c	..	..	..	..	568	862	2 680	3 542	16.5	55.2 (1993)	..	10.2
Estonia	..	..	..	58	168	260	247	507	2.4	72.6 (1992-93)	..	..
Hungary	..	..	1462	1 479	2 350	1 510	5 294	6 804	31.6	171.9 (1991-93)	25.0 (1991-93)	14.5
Kazakhstan	..	..	..	100	150	125	250	375	1.7	7.4 (1992-93)	..	1.7
Latvia	..	..	..	14	20	30	34	64	0.3	6.5 (1992-93)	..	..
Lithuania	..	..	..	10	12	10	22	32	0.1	3.0 (1992-93)	..	..
Moldova, Republic of	..	..	..	17	14	16	31	47	0.2	3.6 (1992-93)	..	..
Poland	11	89	291	678	1 715	1 400	3 004	4 404	20.5	14.6 (1989-93)	1.6 (1989-93)	3.6
Romania	..	..	40	77	94	650	211	861	4.0	3.0 (1991-93)	1.9 (1991-93)	0.9
Russian Federation	..	..	..	700	700	900	1 400	2 300	10.7	4.7 (1992-93)	..	..
Slovakia ^d	..	..	..	..	..	70	404	474	2.2	..	..	3.8
Slovenia	..	..	..	111	112	73	223	296	1.4	57.6 (1992-93)	..	..
Ukraine	..	..	..	200	200	200	400	600	2.8	3.9 (1992-93)	..	..
Uzbekistan	..	..	..	40	45	43	85	128	0.6	2.0 (1992-93)	..	..
Federal Republic of Yugoslavia ^e	9	67	119	64	25	..	465	465	2.2	6.6 (1990-93)	0.3 (1990-93)	..
TOTAL	277	367	2 567	4 720	6 296	6 508	15 001	21 509	100.0	7.5 (1989-93)	3.9 (1989-93)	5.2
Memorandum item:												
Argentina	1 028	1 836	2 439	4 179	6 305	1 200	21 701	22 901		95.2 (1989-93)	30.8 (1989-93)	9.5
United Kingdom	30 379	33 046	16 022	15 030	14 457	10 226	196 811	214 231		377.8 (1989-93)	13.0 (1989-93)	18.9

Source: UNCTAD, Division on Transnational Corporations and Investment, based on International Monetary Fund, balance-of-payments tape, retrieved in June 1995; and UNCTAD, 1994b.

Note: Stock is based on cumulative inflows.
GFCF is gross fixed capital formation.

^a Stock is based on cumulative flows. Cumulative flows prior to 1989 for Hungary, Poland and for the former Yugoslavia were, respectively, \$3 million, \$220 million and \$117 million.

^b The IMF discontinued reporting data on the former Czech and Slovak Federal Republic in February 1995.

^c Data for 1993 and total stock are estimated based on information provided by CzechInvest. Three-quarters of 1989 inflows into the former CSFR are included in the estimate for total stock.

^d Data for 1994 and total stock are estimated based on Deutsche Bank Research Review. One-quarter of 1989 inflows into the former CSFR are included in the estimate for the total stock.

^e Data until 1991 are for the former Yugoslavia, approximately 25 per cent of which were invested in Slovenia and 15 per cent in Croatia.

market-oriented, investment-conducive environment through privatization and the establishment of a market system. Another factor is their geographical distance from the Triad, in particular the European Union. In addition, the status of negotiation of European Union accession agreements and the harmonization of competition policy and environmental, state aid and other firm-specific legislation in the Visegrád countries is reflected in the larger FDI flows to those countries.⁴⁹

Most importantly, privatization has played a crucial role in attracting FDI (UNCTAD-DTCI, 1994a), accounting for nearly two-thirds of inflows during 1988-1993 (see chapter I). While most CEE countries have established privatization programmes (and specialized agencies to implement them), foreign involvement varies from country to country, owing largely to differences in legislative environment, availability of attractive assets and modes of privatization.⁵⁰ Foreign participation is most prominent in countries that have enacted large-scale privatizations of companies, such as Hungary, while in countries with mass privatization schemes that favour resident ownership, foreign investors are much less important privatization agents. Whereas post-privatization effects of FDI -- notably in the form of sequential and associated investments -- are already evident in the countries that attracted FDI in their first privatization efforts (boxes II.11 and II.12), foreign involvement is only just emerging in countries that lagged behind in this respect.

2. Outward trends

While political and economic developments in the late 1980s have dramatically altered conditions for inward FDI, the same cannot be said for outward FDI: capital outflows connected with the acquisition of productive assets abroad are still limited in most countries of the region. The region's outward FDI stock in the OECD countries amounted only to an estimated \$2.5 billion in 1992 (table II.12). This is partly due to restrictions on capital exports, including outward FDI, and because of a lack of firm-specific advantages, know-how and management skills and capital:

- Based on considerations related to the availability of foreign exchange, outward FDI projects generally require special authorizations, approvals, licences or registrations in most CEE countries, which sometimes are made conditional on export performance or profitability tests (see also annex table 7) (OECD, 1993a, p. 62). Only Estonia, Kyrgyzstan, Latvia and Lithuania do not appear to restrict outward FDI. While countries like the Czech Republic and Hungary have reportedly adopted a relatively more liberal approach, apparently in most other countries obtaining permission involves a lengthy and thus discouraging procedure (OECD, 1993a, p. 62).
- In addition to limitations that are based on foreign exchange difficulties, outward FDI by CEE firms also seems to be hampered by a lack of management skills and the know-how necessary to undertake investments abroad and to run a foreign business venture successfully. In a region where even the simplest commercial skills were largely absent,

Box II.11. Post-privatization investments in the CEE automobile industry

Privatization involving foreign investors in the automobile industry has generated numerous associated investments throughout the Central and Eastern European region. Volkswagen's activities in the Czech Republic, e.g., have already led to 30 joint ventures, and another 70 are under negotiation.^a General Motors' \$289 million investment in the Hungarian automobile industry has attracted numerous related investments by firms that are suppliers of GM in its Western markets (accompanying table). Likewise, Ford's and FIAT's investment in Poland (see box II.12) and

General Motors: associated investments in Hungary

Affiliate	Parent company	Home country	Total investment (Million dollars)	Production line
EsCade Kft. Halasztelek	CasCade Engineering Inc.	United States	3.0	Injection moulded plastic parts
ITT Automotive Magyarorszag Kft.	ITT Automotive Europe GmbH	Germany	..	Wipers switches; indicator and light switches; wiper motors; door hinges; ABS-sensors
Leonl Hungaria GmbH	Leonische Drahtwerke AG	Austria	..	Cable harnesses
United Technologies Automotive Hungary	United Technologies Corporation	United States	8.75	Cable harnesses
Semperform Kft.	Semperlit Technische Produkte GmbH	Austria	2.89	Injection moulded rubber parts; metal-rubber parts
SAPUBt.	Reitter & Schefenacker GmbH & Co. KG.	Austria	..	Window lifters; rear view mirrors; rear lights; high mounted stop lamps; turn signal lamps
Baumeister & Ostler	Baumeister & Ostler	Germany	..	Safety mesh
Dekorsky DS Keyboard	Ing. G. Dekorsky GmbH, Kunststofftechnologie	Germany	..	Injection moulding die; injection moulded plastic parts; electrical and mechanical subcomponents assembly
ADA Kft.	August Mößner Aluminium & Metallgießerei GmbH & Co.	Germany	..	High- and low-pressure aluminium and aluminium-alloy castings
Payer-Quatro Kft.	LHS Technik, Graz	Austria	..	Injection moulded plastic parts
Eybl Textil Kft.	Eybl Krems Textilwerke AG	Austria	..	Carpets

Source: UNCTAD, Division on Transnational Corporations and Investment.

Suzuki's in Hungary have been followed by investments by some of their international suppliers.^b Also the Korean car producer Daewoo's investments in Romania and Uzbekistan are beginning to attract numerous associated investments, including those by GM's subsidiary Delphi Automotive Systems and several Korean component suppliers.^c

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it has mostly been the former (usually state-owned) foreign trade enterprises that possessed the proficiency and competence required for world-market operations, including the management of foreign affiliates (McMillan, 1987).

Privatization has changed the ownership structure of these outward-investing enterprises. While many of the investments predating 1989 are still in place (UN-TCMD, 1992a),⁵¹ controlling interest in them has passed to new owners and their structures have changed. Tungsram's former foreign affiliates, e.g., have now become part of the worldwide network of General Electric, in the process of which some of General Electric's original affiliates in Western Europe were dissolved.⁵² Furthermore, with the dissolution of the former Soviet Union, the former Czech and Slovak Federal Republic and the former Yugoslavia, many erstwhile domestic enterprises turned into foreign affiliates. In other words, some investments are relics of formerly unified countries and, in a sense, represent "inherited" transnationalization. Because of this, the Russian Federation now has major investments in other states of the

(Box II.11, cont'd)

A major reason for suppliers to follow their main customers to the region has been the difficulties the latter often encounter in sourcing locally. This is of particular importance in the automobile industry where the location of component suppliers as close as possible to the assembly plant is preferred, given the just-in-time production methods adopted by virtually all of the world's automobile producers. In addition, performance requirements on domestically produced inputs into automobile production have played a significant role. Companies that do not reach the set local content targets face increased taxation and miss opportunities to export to the European Union.^d

Increasingly, the followers have started to produce for other customers as well, including export markets. EsCade, for example, a supplier of GM, now produces components for Opel, Suzuki and ITT. In addition, it has started to produce for other industries, including furniture, packaging, consumer goods and photography. More than 50 per cent of its products are for exports to the European Union. Likewise, United Technologies Automotive Hungary is on the verge of diversifying its customer base. Semperform Kft, a \$2.9 million greenfield investment of GM-supplier Semperit Technische Produkte, GmbH -- which has, since its inception in 1992, increased its capital base by a further \$1 million -- now supplies Semperit SAW in Austria and Mercedes, Volkswagen and Audi in Germany with injection moulded rubber parts and metal-rubber parts.

Investments related to privatization thus play an important role in the domestic economy, through the provision of capital, the diversification of the product base and through additions to exports. Furthermore, successful investments can lead to sequential investments by the same firms and can attract other foreign firms to invest, as they open up attractive markets for suppliers and build confidence in the economy. Although this pattern is most apparent in the automobile industry, similar effects can be expected in several other sectors as well.

a "Getting better", Automotive survey, *Business Central Europe*, 2, 8 (February 1994), p. 42.

b Ibid.

c Kevin Done and Virginia Marsh, "Koreans take the Romanian road", *Financial Times*, 5 May 1995, p. 4.

d "Getting better", op. cit..

Commonwealth of Independent States and the Baltic Republics (in Lithuania, for example, 23 per cent of FDI is accounted for by the Russian Federation); the Czech Republic has now sizeable investments in Slovakia (accounting for 13 per cent of that country's FDI stock) (ECE, 1994a); and Croatia has sizable FDI in Slovenia (accounting for about one-fifth of the total) and vice versa (Rojec et al., 1995, p. 79 and Rojec, 1995) (figure II.8).

At the same time, it has become apparent that the collapse of the former trading, supply and management systems following the demise of the Council for Mutual Economic Assistance necessitated the emergence of new structures for CEE companies formerly dependent on markets in (and inputs originating from) other CEE countries. This fact, combined with newly found possibilities for investing, led these companies to undertake new investments abroad as soon as the political climate changed. Gazprom, the Russian gas utility company, e.g., has been engaging in alliances with western energy groups and suppliers, including a 10 per cent stake

Table II.12. FDI inflows and inward stock in OECD economies from Central and Eastern Europe, 1985-1992

(Millions of dollars)

Host country	Flows								Stock
	1985	1986	1987	1988	1989	1990	1991	1992	1992
Australia	..	..	..	..	..	..	3.9	..	70 ^a
Austria	..	..	8.0	..	7.6	8.8	8.6	18.2	118
Belgium and Luxembourg	-1.7	-	-5.4	5.4	14.5	20.6	25.0	-14.8	..
Denmark	0.01	..	0.2	1.2	4.0	0.8	1.4	2.0	..
Finland	3.7	-1.4	-8.2	..	..	..	..	-4.0	..
France	0.4	2.5	2.2	11.2	4.1	306.3	5.1	168.5	813
Germany	17.7	18.4	31.2	7.4	93.6	91.0	22.9	80.0	932
Greece	..	..	..	1.0	1.0	..	2.0	2.0	..
Italy	..	..	..	..	..	..	..	0.6	..
Japan	..	..	..	..	..	..	..	1.0	1
Mexico	..	..	..	5.3	6.5	10.3	2.3	0.3	..
Netherlands	..	..	-0.5	2.0	-	0.6	3.2	-	12 ^a
Spain	5.9	7.1	15.2	16.4	46.4	20.0	15.4	1.3	..
Sweden	0.3	1.0	0.5	0.5	-	-	1.8	5.0	..
Switzerland	..	..	..	..	..	..	..	..	289
United Kingdom	27.2	-33.7	4.9	-46.3	50.8	-46.4	-24.8	-135.9	..
United States	-5.0	23.0	5.0	-6.0	-9.0	8.0	110.0	63.0	221
Total ^b	48.5	17.0	53.1	-1.9	219.6	420.0	176.8	187.2	2 457 ^c

Source: UNCTAD, Division on Transnational Corporations and Investment, based on OECD, 1994a.

^a 1991.

^b Estimates.

^c Figures in this table are much higher than those for the total of Central and Eastern Europe in annex tables 2 and 4 as the latter data include only the countries for which outward FDI data are available.

Box II.12. FIAT and associated investments in Poland

In October 1992, FIAT acquired a share of FSM, the largest Polish car producer (which was already exploiting a FIAT licence producing automobiles for the Polish market) for \$247 million. At the time of the take-over (and notwithstanding a two months strike at FSM in 1991), FIAT announced that its initial investment would be followed by additional investments worth \$1.6 billion over the next three to five years, plus \$850 million for the technological upgrading of FSM's plants. The bulk of this investment will come from FIAT acquiring the core car assembly business of FSM. At the same time, the car-component plants and smelting plants of FSM were acquired indirectly through FIAT affiliates in Italy.

FIAT: associated investments in Poland

Affiliate	Parent company	Home country	Total investment (Million dollars)	Production line
FIAT Poland	FIAT	Italy	246.6	Automobiles (responsible for seven car assembly plants)
Magneti Marelli Poland	Magneti Marelli (50 per cent directly owned by FIAT SpA) Polish Government (10 per cent)	Italy Poland	2.1	Car components (responsible for the former FSM car component business line)
Teksid Poland	Teksid (100 per cent owned by FIAT)	Italy	11.4	Smelting (responsible for two smelting plants)
TRW Poland	TRW (via TRW Sabelt Italy)	United States	..	Safety belts
Auto-Dekor	Piaggio Pro-Ind Dekora	Italy Poland	..	Textile parts
Gilardini Poland	Gilardini Group (100 per cent owned by FIAT)	Italy	..	Car seats
..	CEAC (62.4 per cent owned by SICIND, a 100 per cent financial holding of FIAT)	Italy	11.4 (plus 30.0 committed)	Battery accumulators
Tycky plant	Cavis	Italy	..	Electronic components
..	Pianfei	Italy	..	Internal panels
Icem Pol	Delta Part	Italy	..	Cables and wires
Istebana plant	Lys Fusion (25 per cent) Comet (25 per cent) Kobajac (50 per cent)	Italy France Poland	2.2	Plastic components
CF Poland	CF Gomma	Italy	0.75	Anti-vibration component
Mazzer Poland	Mazzer (65 per cent) Local partner (20 per cent) Simest (15 per cent)	Italy Poland Italy	5.5	Plastic and metallic components

Source: UNCTAD, Division on Transnational Corporations and Investment, based on information provided by FIAT SpA.

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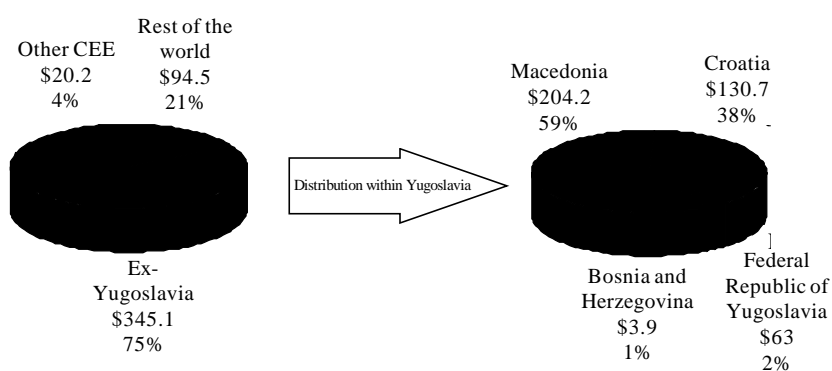
(Box II.12, cont'd)

In addition to these investments, several associated investments of other (mostly Italian) small and medium-sized suppliers of car parts and components, both related and unrelated to FIAT (accompanying table), have already taken place. FIAT played a major role in realizing most of these investments, through helping in the location of sites, assistance in administrative procedures and providing guarantees on its volume purchases from the supplier. The 18 supplier firms that followed FIAT into Poland (4 of which are directly or indirectly controlled by FIAT) provided 27 per cent of FIAT's domestic procurement in 1994, with 46 per cent provided by unrelated Polish firms (a total of 73 per cent domestic procurement -- up from 55 per cent in 1992), 24 per cent imported from Italy and 3 per cent imported from elsewhere (mostly from Germany).

in the United Kingdom-based Continent Interconnector for the development of a £440 million undersea pipeline and a 35 per cent stake in Wingas, a joint venture with Wintershall, the natural gas subsidiary of the German BASF.⁵³ Likewise, the Czech engineering company Skoda Plzen has established joint ventures in Bulgaria, China, Germany, Islamic Republic of Iran, Jordan, the United States and Viet Nam.⁵⁴

Total outflows from CEE to the OECD region rose after 1989, reaching a peak of \$420 million in 1990 and \$187 million in 1992 (table II.12), with Poland, the former CSFR and countries of the former Soviet Union accounting for the majority of this amount.⁵⁵ Still, this is small by international standards: outflows from Norway in 1992 alone, e.g., were twice that magnitude. While the OECD area still figures prominently as the recipient of outward FDI, more recent data show a changing geographical pattern, especially regarding FDI from the Visegrád countries. Taking advantage of lower wage levels in its eastern neighbours, Hungarian and Polish enterprises particularly have, since 1991, increasingly invested in the CEE region.⁵⁶ Styl, a Hungarian textile company, e.g., has moved production to Ukraine because of the wage levels in that country which amount to only about 26 per cent of the average wage levels in Hungary.⁵⁷ Apparently this pattern holds true especially for small and medium-sized enterprises, claiming a growing share in outward FDI. This is why, e.g., the largest number of economic associations with

Figure II.8. Geographical distribution of outward FDI from Slovenia, 1993
(Millions of dollars and percentage)



Source: Based on information provided by National Bank of Slovenia.

Hungarian participation were established in the Czech Republic, Romania, Slovakia and the countries of the Commonwealth of Independent States, mainly in Ukraine.⁵⁸

3. Foreign direct investment in Central and Eastern Europe: a bright spot?

The role of FDI in the transition process and the recovery from the transformational depression may have been greater than what would be expected from the limited capital invested in the region -- primarily through its role in introducing competition, transfer of technology, know-how and management skills via numerous forward and backward linkages and its role in privatization.⁵⁹ In fact, foreign affiliates and companies that have ties with them, be it through non-equity linkages such as subcontracting, licensing or franchising, constitute bright spots in the economies of the region when it comes to productivity, export performance and restructuring. In this way, they have helped to overcome the constraints faced by the region's firms in acquiring new technologies, skills and export markets.

(a) Productivity and sales

Companies with foreign participation are among the best performers in CEE. Their productivity and sales have increased far more than those of domestic firms:⁶⁰

- In Hungary, e.g., where 91 companies of the top 200 have foreign ownership (65 of the companies are majority-owned by foreign firms (Gazdasági Hetilap Figyelő, 1994, supplement p. 5)), sales of foreign affiliates increased by 47 per cent over the 1992-1993 period, whereas domestic firms experienced an increase of only 3.5 per cent. In addition, productivity in companies with foreign participation is almost twice that in purely domestic firms in all industries (table II.13).
- Similarly, foreign affiliates among the 250 largest companies in the Czech Republic increased their total turnover by over 20 per cent in 1993, as compared to 10.7 per cent for domestic firms in the same year.⁶¹ Again, productivity on average is much higher in firms with foreign participation than in domestic firms.⁶²
- In Estonia, output of foreign affiliates grew by 105 per cent over the 1992-1993 period (mostly in financial intermediation, utilities, agriculture and education), whereas domestic companies achieved only a 28 per cent growth. Gross profits of all companies reporting to the central statistical office have, on average, increased by 290 per cent over the 1991-1993 period (measured at current prices), while foreign affiliates have had an average profit increase of 472 per cent over the same period (table II.14).

The relatively good performance of foreign affiliates in the transition economies is largely due to their better access to technology, know-how (including marketing and management skills), access to markets as well as access to capital. It also reflects partly the propensity of TNCs to capitalize on their competitive advantages in respect of these factors and the already existing competitive advantages of the erstwhile state-owned enterprises. As a result, most

Table II.13. Foreign affiliates in the Hungarian economy: selected indicators of performance, 1992-1993

Sales			Exports		Employees		Sales per employee		Exports per employee	
Year/firms	(Billion forints)				(Thousands)		(Million forints)			
	All industries	Manufacturing	All industries	Manufacturing	All industries	Manufacturing	All industries	Manufacturing	All industries	Manufacturing
1992										
Foreign affiliates	1 497	585	326	188	381	229	3.93	2.56	0.86	0.82
Domestic firms	4 601	1 342	487	273	2 026	652	2.27	2.06	0.24	0.42
All firms	6 098	1 927	813	461	2 407	880	2.53	2.19	0.34	0.52
Share of foreign affiliates in all firms	24.5	30.3	40.1	40.8	15.8	26.0	..	..	..	..
1993										
Foreign affiliates	2 203	886	430	265	436	234	5.06	3.78	0.99	1.13
Domestic firms	4 815	1 317	423	247	1 737	531	2.77	2.48	0.24	0.47
All firms	7 018	2 203	853	512	2 173	765	3.23	2.88	0.39	0.67
Share of foreign affiliates in all firms	31.4	40.2	50.4	51.7	20.0	30.6	..	..	..	..
Change 1992-1993										
Foreign affiliates	706	301	104	77	55	6	1.1	1.2	0.1	0.3
Per cent	47.2	51.5	32.0	41.0	14.3	2.5	28.7	47.7	15.5	37.1
Domestic firms	214	-25	-64	-26	-289	-121	0.5	0.4	-	-
Per cent	4.7	-1.9	-13.1	-9.5	-14.3	-18.6	22.1	20.4	1.3	11.1
All firms	920	276	41	50	-235	-115	0.7	0.7	0.1	0.1
Per cent	15.1	14.3	5.0	11.1	-9.7	-13.1	27.5	31.5	16.3	27.6

Source: UNCTAD, Division on Transnational Corporations and Investment, based on information provided by the Hungarian Ministry of Industry and Trade, Department of International Organizations and Tariff Policy.

foreign-owned companies are further ahead in getting through the transitional recession; in fact, some have already turned the corner. Volkswagen, e.g., has managed to turn the Czech automotive company Skoda around, increasing output by over 40 per cent in 1994.⁶³ Similarly, some of the rapid increases in quality standards, labour productivity and changes in work ethics found in the region are traceable to foreign investors' involvement.⁶⁴

There are, however, some foreign affiliates that have either not been able to survive the recession (like a United States investment in the Czech truck producer TATRA),⁶⁵ or have had to scale down production more than anticipated by the parent TNC.⁶⁶ In general, however, only a few large foreign-owned companies have failed. This is also attributable to the fact that most TNCs showed a remarkable patience while encountering problems in CEE. Examples are Fiat's problems with frequent workers' protests in Poland and General Electric's success with Tungsram,⁶⁷ which turned out to be much more difficult to turn around than General Electric had expected.⁶⁸ Likewise, Volkswagen stayed with Skoda in spite of frequent differences with the Czech Government concerning the corporate strategy of the firm.⁶⁹

Table II.14. Foreign affiliates in the Estonian economy and selected performance indicators, 1991-1993

(Millions of Estonian Kroon and percentage)

Year/firm	Number	Assets	Output	Profits (before taxes)		
				Gross ^a	On sales	Ratio ^b
1991 Foreign affiliates	..	342	..	43	12	28
Domestic firms	..	5 307	..	605	546	90
All firms ^c	..	5 649	..	648	558	86
Share of foreign affiliates in all firms	..	6.0	..	6.6	2.1	
1992 Foreign affiliates	1 295	3 902	4 204	282	197	70
Domestic firms	15 447	22 046	34 194	5 275	4 123	78
All firms ^c	16 742	25 948	38 399	5 558	4 320	78
Share of foreign affiliates in all firms	7.7	15.0	11.0	5.1	4.6	
1993 Foreign affiliates	1 576	6 955	8 626	246	228	93
Domestic firms	15 977	32 852	45 048	2 278	1 643	72
All firms ^c	17 553	39 807	53 674	2 524	1 871	74
Share of foreign affiliates in all firms	9.0	17.5	16.1	9.7	12.2	
Per cent change 1991-1993 ^d						
Foreign affiliates	22	1 936	105	472	1 819	
Domestic firms	3	519	32	277	201	
All firms ^c	5	605	40	290	235	

Source: UNCTAD, Division on Transnational Corporations and Investment, based on information provided by the Bank of Estonia.

^a Total gross profits include profits on sales, profits on other business operations (minus other business outlays) and profits from other financial operations.

^b Ratio of profits on sales to gross profits.

^c Number of companies reporting to the Central Statistical Office of Estonia.

^d Per cent change in number of firms and output refers to the 1992-1993 period.

(b) Key industries

The majority of foreign affiliates in CEE are in manufacturing where they have contributed significantly to the manufacturing output of a number of countries. The newly found competitiveness of the region's automobile production is but one example of an industry where substantial FDI has upgraded or created an industrial capability and, in this manner, become an important motor of economic recovery.⁷⁰ In Hungary, 40 per cent of FDI has gone into manufacturing, which in turn has greatly contributed to the boost in industrial output (by 7 per cent in 1993 and by 8 to 10 per cent in 1993). In fact, in 1993, 40 per cent of manufacturing sales were accounted for by foreign affiliates (table II.13). The highest output increases were in industries like telecommunications equipment (55 per cent), electronics-based equipment (31 per cent) and computer and office machines (21 per cent) (ECE, 1994b) -- all industries in which foreign investors play a predominant role through affiliates such as Tungsram and the telecommunications company Matav.⁷¹

Foreign affiliates also figure prominently in the services sector, notably in financial and business services.⁷² Even though these services at large have not attracted amounts comparable to manufacturing and foreign trade, the impact of FDI has been proportionately larger as services were severely neglected under the command economy. In Hungary, foreign companies have succeeded in transforming the insurance sector in less than three years. Foreign capital now accounts for over 65 per cent of ownership in this sector,⁷³ and companies with foreign equity capital account for more than 97 per cent of total premiums in the Hungarian market.⁷⁴ In the Czech Republic and Poland, foreign ownership shares are 63 and 33 per cent, respectively (Falush, 1994, p. 3). All CEE countries, with the exception of Belarus, Kazakhstan, the Russian Federation and Ukraine, have abolished legal obstacles to FDI in the insurance industry. This reflects general recognition of the importance of know-how transfer for development of the industry, as countries of the region have very limited competence in financial services. The scarcity of domestic capital has also added to the conviction that foreign capital is necessary to re-create this industry.⁷⁵ In the market for banking and other financial services, foreign affiliates dominate and outperform domestic firms.⁷⁶ In banking, this is mainly so for two reasons. First, domestic banks are often *de facto* or potentially insolvent, especially those that originated from the breakup of the old monopolistic banks; affiliates of foreign banks, on the other hand, are in a much sounder economic condition. Second, the skills and technology that are available from foreign parent banks are superior to those of domestic banks, giving affiliates a distinctive competitive advantage (OECD, 1994b, p. 10).

As for infrastructure development, the upgrading of telecommunications in most CEE countries has become largely dependent on foreign investors. Most notably, Deutsche Telekom is active in Belarus, Hungary, the Russia Federation and Ukraine. Its operations in Hungary, a joint venture with Ameritech and Matav, constitute the single largest investment in the country. But other Western European and United States telecommunication companies are active in the region as well. Cable & Wireless has invested in the networks of Bulgaria and Belarus, a consortium of Scandinavian investors in Estonia, and Dutch Telecom has recently won the bidding -- together with Swiss Telecom -- for a 27 per cent stake in the Czech national

operator SPT Telecom.⁷⁷ In the creation of cellular phone networks, foreign investors totally dominate the market, providing governments with major concessions in return for licences to operate networks (ECE, 1993, pp. 91-93).

In the primary sector, most of the actual and committed FDI is geared towards the development and exploitation of the vast energy and mineral reserves of some countries of the region. Although most of these projects, in particular in the Russian Federation and the Asian republics of the CIS, have not yet entered the realization stage, the potential for FDI in this area is huge, given the technological backwardness of the industry in these countries and the capital needed to develop resources to their full potential.⁷⁸

(c) Export performance

Foreign affiliates are beginning to play a role in decreasing the region's trade deficits. Initially they have often widened trade imbalances partly because many of them are primarily marketing affiliates (i.e., meant to support exports by the parent firm), or partly because companies investing in manufacturing usually have to import capital goods before they are fully operational. Because of the one-off character of a good part of FDI-related capital-goods imports, the import bias of FDI activities may, however, be of a short-term nature. More generally, TNCs often have to be firmly established in the host economy to be able to source from the domestic market. McDonalds (Poland), e.g., which sourced only 25 per cent locally in the first months after its establishment in 1992, has increased this share to over 70 per cent due to its successful identification and training of domestic suppliers.⁷⁹ Available data suggest that, beginning with 1993, the FDI contribution to the trade balance of most CEE countries has been positive (ECE, 1994b).

Firms have a number of incentives to locate export-oriented production in CEE, including the proximity to the Western European market, high skills, the availability of natural resources and the still relatively low wages. A most recent example of investment resulting from the first of these incentives is Daewoo's decision to enter a joint venture in Romania and to establish assembly production in Poland and the Czech Republic. Daewoo plans to use its plant in Romania, where it plans to invest \$900 million over the next five years, as a springboard into the European market.⁸⁰

In Hungary, firms with foreign links increased their exports in all industries by 32 per cent over the 1992-1993 period, while domestic firms' exports dropped by 8 per cent (table II.13). In 1992-1993, 22 per cent of foreign affiliates' sales-income came from exports, compared with 13 per cent for all Hungarian enterprises. Exports per employee are more than four times as high in foreign affiliates as in domestic firms and twice as high when it comes to manufacturing. In some industries, the shares of foreign firms in exports are much higher: 70 per cent in the exports of non-metallic products, 60 per cent in that of machinery and equipment and 47 per cent in that of textiles and leather (ECE, 1994b, p. 8). In 1993, 52 per cent of total Hungarian manufacturing exports were accounted for by foreign affiliates (table II.13). The contribution of FDI to exports in Hungary owes much to an outward-oriented economic policy

combined with the establishment of an FDI-friendly environment (Dunning and Rojec, 1993, p. 63). The Government followed that route when adopting policies both to encourage high value-added exports and to attract FDI (ECE, 1994b, p. 43). Everything considered, foreign firms in Hungary are clearly more export-oriented than domestic firms.

A similar pattern seems to hold true throughout the other Visegrád countries. In Poland, the average share of exports in sales for foreign affiliates was 15 per cent in 1993 (ECE, 1994b). The corresponding share for domestic firms was only 10 per cent. The largest foreign firms were even more export-oriented, with an export share of 22 per cent. In industries like automotive production and communication equipment, the export share of foreign firms was much higher (by value, 89 and 84 per cent, respectively). In some cases, former totally domestic market-oriented firms became highly competitive exporters through FDI. For example, prior to its 1990 acquisition by Procter & Gamble, the Czech detergent producer Rakona did not export any of its output; it now exports to 14 countries.⁸¹

(d) Restructuring

Enterprises owned by TNCs have, in general, restructured more vigorously than domestically-owned firms, for several reasons. Often, the production of foreign affiliates had to be coordinated with other activities of TNC networks, sometimes in the context of regional core network strategies (UNCTC, 1991). Examples include General Electric's investment in the Hungarian firm Tungsram,⁸² Ford's electrical components manufacturing for cars in Hungary, Audi AG's operations in Hungary, and Asea Brown Boveri's production of electrical engines in Poland,⁸³ all of these now form an integral part of the respective companies' worldwide manufacturing operations. In addition, because of their experience with market economies, TNCs have the knowledge of how to restructure successfully. Indeed, the restructuring of foreign affiliates has begun to pay off. In cases where companies were sold to foreign investors, like the Czech Republic's Skoda or Chkoladovny, the companies were immediately controlled by effective owners, who rapidly began improving enterprise performance. By contrast, in the large Czech aircraft manufacturer Aero, which was privatized through vouchers, ownership remained ill-defined, with neither direct state control nor effective private owners, thus delaying restructuring (Charap and Zemplerova, 1993, p. 12). In Hungary, Tungsram, which went through heavy restructuring, including a cut of 8,500 jobs after it was acquired by General Electric, has now started to show results. The affiliate now produces energy-saving lights for General Electric's worldwide markets -- a product for which it had formerly no technology -- and turned its serious losses into a small profit in 1993. Consequently, Tungsram recruited about 1,000 new employees in 1994.⁸⁴ This preservation through FDI is even more apparent in the already mentioned case of Daewoo's joint venture with the Romanian car producer Olcit: Daewoo projects to increase the workforce from today's 3,900 to 6,200 by 1998, turning around the plant's negative employment trend over the past five years.⁸⁵

However, restructuring has had several painful side-effects, the most apparent being vast lay-offs. The reduction in workforces is partly due to large-scale overstaffing during the years before the transition. As companies found themselves operating under market conditions, they

had to cut excess staff. To a large extent, therefore, the lay-offs are more of a transition effect than a FDI effect. However, restructuring of foreign-owned affiliates due to coordination with their parent firms' global strategies also plays a role.

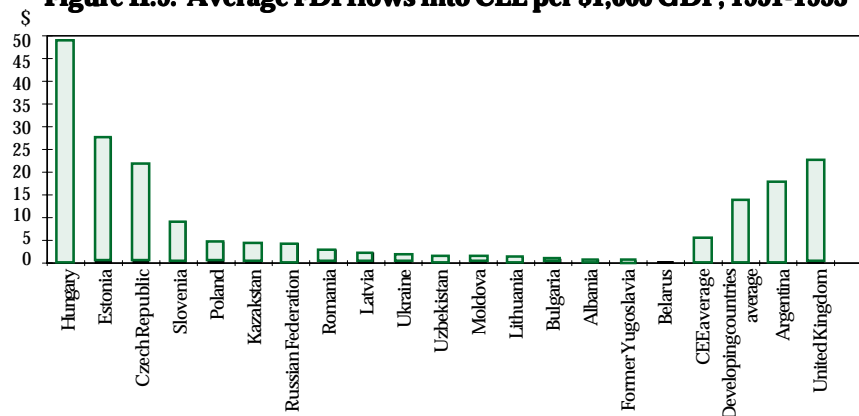
As a result of the above, FDI in CEE countries does not generally generate jobs when it comes to acquisitions. Privatization through FDI has also been generally connected with a sharp reduction in employment (Dunning and Rojec, 1993, p. 23). This has made it hard for image-conscious TNCs (UN-TCMD, 1992b) to satisfy public opinion as lay-offs are, of course, painful for individuals as well as for society as a whole. In the long run, however, it has become evident that vigorous restructuring is necessary in order to restore firms to competitiveness. In fact, FDI can have a stabilizing effect on firms enabling them to survive the "shock" of transition. By contrast, domestic firms are sometimes paralysed by this shock, as it threatens their very survival, thus hindering their adjustment to a market economy (Estrin, Gelb and Singh, 1993, p. 11).

Conclusions

Many foreign affiliates in CEE are performing above average, in terms of productivity, export performance and restructuring. In some cases, notably in Hungary, FDI has become a leading element in the transformation process, contributing significantly to capital formation (25 per cent of gross investment in Hungary) (table II.11). In fact, when measured in terms of average FDI inflows (1991-1993) per \$1,000 GDP, Hungary and Estonia register higher shares than the United Kingdom or Argentina, with the Czech Republic only slightly below the latter (figure II.9). These are also the countries that registered positive GDP growth rates in 1994. However, in a number of countries, particularly in Poland and Slovenia, positive GDP growth rates have not yet been matched by increased FDI inflows. In those countries, FDI appears to be lagging behind the economic recovery. As these countries maintain their recovery, and others follow suit, they are likely to attract more FDI.

In those countries in which FDI has already been sizeable, it has helped to build up international competitive industries in areas where they would face difficulties if they were to rely solely on domestic firms. The enhanced competitiveness of the automotive industry in the

Figure II.9. Average FDI flows into CEE per \$1,000 GDP, 1991-1993



Source: UNCTAD, Division on Transnational Corporations and Investment, based on International Monetary Fund balance-of-payments tape, retrieved in June 1994 and UNCTAD, 1994a.

Visegrád countries is a good example, as is the telecommunications industry in a number of countries in the region.⁸⁶ In addition, FDI constitutes the most feasible form of obtaining foreign capital as the stock markets in the region are generally underdeveloped and unstable, discouraging portfolio investment.⁸⁷ Successful investments can lead to sequential investments by the same firms and can encourage other foreign firms to invest as well, as they open up attractive markets for suppliers and build confidence in the economy. In other words, FDI can start a virtuous circle that leads to larger amounts of FDI. Host economies and domestic firms benefit from this effect, especially in the industries and economies that have so far received the bulk of FDI. The impact of FDI will in all likelihood increase, as planned and committed FDI projects are actually implemented.

At the same time, FDI in CEE remains small by international comparison, and the CEE region cannot rely solely on foreign firms to improve its overall economic situation. Moreover, a combination of factors -- disappointment after excessive expectations, the harshness of the privatization process, sovereignty sensibilities -- has led to an uneasiness towards foreign economic involvement in a number of countries (box II.13), exacerbated by a number of negative side-effects that can be associated with FDI. Such side-effects include restructuring (such as lay-offs and the closing of production lines that are perceived profitable by the public at large), acquisition of monopoly power and the negotiation of market restrictions. The countries of the region, as well as TNCs, have to deal consciously with legitimate concerns if they are to mutually benefit from foreign participation.

In order to improve the efficiency of their firms, it is important for countries of the region to expose them to increased competition not only through appropriate domestic reform and competition in the domestic market (including from FDI), but also, eventually, to permit their domestic firms to insert themselves actively -- and competitively -- in world markets and the emerging integrated international production system by undertaking their own FDI (see chapter VII). Companies of the region have, to a limited degree, already emerged as outward investors in their own right, despite numerous legal and regulatory constraints.

Box II.13. An FDI backlash?

Negative reactions to FDI ("selling off crown jewels", "deindustrialization", etc.)^a are apparent throughout the region, but are most evident in the Visegrád countries. A recent example in the Czech Republic is the protest over Volkswagen's plans to reduce production at the Skoda plant. After protests, not only from the local unions but also from the Government, Volkswagen agreed to moderate the cuts.^b Sometimes a negative attitude towards FDI has hindered privatization deals. When, for example, the Italian company Marucci tried to acquire the pharmaceutical producer Sevac, the Government of the Czech Republic stopped the deal arguing that its strategic importance made it unsuitable for privatization.^c This reaction derives to a large extent from the experience of the national airline CSA with the participation of Air France. Air France pulled out of a strategic alliance in March 1994 after disagreements over the future of CSA. This has made CSA reluctant to seek another partner, even though the loss-making airline was in need of fresh

/...

(Box II.13, cont'd)

capital.^d This incident may also have induced France Telecom to play only a secondary role in a consortium bidding for the privatization of the Czech teleoperator SPT Telecom. Fears about too strong a German influence may also have led Deutsche Telekom to involve Ameritech, a United States regional Bell company, in its effort to take a stake in the company.^e

Even though signs of a backlash appear to be strongest in the Czech Republic, the same phenomena can be observed in other Visegrad countries. In Hungary, for example, the privatization of the hotel group "HungarHotels" through foreign investors was eventually cancelled by the Hungarian Government. It overruled a sales agreement between the privatization agency and a United States consortium, arguing that the price was too low.^f In Poland, the most apparent backlash reaction has been protests from local unions against FIAT's attempt to restructure the automobile producer FSM which also involved a two-months strike.^g

Foreign firms are often accused of "cherry-picking" in the privatization process (as in the above-mentioned case of HungarHotels), of "trash" production (producing outdated goods, impossible to sell in any market but the CEE's) and of making the countries too dependent on foreign firms. The latter has resulted in government attempts to diversify foreign participation by nationality (the Czech Republic, e.g., tries to attract investment from the United States as a counterweight to investments from the European Union, particularly from Germany; Poland also tries to attract investors from the United Kingdom, in order not to become too dependent on Germany),^h which already had an impact on foreign investors' behaviour.^e For all these reasons, a number of countries have become more cautious towards FDI in general.

^a For example, according to Jerzy Strzelecki, the then Polish Under-Secretary of State in the Ministry of Privatization, arguments about "selling off the family silver" have been common in Poland; cited in Ray Bashford and Anthony Robinson, "Survey of Poland", *Financial Times*, 17 June 1993.

^b Joe Cook and Andrew Fisher, "VW eases concern on Skoda cuts", *Financial Times*, 24 October 1994, p. 21; and Kevin Done, "Harmony under the bonnet", *Financial Times*, 21 November 1994, p. 17.

^c "Western investment: foreign affairs", Health care industry survey, *Business Central Europe*, 2, 16 (November 1994), p. 40.

^d Vincent Boland, "CSA adopts a new flight plan", *Financial Times*, 24 November 1994, p. 9.

^e Nicholas Denton, "'Prejudice' changes line-up in Czech telecom bit", *Financial Times*, 9 January 1995, p. 13.

^f Virginia Marsh and Anthony Robinson, "Hungary risks fury over hotel sell-off", *Financial Times*, 16 November 1994, p. 8.

^g "Small is beautiful", Automotive survey, *Business Central Europe*, 2, 8 (February 1994), pp. 34-35.

^h Anthony Robinson, "Poland bids for improved UK trade and investment", *Financial Times*, 10 November 1994, p. 5.

Notes

- ¹ Large increases in investment inflows in the United States in 1993 and 1994 concurred with an increase of 41 per cent and 93 per cent, respectively, in the value of mergers and acquisitions of

- United States companies by foreign companies. "Cross-Border M&A", *Mergers and Acquisitions*, 29, 6 (May/June 1995), p. 61.
- ² The United States invested \$1.3 billion in Chile -- a prospective member of NAFTA -- in 1994, compared with only \$106 million in 1992 (United States, Department of Commerce, unpublished data).
 - ³ Based on 158 major Japanese companies surveyed by Nihon Keizai Shimbunsha in August 1994. Foreign employment of these companies is expected to have increased by some 6 per cent in 1994 and by 11 per cent in 1995, while domestic employment is expected to have declined by 0.6 per cent in 1994 and 0.8 per cent in 1995. *Nihon Keizai Shimbun*, 29 August 1994. Another survey conducted by the Export-Import Bank of Japan that 54 per cent of 369 respondents (three-quarters of respondents in the electronic assembly and electrical-parts industries) intended to increase outward FDI as a result of the yen appreciation (Tejima, 1995, p. 93).
 - ⁴ Survey of the Export-Import Bank of Japan in the "The outlook of Japanese foreign direct investment based on the EXIM Japan FY 1994 survey", *Journal of Research Institute for International Investment and Development*, 21, 1 (January 1995), p. 17. This survey is the basis for Tejima, 1995.
 - ⁵ Bank of Japan, *Balance of Payments Monthly*, 333 (April 1994), p. 85.
 - ⁶ Data on cross-border mergers and acquisitions reported here include all investments that result in the investor, located in one country, holding more than 50 per cent of the outstanding voting securities of a business located in another country. Only imperfect comparisons can be made between cross-border acquisitions and FDI flows because the data are not strictly comparable. For further explanations, see UNCTAD-DTCL, 1994a, chap. I.
 - ⁷ It may be noted that cumulative FDI flows from Japan to South, East and South-East Asia and the Pacific, according to approvals data, amounted to \$66.5 billion as of fiscal year 1993 (data from Japan, Ministry of Finance).
 - ⁸ The share of the developed countries in Japan's approved/notified outward FDI stock increased from 45 per cent in fiscal year 1980 to 54 per cent in fiscal year 1986 and 69 per cent in fiscal year 1994; the share of the United States increased from 24 per cent to 34 per cent and to 42 per cent, and that of Western Europe from 12 per cent to 14 per cent and to 19 per cent, respectively (data from Japan, Ministry of Finance).
 - ⁹ For example, the share of European Union in outward FDI stocks rose from 37 per cent in 1982 to 60 per cent in 1992 for France, 39 per cent in 1980 to 46 per cent in 1993 for Germany, 30 per cent in 1984 to 44 per cent in 1993 for the Netherlands and 21 per cent in 1981 to 32 per cent in 1993 for the United Kingdom; and the proportion of the combined FDI flows from these four countries that went to the European Union, rose from 34 per cent in 1985-1989 to 59 per cent in 1990-1993 (UN-TCMD, 1993a and UNCTAD-DTCL, FDI database). As to the share of the United States in outward FDI stocks, it increased from 28 per cent to 35 per cent between 1981 and 1993 in the case of the United Kingdom.
 - ¹⁰ South, East and South-East Asia and the Pacific accounted for 25 per cent, 24 per cent, and 35 per cent of the outward FDI stocks in developing countries of Germany, Netherlands and United Kingdom, respectively, in 1992, and 24 per cent of the outward FDI stock of France in 1991. The comparable shares of Latin America in the FDI stock in developing countries of the four countries were 55 per cent, 24 per cent, 53 per cent and 40 per cent, respectively. In comparison, the shares of South, East and South-East Asia and the Pacific in the FDI stock in developing countries of Japan and the United States in 1992 were 51 per cent and 24 per cent, respectively, and the shares of Latin America, 38 per cent and 68 per cent respectively (UNCTAD-DTCL, FDI database).

- 11 *APEC Economic Leaders' Declaration of Common Resolve* (Bogor, 15 November 1994), mimeo., para. 6. For a critique, see Graham, 1994.
- 12 Includes Japan, data for which are not separately available.
- 13 *Nihon Keizai Shimbun*, 16 July 1994 (Tokyo).
- 14 The data on GDP and population for 1993 are from UNCTAD Secretariat and United Nations Population Division, respectively.
- 15 Data provided by the Ministry of Foreign Trade and Economic Co-operation of China.
- 16 A decline might occur if investors are influenced by new tax policies (which have reduced preferential tax treatment for foreign affiliates) and also because of tighter credit policies in several industries (such as real estate) to control overly rapid growth, which has led to increases of more than 20 per cent in inflation in major cities of China.
- 17 As regards Indonesia, the new regulations allow 100 per cent foreign ownership of local enterprises for 15 years and require only a 1 per cent divestment afterwards. In joint ventures, local firms are now required to hold only 5 per cent of ownership, a substantial drop from 20 per cent in the past. Previously restricted industries such as transportation, telecommunications and power are now open to foreign firms. In the case of Thailand, previously restricted industries such as advertising, garments, certain types of construction and engineering work are to be opened to FDI. See "The year of doing business", *Far Eastern Economic Review*, 1 September 1994, "All's fair" and "Just how liberal?", *Far Eastern Economic Review*, 17 November 1994.
- 18 Paul Taylor, "Writing is on the wall for controllers", *Financial Times*, 8 November 1994, p. 6.
- 19 Victor Mallet, "World's car makers prefer the Thai tiger", *Financial Times*, 9 November 1994, p. 4.
- 20 *Nihon Keizai Shimbun*, 11 August 1994 and 24 March 1995.
- 21 Increases in FDI in the services sector not only reflect the growing importance of services-related activities in national economies but are also due to liberalization in this sector (e.g., relaxation of regulations in the retail industry in 1993 and infrastructure construction in 1994 in the Republic of Korea and the financial services industry in Taiwan Province of China in recent years).
- 22 For the purpose of this section, West Asia is broadly defined to encompass the following economies: Bahrain, Cyprus, Egypt, Islamic Republic of Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Palestinian Territory (West Bank and Gaza Strip), Qatar, Saudi Arabia, Syrian Arab Republic, Turkey, United Arab Emirates and Yemen. According to the country classification of the UNCTAD Secretariat, Egypt is included in Africa and Israel is placed in the developed country group. Therefore, the country grouping of West Asia in this section is different from that used elsewhere in this Report. Egypt, although an African country, is included in this discussion because of the relevance of this country to the topic addressed.
- 23 Population data are from United Nations Population Division and GDP data from the UNCTAD Secretariat.
- 24 Ibid..
- 25 D. Davis, "Lebanon will recover with peace", *Jerusalem Post*, 18 November 1993, p. 14.
- 26 For discussion, see Middle-East Economic Survey, 1994; Israel Investment Authority, 1994; and R.S. Greenberger, "Desert bloom? Syria loosens grip on economy, enjoys a post-Soviet bloom", *Wall Street Journal Europe*, 6 January 1994, p. 1.
- 27 On Jordan, see P. Dougherty, "Jordan: soft steps on the privatization road," *Middle East Economic Digest*, 20 January 1995, p. 23; on Islamic Republic of Iran, see "Special report: Iran", *Middle East Economic Digest*, 10 February 1995, pp. 12-15; and on Turkey, see J. Bodgener, "Turkey:

privatisation plan starts to roll”, *Middle East Economic Digest*, 20 January 1995, p. 31; see also Feiler, 1995.

- 28 These estimates include FDI flows to tax havens such as Bermuda and the Virgin Islands. If flows to tax haven economies are excluded, the regional inflows for 1993 and 1994 are \$15.9 billion and \$15.5 billion, respectively.
- 29 These shares exclude tax havens.
- 30 Data for the United States were supplied by the United States, Department of Commerce, Bureau of Economic Analysis, unpublished. Data for Canada are from Canada, Statistics Canada, 1994.
- 31 Data supplied by the United States, Department of Commerce, Bureau of Economic Analysis, unpublished.
- 32 The value of Mexican imports by United States foreign affiliates in total imports from the United States has increased, but the share of intra-firm imports in these has decreased slightly between 1989 and 1992. One possible explanation for this decrease could be that the liberalization of domestic sourcing requirements in Mexico has allowed United States foreign affiliates to increase their sourcing from their established unaffiliated supplier networks in the United States.
- 33 The amount of Chilean FDI in the United States is so small that it does not appear separately in the United States statistics; it is included in “other” sources of FDI into the United States from South and Central America, which together accounted for \$452 million in 1994. United States, Department of Commerce, Bureau of Economic Analysis, unpublished data.
- 34 United States, Department of Commerce, Bureau of Economic Analysis, unpublished data.
- 35 Pilling, David, “The GATT-plus principle”, Mercosur II survey, *Financial Times*, 25 January 1995, p. 13.
- 36 Data for Mexico are based upon Mexico, SECOFI, 1994, table 5. Only the first six months of 1994 are covered for Mexico. Data for the United States are based upon United States, Department of Commerce, Bureau of Economic Analysis, unpublished data. FDI inflow data exclude Bermuda, British Virgin Islands, Mexico, the Netherlands Antilles and the Caribbean. The latter are excluded to avoid distortions in the FDI data associated with tax havens.
- 37 United States Department of Commerce, Bureau of Economic Analysis, unpublished data.
- 38 See *Business Asia*, 115, 12 (December 1994), pp. 10-13.
- 39 See chapter I.
- 40 For a detailed discussion of FDI in Africa, including policy issues, see UNCTAD-DTCI, 1995a.
- 41 J. Greenwald, “Black gold rush”, *Time*, June 1994, pp. 36-41.
- 42 *International Herald Tribune*, 6 December 1994, p. 18.
- 43 UNCTAD-DTCI, 1994a, table II.6, p. 50; and United States, Department of Commerce, *Survey of Current Business*, various issues.
- 44 On privatization programmes in Africa, see “Privatization in Sub-Saharan Africa”, in *Africa Financing Review* (September/October 1994), pp. 14-16; P. Lietard, “Privatization and Africa”, *Africa Business* (July/August 1994), pp. 34-35; and “Afraid to let go”, *Infrastructure Finance* (August/September 1994), pp. 69-72. Sources also include The World Bank’s private infrastructure project database.
- 45 For details, see UNCTAD-DTCI, 1995a and 1994b.
- 46 International Monetary Fund, 1994a, p. 169. Data are a projection by the International Monetary Fund.

- ⁴⁷ For the purposes of this *Section*, the Central and Eastern European region is broadly defined to include the following countries: Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Georgia, Hungary, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Republic of Moldova, Poland, Romania, Russian Federation, Slovakia, Slovenia, Tajikistan, Turkmenistan, Ukraine, Uzbekistan, the former Yugoslav Republic of Macedonia and the Federal Republic of Yugoslavia. As a memorandum item, references to the former Czech and Slovak Federal Republic, the former USSR, and the former Yugoslavia are included on occasion. The UNCTAD Secretariat classifies Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan as developing economies in Central Asia and the countries of the former Yugoslavia as developing economies in Europe. The classification of Central and Eastern Europe in this section is therefore different from that used elsewhere in this *Report*.
- ⁴⁸ "Oil's 'deal of the century' is still in the pipeline", *Washington Post*, 12 March 1995, p. 5..
- ⁴⁹ For the impact of the "Europe Agreements" between the European Union and the Visegrád countries on FDI, see Agarwal (1994).
- ⁵⁰ For an overview and discussion of privatization schemes, see, for example, Rondinelli (1994), Kiss (1993) and UNCTAD (1994b).
- ⁵¹ The majority of TNCs from CEE emerged during the past 30 years, even though some Eastern European enterprises operating in the West have pre-dated this period (UN-TCMD, 1992a). The former USSR, for example, re-established Russian enterprises dating from the tsarist period not long after the October revolution, among others, the two largest Russian banks operating abroad today. Another example is Tungsram of Hungary, which was operating internationally already before the Second World War (Hamilton, 1986). Nevertheless, outward FDI from CEE -- principally by foreign trade organizations -- is essentially a phenomenon of the period of the late 1960s (UN-TCMD and ECE, 1992).
- ⁵² Lucy Hooker, "A welcome for foreign investors", *International Herald Tribune*, 5 December 1994, p. 14.
- ⁵³ Nicholas Denton and John Thornhill, "Ambitious but a bit frightening", *Financial Times*, 10 January 1995, p. 15.
- ⁵⁴ "Something clunky out east", *The Economist*, 18 February 1995, pp. 84-87.
- ⁵⁵ The IMF reports \$40 million in 1990 and \$17 million in 1992 (and an estimated \$70 million in 1994) for outflows of FDI from the region (but only for the countries for which data are available). The data differ from those in table II.12 because the latter were compiled on the basis of inflow data into the OECD countries.
- ⁵⁶ Information obtained from the Hungarian Ministry of Industry and Trade and the Polish Foreign Investment Agency.
- ⁵⁷ "Intra-regional investment", Foreign investment survey, *Business Central Europe*, 2, 10 (April 1994), p. 47.
- ⁵⁸ "Facts and figures", *Business Central Europe*, 3, 22 (June 1995), p. 64.
- ⁵⁹ See the chapter on Central and Eastern Europe in UNCTAD-DTCI (1994a). See also EBRD (1994).
- ⁶⁰ Strictly speaking, performance should be compared within industries and, in fact, by pairing similar firms. Data limitations, however, make this impossible.
- ⁶¹ Calculation based M.B. Christie and Associates, *Resources 300*, October 1994 (Prague: Resources).

- 62 The ratio is 1.3 million Czech Koruna in sales per employee for foreign affiliates to 0.7 million Czech Koruna in sales for domestic firms. Ibid..
- 63 "Month in review", *Business Central Europe*, 2, 14 (September 1994), p. 25.
- 64 Dana Milbank, "New competitors. East Europe's industry is raising its quality and taking on the West", *Wall Street Journal*, 22 September 1994, p. 1.
- 65 Jay Branegan, "White knights need not apply", *Time Magazine*, 31 October 1994, pp. 33-39.
- 66 Ibid., p. 39.
- 67 "Small is beautiful", Automotive survey, *Business Central Europe*, 2, 8 (February 1994), pp. 34-35.
- 68 Jay Branegan, "White knights need not apply", *Time Magazine*, op. cit..
- 69 Joe Cook and Andrew Fisher, "VW eases concern on Skoda cuts", *Financial Times*, 24 October 1994, p. 21; and Kevin Done, "Harmony under the bonnet", *Financial Times*, 21 November 1994, p. 17.
- 70 "Automotive survey", *Business Central Europe*, 2, 8 (February 1994), pp. 31-45; and Anthony Robinson, "Survey of world car industry", *Financial Times*, 9 September 1993.
- 71 Terry Schwartzberg, "Turnaround year ends with modest growth", *International Herald Tribune*, 5 December 1994, pp. 13-15.
- 72 Ibid.; "Falling into place", Banking survey, *Business Central Europe*, 2, 15 (October 1994), p. 40; "At your service", A survey of professional services, *Business Central Europe*, 2, 17 (December 1994/January 1995), pp. 35-48.
- 73 *Business Eastern Europe*, December 1993, p. 7.
- 74 "Insurance survey", *Business Central Europe*, 1, 6 (November 1993), pp. 35-47, especially p. 37.
- 75 Ibid., pp. 35-36.
- 76 Ibid., and "Banking survey", *Business Central Europe*, op. cit..
- 77 Vincent Boland and Nicholas Denton, "Czech telecom stake sold for record \$1.5bn", *Financial Times*, 29 June 1995, p. 13.
- 78 "The engine of growth", Foreign investment survey, *Business Central Europe*, op. cit., p. 46.
- 79 Peggy Simpson, "McDonald's Polish suppliers: going local", *Business Central Europe*, 3, 21 (May 1995), p. 34.
- 80 Kevin Done, "Daewoo targets European market", *Financial Times*, 5 May 1995, p. 4.
- 81 Blomberg Business News, "Central Europe seduces the West", *International Herald Tribune*, 2 December 1994, p. 10.
- 82 Tim Smart and Ken Kasriel, "Tungsram turns a corner", *Business Central Europe*, 2, 9 (March 1994), p. 25.
- 83 Anthony Robinson, "Profitable vision", Survey on Poland, *Financial Times*, 18 March 1994, p. II.
- 84 Lucy Hooker, "A welcome for foreign investors", *International Herald Tribune*, 5 December 1994, p. 14.
- 85 Kevin Done and Virginia Marsh, "Koreans take the Romanian road", *Financial Times*, 5 May 1995, p. 4.
- 86 Lucy Hooker, "The whole world watches as telephones go private", *International Herald Tribune*, 5 December 1994, p. 15.
- 87 Michael Kapor, "Boom, bust and good-bye", *Business Central Europe*, 3, 21 (May 1995), pp. 56-57.

PART TWO

**FOREIGN DIRECT INVESTMENT,
FIRM COMPETITIVENESS AND
COUNTRY PERFORMANCE**

CHAPTER III

ACCESS TO RESOURCES

Introduction

The economic performance of countries is determined, to a significant extent, by their ability to generate internally key productive resources and/or obtain them from external sources. Although the relative importance of the different factors that interact in the production of goods and services and the generation of incomes may vary among countries, financial and physical capital, technology, technological, organizational and managerial capacities and the quantity and quality of the workforce are central factors determining output and its growth. Building up assets and capabilities for production is particularly important for developing countries, where stocks of created assets -- especially physical and human capital and technological capacities -- are well below those of developed countries.

In the globalizing world economy of today, international production through foreign direct investment (FDI) and other modalities, as organized by transnational corporations (TNCs), expands the range of opportunities available for countries to access the created assets necessary for expanding production capabilities. Transnational corporate systems, comprising parent firms and their domestic and foreign affiliates, are generators of financial capital for investment; technologies, innovatory capacities and skills; and organizational and managerial practices and capabilities, all of which are important for the competitiveness of their own production systems. The creation of these resources by TNC systems is the outcome of the interaction between the proprietary assets of TNCs and the location-specific assets provided by the countries in which TNCs operate.

Transnational corporate systems are also conduits for the transfer of productive assets among the firms comprising TNC systems. These member firms have privileged access to the resources created within such systems, to the extent that they require such access for performing their role within their particular TNC system. Transnational corporations, because of their organizational and managerial capacities, employ the resources generated internally worldwide wherever they yield the highest return and maximize the competitiveness of the system as a whole. Firms outside TNC systems may also have advantageous access to resources generated by TNCs, through linkages, externalities or spillover effects.

The resources associated with FDI and the attributes embedded in it can contribute to enhancing the economic performance of the countries in which TNCs operate. Indeed, it is an advantage of FDI that it provides a package of tangible and intangible wealth-creating assets. These assets become available directly for use in productive activities in host economies and are further amplified by externalities and spillovers that strengthen the resource base and production capabilities in such economies (box III.1). Similar effects occur in home countries to the extent that FDI leads to flows of resources, within TNC systems, to those countries. However, as indicated below, the effects on host and home countries are not symmetric.

Box III.1. Transnational corporations, access to resources and implications for the performance of countries: the semiconductor industry

The semiconductor industry offers a good illustration of TNCs providing access to tangible and intangible resources that are becoming increasingly important for the performance of countries, particularly in new and globalized industries. Semiconductors are used as inputs in a variety of areas in the electronics industry, including consumer products, data processing, telecommunications and industrial goods. The world semiconductor market has a high growth potential and is estimated to reach \$270 billion in sales by the year 2000.^a The principal manufacturers in the semiconductors industry are TNCs based in developed countries, such as Intel (United States) and Toshiba (Japan); but there are also a few TNCs from developing countries, such as Samsung (Republic of Korea) and Acer (Taiwan Province of China).

Transnational corporations have played a major role in providing, first, their own member firms and then host countries access to various resources in the semiconductor industry:

- ***Transnational corporations help host economies develop innovative capabilities through the globalization of research and development (R&D) facilities and training of employees.*** Innovation is particularly important for TNC competitiveness in semiconductors, as evidenced by the high R&D expenditures of these firms.^b While core innovation is generally undertaken at corporate headquarters, R&D centres of semiconductor TNCs abroad engage in selective or applied research, e.g., product customization. For example, Philips Electronic N.V. (Netherlands) opened a research facility in Briarcliff Manor, New York, that accounted for about 15 per cent of all research expenditures by Philips in 1994 (United States Congress, OTA, 1994); Intel transferred microprocessor-unit technology for the production of Pentium chips to its affiliate in Ireland; NEC transferred memory-chip technology to its affiliate in the United Kingdom; and SGS-Thomson transferred the same to its affiliate in Singapore.

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(Box III.1, cont'd)

Technology transfer has also taken place among foreign affiliates: the Singapore affiliate of Conner Peripherals (United States) transferred new processes to Conner's affiliates in Italy, Malaysia and the United Kingdom (Hobday, 1994); and Intel relied on senior engineers from its affiliate in Malaysia to help in the establishment of a highly automated plant in Arizona (Ernst, 1994a).

- ***Transnational corporations provide host-country firms access to advanced technology.*** Technology diffusion to the local economy by semiconductor TNCs usually takes place via foreign affiliates or non-equity arrangements. In general, local suppliers benefit from contracts with foreign affiliates of semiconductor TNCs requiring high-quality inputs that meet advanced technical specifications either in vertically integrated structures (e.g., corporate conglomerates based in the Republic of Korea) or in looser structures (e.g., production networks based in Taiwan Province of China). For example, an alliance between Texas Instruments (United States) and Acer (Taiwan Province of China) in 1989 for the manufacture of 4 megabit dynamic random access memory chips provided for a technological upgrading of Acer's domestic facilities that also trickled down to the entire Taiwanese electronics industry via Acer's numerous forward and backward linkages.^c Similarly, Japanese TNCs such as NEC, Toshiba and Fujitsu have agreed to share new manufacturing processes and chip design know-how with indigenous semiconductor producers in Taiwan Province of China and Singapore (Ernst, 1994b).

Linkages to and spillovers from the semiconductor industry also help spread technology to other segments of the electronics industry and even industry in general. For example, in the Republic of Korea, an important indirect transfer occurred when production managers left foreign affiliates to join or create their own companies (Bloom, 1992). Substantial spillover effects have also occurred in the Republic of Korea through original-equipment-manufacturer agreements between different segments of the electronics industry (Ernst, 1994c). Spillover effects are easily transmitted in the case of vertically integrated semiconductor TNCs; for NEC, Toshiba, Samsung, Hyundai or Siemens, semiconductor activities represent a small part of the whole production, but one that is instrumental to upgrading related segments in the electronics industry. In Malaysia, spillovers have occurred through training: for example, the Penang Skills Development Centre, established jointly by the electronics industry comprising mainly foreign affiliates of semiconductor TNCs, and the Government, provides training courses not only for its member firms but for the entire manufacturing sector (Salleh and Meyanathan, 1993, p. 13).

- ***Transnational corporations also provide access to capital.*** Large financial resources are required by TNCs not only for investing in the production of semiconductors -- the costs of production double with each generation of microchips (about every three years) -- but also for design and R&D activities. In the case of Intel, for example, R&D expenditures accounted for about 40 per cent of the company's investment expenditures in 1992 and 1993.^d For Japanese semiconductor affiliates in East Asia, for example, the majority of funds required for their establishment and expansion were obtained from their parent firms; only after 1990 have reinvested earnings been used as a source of funds for those affiliates in Malaysia and Thailand (Ernst, 1994b).^e

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This chapter looks at the contribution of access to key resources for the competitiveness of TNC systems, the ultimate objective being to examine implications for the performance of host and home countries. The focus is on capital (section A), technology and innovatory capacity and skills (section B) and organizational and managerial practices (section C).¹ The discussion for each resource area begins with a consideration of the generation and transfer of the assets involved within TNC systems and proceeds to discuss the linkage and other effects on firms outside such systems; in both cases the discussion examines effects on the competitiveness of TNC systems and other firms. Finally, the discussion of each resource area explores the implications of inward and outward FDI for the economic performance of countries.

A. Capital

The financial capital generated, mobilized, transmitted and invested by transnational corporate systems is one of FDI's principal contributions to a country's output or productivity growth. Transnational corporation systems generate financial capital internally because not all of their profits are distributed to shareholders as dividends; some are retained and reinvested, adding to the firm's capital stock (shareholders' equity). Transnational corporations can also raise capital from outside their systems, or provide it to other firms as needed. They are

(Box III.1, cont'd)

The type of linkages semiconductor TNCs create with the host economies and, hence, the access to resources provided by them vary, depending on the way these TNCs organize their international networks and share activities with their affiliates. Japanese semiconductor TNCs tend to keep the higher value-added activities at home, and shift abroad mainly the labour-intensive parts of the production processes. By contrast, United States TNCs have long been developing globally integrated production networks, and to a large extent have moved abroad higher value-added activities (Ernst, 1994b). These differences naturally impact the nature and extent of access to resources provided by the respective TNCs through linkages to indigenous firms in the host economies.

Access to resources provided by semiconductor TNCs has had direct and indirect impacts on the competitiveness of firms and the economic performance of countries as witnessed by the growing market share of firms, domestic companies as well as foreign affiliates, that are located in developing countries. Another indication of the increased competitiveness of national firms derived from accessing resources provided by semiconductor TNCs is the fact that companies such as Apple, Compaq, IBM and Hewlett-Packard were able to set up international procurement offices in China, Hong Kong and Taiwan Province of China, from where they bought more than \$1.4 billion worth of electronics products in 1994.^f

- a *Electronique International Hebdo*, 29 June 1995, p. 6.
- b "The global 1000", *Business Week*, 1 July 1994, pp. 73-89.
- c "Inferiority complex", *The Economist*, 1 February 1995.
- d *Industries et Techniques*, 743 (November, 1993), pp. 82-83.
- e *Business Times*, Malaysia, 28 July 1994.
- f *Electronique International Hebdo*, 9 February 1995, p. 16.

conduits for the transmission of this capital among units of corporate systems located in various countries. As such, they play an important role in the international mobilization of savings and the transfer of funds for investment. To the extent that this capital is invested in foreign affiliates, it constitutes FDI, an important source of investment capital in today's world economy (see chapter I).

Section 1 focuses on the ways in which TNC systems generate capital internally and transfer funds within those systems, and the implications this has for the competitiveness of TNCs. Section 2 looks at the ways in which a TNC system interacts with the economies in which it operates by borrowing from, or lending to, indigenous enterprises in those economies, apart from helping to mobilize savings. Section 3 examines the implications of FDI capital flows for the performance of the economies that receive such flows or from which they originate.

1. Generation and transfer within transnational corporate systems

As profit-seeking entities, TNC systems generate financial capital internally in the form of profits, either in the home country by parent firms and their domestic affiliates, or in host countries by foreign affiliates. In the case of United States TNCs, e.g., the net income (a proxy for profits) of parent firms (non-bank) from their operations in the United States was \$39 billion in 1992 (United States, Department of Commerce, 1995, table II.K.1).² Part of the profits generated by parent firms and their domestic affiliates is reinvested at home or abroad, with all firms comprising a TNC system having privileged access to this pool of financial capital.

For all countries that report such data, total profits of foreign affiliates (reinvested and repatriated) amounted to \$99 billion in 1993 (IMF, balance-of-payments tape), or 8 per cent of the global FDI stock that generated these profits. (For United States TNCs alone, total profits -- prior to the deduction of withholding taxes -- arising from the operations of their affiliates abroad were \$57 billion in 1993 (Mataloni, 1995). Over a half was reinvested by the foreign affiliates in their own production; the remainder was repatriated, with part of it distributed to shareholders in the United States in the form of dividends.) If one assumes a similar capacity to generate profits for the rest of the world's FDI stock, then total profits of foreign affiliates worldwide are an estimated \$175 billion. Again, all firms comprising a TNC system have privileged access to these internally generated funds.

Besides generating financial capital for investment, a TNC system also serves as a conduit for the circulation of that capital (and related payments) among its units. Where profits are not reinvested at source, its circulation takes place via equity flows, intra-company loans and repatriated profits:

- Equity capital of TNCs (net) for the 40 countries that report such data was \$80 billion in 1993 (70 per cent of total FDI inflows in those countries).³ For the United States alone, equity capital transferred via its TNC systems was \$31 billion -- \$24 billion from

parent firms to their foreign affiliates and another \$7 billion from foreign affiliates to their parent firms (Mataloni, 1995).

- Intra-company loans (net) for the 41 countries that report such data were \$51 billion in 1993 (37 per cent of total FDI inflows in those countries).⁴ For the United States, intra-company loans excluding interest payments were \$11 billion in 1993: \$15 billion from parent firms to their foreign affiliates and a negative \$4 billion from the foreign affiliates to their parent firms. For the United Kingdom, intra-company loans (net) in 1993 were \$9 billion, or 17 per cent of total inflows; for the Netherlands, the corresponding figure and share, respectively, was \$3 billion and 6 per cent.
- For the 27 countries that report such data, repatriated profits worldwide were \$56 billion in 1993. For the United States, repatriated profits transferred from foreign affiliates to their parent firms were \$27 billion in 1993; for the United Kingdom and Germany the corresponding figures were \$11 billion and \$4 billion in the same year.

The generation of capital by TNC systems through profits and its allocation among the constituent firms of a system aim at increasing the competitiveness of the system as a whole and at ensuring the highest possible returns. Finance generated within TNC systems often constitutes an important source of capital compared with externally raised equity or (long-term) loans. Internally generated capital also allows a certain degree of flexibility in the financing of projects that are important to the firm, but which may face unfavourable terms and conditions from external capital providers.

2. Raising and providing capital outside transnational corporate systems

The liberalization of foreign-exchange regulations and the removal of many restrictions on indigenous stock markets regarding foreign-investor participation (including allowing cross-listings of TNCs); the increasing sophistication and deepening of emerging financial markets; and advances in information and communication technologies have all broadened the range of external financing options available to TNCs. As a result, TNCs have a variety of choices for raising capital externally including, most importantly, host or home-country equity markets, local financial institutions and international capital markets. As long as funds are raised by the parent firm and then transferred to foreign affiliates, the values involved are captured by FDI data. Where foreign affiliates engage in direct borrowing (be it in their domestic markets or elsewhere), the values involved are not reflected in FDI data.

A large proportion of FDI is financed externally. In 1993, around 55 per cent of the investment outlays (the dollar cost of the equity stakes acquired or established) by United States foreign affiliates was financed from external sources, with the remainder being obtained from parent firms or other sources.⁵ About a half of all funds obtained externally by majority-owned foreign affiliates (non-bank) of United States TNCs (non-bank) were raised in host countries in 1992 (United States, Department of Commerce, 1995, table III.C.1). In the case of Japan, funds raised externally financed 58 per cent of total overseas investments in 1992, with funds

obtained from local (host-country) financial institutions accounting for 35 per cent of that total (Japan, MITI, 1994b; see also Tejima, 1995). Externally raised capital appears to finance a larger share of investment funds in developed than in developing countries: issuance of corporate bonds and borrowing from local financial institutions in host developing countries accounted for 42 per cent of investment funds obtained by Japanese foreign affiliates in these countries in 1992; the corresponding share in developed countries was 64 per cent (Japan, MITI, 1994b, pp. 174-179).

Domestic firms in host and home countries can also borrow directly from foreign affiliates or transnational finance corporations. While such borrowing appears to be small overall,⁶ it can be of some importance, e.g., in the case of venture capital. It is often a major source of capital for small start-ups, firms developing or using advanced technology, or ventures carrying high risks. For instance, 3M (United States) has invested \$85 million in 37 venture-capital funds and another \$3-4 million directly in some 20-30 start-ups in the United States.⁷ Kubuota, a Japanese affiliate manufacturing agricultural equipment in the United States, has invested \$123 million in six United States computer-related start-ups.⁸ Inovelf, an affiliate of Elf Aquitaine (France) in the United States was created specifically to spot promising start-ups in the United States.⁹ The interest of TNCs or foreign affiliates in financing new ventures stems from their desire to keep up with state-of-the-art technologies that are usually developed by these firms and which may be too risky to develop in-house, or to exploit commercial opportunities that are not in their line of business.

Foreign affiliates in financial industries can play a special role in the mobilization of savings in countries in which they are located, lending these to both domestic and foreign firms. In developing countries, foreign banks, for instance, often have a reputation that makes them more attractive to local savers, and they often provide services that are unique (Lipsev and Zimny, 1994, p. 326). By receiving such services, advice or information from transnational banks, indigenous firms can gain access to sources of finance that are usually beyond their reach (e.g., international capital markets). Moreover, competition between indigenous and transnational banks and the introduction of new forms of financial intermediation and management techniques (as well as accounting and computerization) by the latter can also induce the former to raise the range and quality of services provided to domestic firms.

By being situated in a number of countries TNCs are in an advantageous position, compared with purely domestic firms, to raise capital from outside their corporate systems because of their ability to exploit interest-rate and cost differentials in different locations; to access and assess information on financial markets of various economies; to spread and diversify risks (including foreign exchange risks) by raising capital in more than one country; and to borrow from national and international institutions and markets on the basis of (often superior) credit rating. Furthermore, foreign affiliates can benefit from an explicit guarantee or implicit backing by their parent firms (e.g., through a "comfort letter" that the parent will not sell the affiliate during the life of a loan) (Pugel, 1981). In the case of Maruti Udyog, an automobile manufacturer in India in which Suzuki (Japan) has a 50 per cent ownership, for example, a public share issue is expected to be offered in India's equity markets to raise capital

for an expansion in production.¹⁰ The plan to raise capital in the local equity market had to receive the stamp of approval of Suzuki, the foreign partner, before launching the issue because that approval was viewed by Maruti Udyog as a guarantee for the issue's success.¹¹ Such support by parent firms can be of crucial importance if, in spite of the good credit rating of a foreign affiliate, its access to international capital markets is limited by the lower credit rating of the host country.

In sum, the ability of a TNC system to access capital worldwide can not only give it better access to capital, but also reduce the cost of such capital and minimize foreign-exchange risks through an international diversification of its debt portfolio (Stonehill and Moffett, 1993), thus enhancing its competitiveness.

3. Implications for country performance

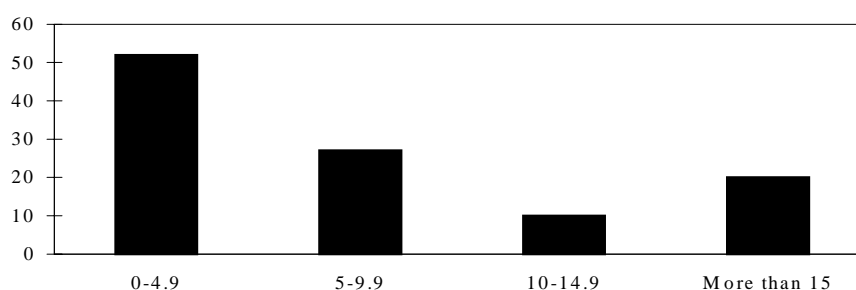
While recognizing, but abstracting from, the fact that FDI is more than just financial capital, this section focuses on how access to capital generated or circulated through TNC systems can affect the performance of the economies involved.

(a) Impact of inward FDI

For recipient economies, an injection of FDI that adds to the capital stock already in place can increase a country's output or productivity through a more efficient utilization of existing resources or by absorbing unemployed resources. It can also induce a series of multiplier effects leading to an expansion of investment by indigenous (unrelated) firms, including through backward and forward linkages and spillovers. However, if FDI is financed by raising funds in host country capital markets, there may be crowding out of investment by indigenous firms.

In most countries, the ratio of FDI inflows to gross domestic fixed capital formation does not exceed 10 per cent (figure III.1), although it can be significantly higher for individual countries (e.g., Belgium and Luxembourg and Singapore) (figure III.2) or industries (e.g., electronics in the Republic of

Figure III.1. The distribution of countries according to the ratio of FDI inflows to gross domestic fixed capital formation, annual average, 1990-1993
(Percentage and number of countries)



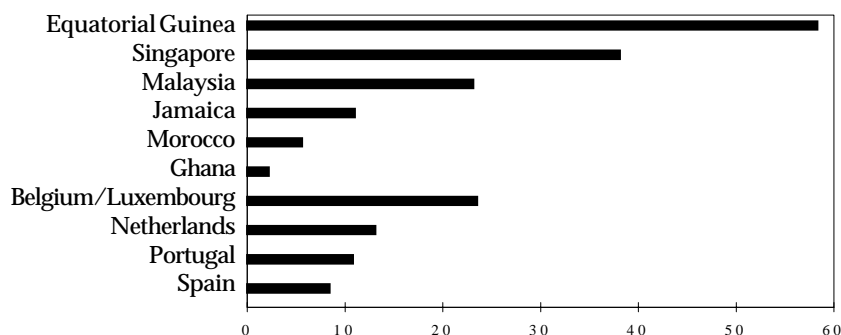
Source: UNCTAD, Division on Transnational Corporations and Investment, estimates based on International Monetary Fund, balance-of-payments tape, retrieved in April 1995 and FDI data base.

Korea; see UN-TCMD, 1992b). The ratio of FDI inflows to *private* domestic capital formation may be considerably higher: e.g., by nine percentage points for the United Kingdom and by 7 points for Colombia during 1988-1992 (UNTCAD-DTCI, FDI data base, and United Nations, 1995). Despite its small contribution to the domestic capital stock, FDI capital is especially important for developing countries, both on account of the diminished flows of other official and private capital in recent years (see figure I.2) and a growing recognition of the need to balance loan and equity capital in private foreign capital inflows.

There are several ways in which inward FDI can add to the capital stock of a recipient country. The most obvious is *greenfield* FDI, i.e., establishing a new business. *Ownership-switching* FDI (e.g., acquisitions or privatizations) may also benefit the capital stock of a host country if the domestic firm that is taken over would have closed down otherwise and, more generally, if its capabilities are improved. In any case, the funds received by host countries from the sale of domestic firms to foreign investors can be reinvested in the host country, thus adding to the existing capital stock.

In developed countries, most FDI is ownership-switching as opposed to greenfield investment. Investment outlays for acquisitions in the United States by foreign firms accounted for nearly 90 per cent of total investment outlays in 1993, although that share was lower in some of the earlier years (table III.1). For the United States (and presumably for other developed countries with similar FDI patterns), the importance of acquisitions suggests that most FDI capital may add only indirectly to the existing capital stock. In developing countries, ownership-switching FDI through acquisitions is less prominent. In the case of United States outward FDI for example, the ratio of the *number* (data on values are not available) of new establishments to acquisitions during 1990-1992 was 0.96 in developed countries compared with 1.8 in developing countries.¹² This is so because there are fewer opportunities in developing countries for acquisitions, or acquisitions may be restricted; and the fact that equity markets, an important medium for acquiring firms, are not fully developed in many developing countries. Hence, the incidence of FDI augmenting the domestic capital stock is probably higher in developing than developed countries. Privatization-related FDI has recently become a more important form of ownership-switching investment for developing countries, although, such FDI overall accounted for less than 10 per cent of cumulative FDI inflows to developing countries over the period 1988-1993 (see chapter I).

Figure III.2. The ratio of FDI inflows to gross domestic fixed capital formation, selected economies, annual average, 1990-1993
(Percentage)



Source: UNCTAD, Division on Transnational Corporations and Investment estimates, based on International Monetary Fund, balance-of-payments tape, retrieved in April 1995 and FDI data base.

Both ownership-switching and greenfield FDI can also induce a further expansion of the domestic capital stock through *sequential* investments to which FDI often gives rise (see, e.g., box II.7). Sequential investments are sometimes triggered by policy liberalization; for example, TNCs with existing foreign affiliates in India have responded to the increase in the permitted foreign ownership threshold by increasing their equity stake. Sequential investments also take place in response to improving host-country conditions or to changing corporate strategies. Some TNCs stagger their investments in newly opened markets in order to test the ground before committing the full amount of capital funds.

Any FDI (greenfield or ownership-switching) may also be accompanied by investments of foreign firms that are associated with the parent firm and which probably would not have taken place in the absence of the initial investment (boxes II.11 and II.12). Such *associated* FDI is typically undertaken by firms that are suppliers of intermediate inputs to foreign investors or distributors of investors' final products (including, in particular, services that are non-tradable). Foreign investors often need associated investors because local firms do not exist, or do not produce up to acceptable standards or because they prefer to purchase inputs from suppliers with long-established ties of confidence and trust. For instance, in the case of Volkswagen's investment in the Czech Republic's automotive firm Skoda, more than 15 foreign-based firms set up greenfield operations tied to that investment, and more than 40 domestic automotive suppliers entered into joint ventures with, or were acquired by, foreign firms.¹³ Similarly, Alfred Engelmann (Germany), an auto-component supplier to Volkswagen in Germany, is considering a joint venture in China, encouraged by Volkswagen, to supply mirrors to that company's automobile plant in China.¹⁴

Such positive effects may be further amplified through multiplier effects. Beyond that, FDI can also act as a catalyst for domestic investment, either by contributing to the mobilization of financial and other resources of indigenous firms or as a signal of confidence and future investment opportunities.

Table III.1. FDI outlays in the United States, 1984-1993

Year	Investment outlays (Million dollars and number)				Ratio of outlay (value) in new establishments to that in acquisitions
	Acquisitions		New establishments		
	Value	Number	Value	Number	
1984	11 836	315	3 361	449	0.28
1985	20 083	390	3 023	363	0.15
1986	31 450	555	7 728	485	0.25
1987	33 933	543	6 377	435	0.19
1988	64 855	869	7 837	555	0.12
1989	59 708	837	11 455	743	0.19
1990	55 315	839	10 617	778	0.19
1991	17 806	561	7 732	530	0.43
1992	10 616	463	4 718	478	0.44
1993	23 055	553	3 126	456	0.14

Source: United States, Department of Commerce, *Survey of Current Business*, various issues.

(b) Impact of outward FDI

Looking at FDI capital flows only, there is an obvious asymmetry between outward and inward FDI as regards their impact on the size of the capital stock of countries. Outward FDI may detract from a home country's capital stock (even if a part of the income received from that investment is repatriated and reinvested). However, looking at the impact of outward FDI capital on the size of the domestic capital stock provides only an incomplete picture. Indirect effects such as investments financed through repatriated profits or brought about because of increased foreign demand for the country's exports have also to be taken into account. Domestic factors of production may also be released for more productive uses when outward FDI takes place, improving long-term performance through economic restructuring.

A central question with respect to the impact of outward FDI on a country's economic performance is whether that investment takes place at the expense of domestic investment. The answer depends partly on how that investment is financed. In the case of United States TNCs, about 20 per cent of the value of foreign-affiliate assets are financed through cross-border capital outflows from the United States (Feldstein, 1994, p. 1). Moreover, if parent firms raise capital in domestic equity markets and, in that process, crowd out indigenous firms, then domestic capital formation might be affected negatively; however, there appears to be little evidence -- at least for selected major home countries -- that the kind of crowding out described above has taken place when TNCs and domestic firms are competing for funds to finance their respective investments (Rao, Legault and Ahmad, 1994, p. 93). On the other hand, the indirect effects of outward FDI on the size of the domestic investment, already mentioned, must be taken into account.

For home countries, the evidence regarding the impact of outward FDI on the size of the domestic capital stock is mixed. In the case of the United States, there is evidence of a strong positive correlation between fixed capital expenditures at home and abroad by United States TNCs (Stevens and Lipsey, 1992), suggesting that foreign and domestic investments are complementary. What underlies that result, however, is a positive relationship between both domestic and foreign fixed capital expenditures and a parent firm's supply of internally generated funds. Although a positive correlation between these two types of expenditures does not indicate a causal relationship between them, this evidence suggests that outward FDI does not necessarily have a detrimental effect on the size of the home country's capital stock. A similar finding for Canada also shows that outward FDI and domestic capital formation are positively correlated. However, that positive correlation breaks down once other factors (e.g., economic activity, profitability and technical changes) are taken into account (Rao, Legault and Ahmad, 1994), reflecting the fact that profit maximizing TNCs may substitute outward FDI for domestic investment. On the other hand, for example, it has been shown that, in the 1980s, large outflows of FDI (mostly to the European Union) from Sweden's TNCs had a negative impact on the size of Sweden's capital stock (Svensson, 1993). In the case of the United States, other studies (Feldstein, 1994) also suggest that outward FDI and domestic investment are at least partial substitutes.

* * *

To summarize, a TNC system raises capital where it is least expensive, including internally, and uses that capital where it is most needed for enhancing competitiveness. The principal direct effects of FDI capital generated or transferred through a TNC system on the economic performance of countries are the changes in the size of the indigenous capital stock and the changes in the amount of savings that are mobilized for investments. Indirectly, FDI capital can generate income flows, a part of which is invested, or produce positive or negative multiplier effects for the country in question. For countries that are both importers and exporters of FDI capital, the impact of the interplay of inward and outward FDI on country performance may not only have an impact on the performance of countries in terms of the effects described above, but it can also affect that performance through a dynamic restructuring of the economy (chapter V).

B. Technology, innovatory capabilities and skills

Technology, innovatory capabilities and skills are key sources of competitive strength for firms and countries.¹⁵ As the global environment becomes more competitive and rapid technological changes result in shorter product life cycles, a firm's ability to generate new or improved products and exploit them speedily in markets worldwide, and to find new processes that reduce costs of production, becomes an increasingly important determinant of its competitiveness. Firms are compelled to find new ways of strengthening and exploiting their technologies and innovative capabilities. To this end, innovation (the process by which technological capabilities are changed over time (Cantwell, 1992a)) through research and development (R&D) in new products/processes or improvements to existing products/processes plays a crucial role in enhancing the competitiveness of firms.

This section focuses on the generation and transfer of technology, technological capabilities and skills by TNCs, their role in strengthening the competitiveness of TNC systems and other firms and the implications this has for countries. Transnational corporations generate technology through innovation and disseminate it within their corporate systems as need arises (subsection 1). In the process of enhancing their own competitiveness by strengthening their technologies and innovatory capabilities and/or exploiting them through international production, TNCs also disseminate technologies, technological capabilities and skills to their business partners and to other firms in host and home countries, enhancing the competitiveness of those firms as well (subsection 2). Finally, the presence of technologically strong firms in a country, regardless of ownership, has implications for its overall economic performance (subsection 3). The following text does not discuss separately the generation and dissemination of skills, which are considered an integral part of technological capabilities and their utilization.¹⁶ The focus of the discussion is mainly on the generation and dissemination of technology within TNC systems and the implications arising therefrom for the economic performance of countries.

1. Innovation and the transfer of technology and skills within transnational corporate systems

(a) *The generation and dispersion of technological capabilities and skills*

A large proportion of the R&D expenditures that form the basis for technology development in today's world economy is concentrated within TNC systems -- an estimated 75 to 80 per cent of all global civilian R&D expenditures (Dunning, 1993). On the basis of the number of patents granted, the world's 700 largest industrial firms (most of which are TNCs) account for around a half of the world's commercial inventions (Cantwell, 1994, p. 2).

Driven by global competitive pressures, TNCs are constantly increasing their R&D expenditures. In the case of United States TNCs, absolute R&D expenditures on manufacturing technologies (in constant 1987 dollars) grew by 43 per cent over the period 1982-1991 (United States Congress, OTA, 1994, p. 7). Expressed as a percentage of total sales, R&D expenditures of United States TNC parent firms were 2.1 per cent in 1992; the corresponding ratio for the majority-owned foreign affiliates of United States TNCs was 0.8 per cent (table III.2 and United States Congress, OTA, 1994, p. 7); both of these a substantial increase on a decade ago.

Transnational corporate systems are well suited for technological innovation because they have easier access to financial resources (see section A), an ability to tap the global market for scientific and technical personnel, and the ability to organize R&D and utilize technological assets worldwide (Dunning, 1993). Even though other agencies, such as universities, research institutes and domestic enterprises, also generate new technologies, TNC systems are typically better equipped to commercialize these technologies because of their access to global markets and economies of scale and scope in production.

Traditionally, the part of the TNC system located in the home country (parent firms and domestic affiliates) has been the locus of innovation. In 1992, e.g., some 87 per cent of R&D expenditures by United States TNC systems conducted on their own behalf was incurred within the United States (table III.2). Foreign affiliates, to varying degrees, have had privileged access to these technologies. This is reflected, e.g., in the fact that between 80 per cent and 90 per cent of international payments for technology received by Germany, United Kingdom and the United States in the early 1990s were made on an intra-firm basis (UNCTAD-DTCI, 1994a, p. 142).

Gradually, however, this is changing in the direction of a greater dispersion of R&D activities within TNC systems. The main driving forces for this dispersion are:

- *Competitive pressures.* Competition increases the need to tap knowledge, expertise and skills wherever they are located in the world (and before others appropriate these assets), in a quest to secure the basis for the innovatory activities that give rise to key (created) proprietary assets. This is not only facilitated by, but actually capitalizes on, the transnational nature of TNCs. A dispersion of R&D is further facilitated by the

Table III.2. Research and development activities and technology exports undertaken by TNCs: selected indicators for the United States, 1982 and 1992

(Millions of dollars and percentage)

	1982			1992		
	Parent firms	Foreign affiliates ^a	Total	Parent firms	Foreign affiliates ^a	Total
(a) R&D expenditures by United States TNC systems						
Value	38 157 ^b	3 647 ^c	41 804	72 107 ^b	11 084 ^c	83 191
Share in total sales	1.6	0.5	1.4	2.2	0.9	1.8
(b) Technology-intensive exports of United States TNC systems ^e	64 297	31 551 ^f	95 848	139 539 ^g	88 979 ^f	228 518
Technology-intensive exports of the United States ^h			90 200			202 600
(c) Royalties and fees receipts and payments of United States TNC systems ⁱ						
Receipts	5 151	435	5 586	12 800	1 461	14 261
of which, intra-firm ^j	3 629	36	3 665	10 281	54	10 335
Payments	457	3 954	4 411	978	12 472	13 450
of which, intra-firm ^j	62	3 308	3 370	61	9 839	9 900
Memorandum item:						
R&D expenditures of TNC units based or located in the United States (Parent firms of United States TNCs and affiliates of foreign-owned TNCs)	38 157 ^b	3 744 ^d	41 901	72 107 ^b	13 693 ^d	85 800

Sources: UNCTAD, Division on Transnational Corporations and Investment, based on United States, Department of Commerce, 1985a, 1985b, 1992a, 1992b and 1995; and UNCTAD, 1995b.

^a Majority-owned non-bank foreign affiliates of non-bank United States parents only, unless otherwise indicated.

^b Research and development performed for United States parents only.

^c Research and development performed for United States foreign affiliates only.

^d All non-bank foreign affiliates.

^e Including machinery (except electrical), electric and electronics equipment and transportation equipment.

^f Excluding exports back to the United States.

^g Includes exports by unaffiliated United States persons to foreign affiliates of United States TNCs.

^h Including machinery and transport equipment (SITC 7).

ⁱ Data are for 1982 and 1989.

^j Data for payments and receipts between parents and their affiliates only.

availability of a large pool of scientifically and technically trained manpower throughout the developed world and economies in transition and, increasingly, also developing countries. As far as economies in transition and developing countries are concerned, substantially lower costs constitute a pull factor.¹⁷ In addition, a shortage of indigenous R&D personnel in many developed countries acts as a push factor (OECD, 1988).

- *Advances in technology.* At the same time, advances in communications and information technologies allow the division of R&D into self-contained divisible activities that can take place in geographically separate locations, to be subsequently integrated, and they also allow, where needed, R&D activities that are undertaken on an integrated, on-line manner across borders.
- *Changes in the regulatory frameworks.* Liberalization, especially as regards foreign participation, particularly through ownership and better access to local universities and science and technology centres, coupled with the strengthening of intellectual property rights, has encouraged the dispersion of R&D by TNCs.¹⁸ In addition, pro-active policies adopted by some countries, e.g., the establishment of science parks (see chapter VI), influence positively the decision of TNCs to locate R&D abroad.

In a highly competitive environment in which every advantage counts, it can increasingly be expected that TNCs will utilize good (and cheaper) possibilities abroad to create key proprietary assets. Naturally, this is a slow process, because there are also countervailing factors, including the “stickiness” resulting from an established pattern of locating R&D facilities in home countries. In addition, there are, after all, costs in organizing and coordinating geographically dispersed R&D activities, and one cannot neglect the importance of the presence of supporting industries and the advantages of agglomerative economies as well as a certain need to be adjacent to downstream operations (Dunning, 1993). Still, the direction of the driving forces, and the self-interest logic of a TNC system that seeks to increase its competitiveness as much as possible, suggests that R&D -- like manufacturing before it -- will increasingly, and at least to a certain extent, be more geographically dispersed within TNC systems. (As will be discussed in chapter VI, this creates certain policy opportunities for host countries.)

Indeed, a number of indications suggest that this is taking place and that a wider range of firms is dispersing R&D activities geographically, at least to a certain extent,¹⁹ with the result being that the life-cycle of a product may now begin anywhere in the world. For the United States, the share of R&D expenditures undertaken by foreign affiliates in total R&D expenditure by TNCs in 1992 was 12 per cent compared with 9 per cent in 1982 (table III.2). According to United States patent data (table III.3), a considerable share of patents granted in the United States to the world’s largest firms derives from R&D activities conducted outside the home countries of those firms. In some cases, this share is substantial, and consistently so; in other cases it is increasing. In the cases of Australia, Belgium, Canada, Germany, India, Republic of Korea, Singapore and United Kingdom, the share of national R&D expenditures accounted for by foreign affiliates located there exceeded 15 per cent in the 1980s (Dunning, 1992). As these

data suggest, the dispersion of R&D activities within TNC systems extends also to developing countries able to offer the required resources, especially skills and knowledge (see also box III.2).

Finally, some of the factors that push TNCs from developed countries to increase R&D in foreign affiliates apply also to TNCs from developing countries. Samsung (Republic of Korea), for instance, has established eleven R&D centres worldwide,²⁰ and Goldstar (Republic of Korea) has established a research centre at the Alps Central Laboratory in Japan to develop, jointly with Alps Electric Co. (Japan), thin film transistor-liquid crystal display technologies.²¹ Similarly, WIPRO, an Indian computer company, has established a global R&D centre in Silicon Valley, California, United States.²²

To sum up, TNCs are principal locations of technological capabilities and leading generators of innovation. In today's world economy, it becomes increasingly advantageous - if not necessary -- for TNCs to spread their R&D activities geographically, in the interest of maintaining or improving competitiveness, so as to tap science and technology capabilities located elsewhere; to exploit cost differentials in R&D between countries; and achieve economies of scale and scope in R&D. This dispersion of R&D capabilities means that more technology is generated by combining the innovatory capabilities of TNC systems with capabilities available elsewhere in the world, giving them a competitive edge.

(b) The transfer of technology and skills within transnational corporate systems

Transnational corporate systems are also primary conduits for the transfer of technology and related skills. Member firms within the system have privileged (but not necessarily free) access to technologies and skills of the system as a whole. The nature of technology flows between parent firms and their foreign affiliates depends, first, on whether or not R&D activity

Table III.3. Patents granted in the United States to large firms from selected countries based on their foreign R&D

(Percentage)^a

Country	1969-1972	1973-1977	1978-1982	1983-1986	1987-1990
Europe	29	26	25	27	30
France	8	8	7	9	16
Germany	13	11	12	15	17
Netherlands	50	47	48	54	54
Sweden	18	20	25	29	28
Switzerland	45	44	44	42	43
United Kingdom	45	44	41	48	49
Japan	3	2	1	1	1
United States	5	6	7	8	8
Total	10	11	11	11	11

Source: Papanastassiou and Pearce, 1992.

^a Patents granted in the United States to firms of a given country for R&D conducted outside the home country divided by total patents granted in the United States to firms of that country.

Box III.2. The dispersion of R&D activities within TNC systems

The activities of Texas Instruments Inc. (United States) in India provide a good example of intra-TNC system dispersion of R&D activities. In 1986, Texas Instruments established Texas Instruments (India), a wholly owned affiliate performing R&D activities in Bangalore, India. Texas Instruments (India) represents an investment of about \$15 million and employs about 300 engineers recruited in India. The primary driving force behind the location of R&D in India was access to R&D personnel of required quality to cater to the needs of all manufacturing affiliates worldwide. Texas Instruments (India) is one of four R&D centres of this nature, the others being located in Dallas, United States; Tokyo, Japan; and Bedford, United Kingdom.

Texas Instruments has been able to perform geographically dispersed, but globally integrated, R&D activities because of information and communication technologies that allow the exchange of detailed integrated chip designs and scientific simulations across the world without a time delay. Texas Instruments (India) has the latest HP and Sun workstations and a variety of computers that are interconnected by a Local Area Network, which in turn is connected to Texas Instrument's worldwide data communications network. That network is one of the largest fully integrated, privately owned networks in the world. Texas Instruments (India) is connected to it on a "real-time" basis through a dedicated 128KB link, enabling the company to send and receive the latest support information, design technology and applications information for its products and services. All the software, databases and designs developed by Texas Instruments (India) are exported to the parent firm in the United States via this satellite link for distribution and use by the whole TNC system and its customers.

Through this communication link, Texas Instruments (India) can draw upon the resources, data and expertise available in the other R&D centres of the transnational network of Texas Instruments. Texas Instruments (India) also exchanges information with other manufacturing affiliates of Texas Instruments in Asia, Europe and the United States so that the products designed and developed at Texas Instruments (India) can be smoothly manufactured by these affiliates.

Motorola Inc.'s paging-device plant in Singapore employs 75 local engineers in its R&D laboratory, the Motorola Innovation Centre. The Scriptor pager was developed by local designers at this Centre, using locally developed software. Hewlett-Packard's plant in Singapore has become the global R&D and production centre for the company's portable ink-jet printers,^a and Intel Corp. has chosen Penang, Malaysia as the location for its design centre for microprocessors for hand held equipment.^b

Similar R&D activities by TNCs take also place in economies in transition. For example, Fakel Experimental Design Bureau, Kaliningrad, Russia, and Space Systems Loral of Loral Corporation, United States, have formed a new joint venture company to develop electrical thrusters for spacecraft, based on Russian designed "Hall thrusters". And the Boreskov Institute of Catalysis in Akademgorodok, Russia, has entered into contractual R&D agreements with more than 20 TNCs and has been carrying out research for them on industrial catalytic processes (Beardsley, 1993).

Sources: Reddy, 1995.

^a "The new global workforce", *Business Week*, 19 December 1994, pp. 42-47.

^b "Technology and manufacturing", *Business Week*, 19 December 1994, p. 32.

is undertaken by affiliates: if foreign affiliates do not undertake any R&D, then what flows within a TNC system would be technology for production and other activities (e.g., marketing). If affiliates perform R&D, the nature of the technology flows is largely determined by the type of R&D: if it involves operating support laboratories whose main function is to adapt products or production processes to local conditions, the flows of technology are mainly from the parent firm to an affiliate in the form of specifications -- the basic instructions for the introduction of a new product into a particular market. On the other hand, affiliates with R&D activities that are integrated with the overall R&D programme of a TNC system have their strongest ties with other R&D facilities within the system. They are integral components of an international R&D network and, as such, the flows of technology between them and the rest of the TNC R&D system tend to be substantial and characterized by two-way flows of information (box III.2).

While the dispersion of R&D activities has been increasing, most affiliates of TNCs are still of the traditional type, involved only in production operations. For these, the transfer of production technology from the parent firm or other TNC-system members and the related training in skills that is provided are the primary benefit.²³ Production affiliates acquire technology through intra-TNC-system imports of machinery, intermediate and final products, as well as services. The nature of, and degree to which, technology is transferred or made available to production affiliates depends upon the activities performed by the affiliates which, in turn, depend upon the motivations and strategies of a TNC and the assets, skills and managerial know-how that can be mustered in an affiliate, as well as other factors.

The ownership structure of production affiliates may also affect the transfer of technology to production affiliates. Newer and more valuable production processes and products are more likely to be transferred to wholly owned subsidiaries rather than other types of affiliates for proprietary reasons. More complex and rapidly changing technologies that require continuous interaction between the transferor and transferee are also more likely to be transferred only to foreign affiliates in which control by parent firms is significant. In addition, the regulatory environment can affect technology transfer to production affiliates in several ways. For example, as TNCs seek to rationalize their production systems and generate greater economies of scale and specialization, trade restrictions can discourage them from introducing in their affiliates first generation production techniques and machinery that have been developed for scales of production which smaller, protected markets cannot support. Likewise, the strength of the intellectual property regime in a particular host country may determine the level and type of technology transferred to affiliates. Where intellectual property legislation is weak, or where specific measures, such as mandatory licensing, are imposed (to speed up the transfer of proprietary knowledge to indigenous producers), TNCs in certain industries would also be less willing to establish state-of-the-art production affiliates (UNCTC, 1993).

Cross-border intra-firm flows of royalties and fees can be used as a proxy to measure the technology transferred within TNC systems. Typically these account for a large share of a country's overall cross-border flows of royalties and fees; while these payments are mostly from foreign affiliates to parent firms, there are also payments from parent firms (and other affiliates) to foreign affiliates, with both growing at comparable rates in the case of United

States TNCs during 1982-1992 (see table III.2). Moreover, a substantial part of technology-intensive exports are undertaken by TNCs, either on an intra-firm basis or at arm's length. In the case of the United States, for example, parent firms account for more than 60 per cent of such exports; foreign affiliates of these TNCs account for a significant volume as well (table III.2). Furthermore, nearly all (97 per cent in 1992) of United States parent firm exports of technology-intensive goods were undertaken on an intra-firm basis (United States Congress, OTA, 1994, p. 8).

Closely related to the transfer of technology and innovatory capabilities within TNC systems is the transfer of skills necessary for utilizing technologies or participating in technological development. The principal modes of skills transfer are the use of expatriate employees and, most importantly, training of local employees -- a subject discussed in detail in the *World Investment Report 1994* (UNCTAD-DTCI, 1994a).

2. Linkages with and spillovers to firms and institutions outside the TNC system

(a) Technology alliances and linkages

Transnational corporations not only undertake innovation by combining the resources and technological capabilities of parts of their own systems, but also by establishing collaborative relationships with firms outside their production systems for generating or transferring technology. Such collaborative arrangements include technology alliances among TNC systems of similar strength and between TNC systems and other enterprises; and cooperative arrangements between TNC systems and universities or research institutions. These arrangements allow information sharing, joint problem solving, cooperative resource sharing and collective implementation among TNC systems or between TNC systems and local enterprises or research institutions -- all, of course, geared towards increasing the competitiveness of the TNC systems involved.

- Technology alliances have proliferated, particularly in new technologies (tables III.4 and III.5) and the automobile industry (UNCTAD-DTCI, 1994a, p. 139). The reasons for undertaking such alliances include the high costs and risks of R&D and technology development; the need to pre-empt other competitors by undertaking R&D rapidly; benefits from a mutual exchange of complementarities in R&D expertise; and a reduction of the time required to develop a product (Hagedoorn and Schakenraad, 1989). Technology alliances by TNC systems can also involve the transfer of R&D related and other activities for one group of products to other firms, including in developing countries, so that the TNC system's operations at home can concentrate on products appropriate for high-income markets. For instance, Hitachi (Japan) has formed an alliance with Goldstar (Republic of Korea), under which Hitachi provides 1M DRAM technology to Goldstar (Yamada, 1990). Toshiba (Japan) has transferred all prototyping, development and production of some video-cassette recorder models to Samsung Electronics (Republic of Korea) in order to concentrate on other models (Yamada, 1990). Such alliances can also involve small and medium-sized enterprises in

home or host countries (box III.3). These firms thus gain access to capital equipment and other resources of TNC systems. Or, alternatively, foreign affiliates may support directly the R&D activities of domestic firms. In Singapore's electronics industry, e.g., foreign affiliates have demonstrated a willingness to absorb the costs of promoting innovations of new products by local firms, or provide them with know-how, in anticipation of subsequent improvements that will eventually lead to the commercialization of these new products (Lim and Pang, 1982).

Table III.4. Number of technology alliances formed in new technologies

Core technology	1980-82	1983-85	1986-88	1989-91	1992-93	Total
New materials	58	104	198	111	100	571
Information technology	275	544	674	717	496	2 706
Biotechnology	193	258	363	173	248	1 235

Source: UNCTAD, Division on Transnational Corporations and Investment, based on MERIT-CATI Databank, Maastricht.

- Transnational corporations also establish links with local research centres and research institutions in home and/or host countries. For example, the Indian affiliate of Astra (Sweden) collaborates with research institutes in Sweden as well as with the Indian Institute of Science (box III.4). In China, Ford (United States) has established a \$1.6 million R&D foundation in collaboration with the Government of China, aimed at funding projects in universities and research institutions.²⁴ In the United States, co-operative R&D agreements have been made between TNCs and federal laboratories (in the chemical field), the Department of Energy, the National Institute of Standards and Technology and the National Institute of Health, numbering 1,646 by the end of July 1994; major companies involved are Dow Chemical, Du Pont, Allied Signal, Olin, Rohm

Table III.5. Forms of technology alliances in new technologies, ^a 1970-1989

(Cumulative total number of cases and percentage)

Form	Biotechnology		Information technology		New materials	
Joint research venture	164	(13.5)	458	(16.9)	177	(25.7)
Joint R&D	362	(29.8)	749	(27.6)	173	(25.1)
Technology exchange	84	(6.9)	328	(12.1)	54	(7.8)
Direct investments ^b	234	(19.3)	357	(13.1)	65	(9.4)
Customer-supplier relations	186	(15.3)	245	(9.0)	42	(6.1)
Uni-directional technology flows ^c	183	(15.1)	581	(21.4)	177	(25.7)
Total	1 213	(100.0)	2 718	(100.0)	688	(100.0)

Source: Hagedoorn and Schakenraad, 1990, p. 7.

^a Based on sample of 7,000 cooperative agreements in a large number of technologies.

^b Joint production ventures.

^c Original equipment manufacturing arrangements.

and Haas, W.R. Grace and Union Carbide.²⁵ Transnational corporations from developing countries have also been involved in R&D in collaboration with local universities in host countries. Daewoo (Republic of Korea), for instance, is undertaking research in conjunction with a university in Metz (France) and plans to set up industrial design centres in Paris.²⁶

**Box III.3. Biocon India Pvt. Ltd. and Quest International (Unilever):
a strategic R&D partnership in biotechnology**

Biocon India Pvt. Ltd., a medium-sized biotechnology enterprise, was formed in 1978 as a joint venture with Biocon Biochemicals Ltd. (Ireland) holding 30 per cent of the equity. Biocon India develops and manufactures a range of microbial industrial enzymes using the solid substrate fermentation technology, and has established substantial in-house facilities for basic R&D.

Although there was no formal agreement, the R&D carried out by Biocon India was a collaborative effort between Biocon India and Biocon Biochemicals. Most of the research was carried out in India because of the experience and expertise available in Biocon India. Biocon Biochemicals tested new enzymes for their efficacy, suitability for plant scale production, performance etc.. Feedback from Biocon Biochemicals helped Biocon India significantly in its innovatory activities. Biocon India also built up strength in production technologies related to certain enzymes and developed certain unique strains and process technologies through its R&D.

In 1989, Biocon Biochemicals Ltd. and its affiliates were acquired by Quest International, a wholly owned affiliate of Unilever (Netherlands). After the acquisition, a formal technology alliance agreement was concluded between Biocon India and Quest International, under which Biocon India agreed to develop certain new products and processes exclusively for Quest International, from the laboratory stage to final production. The driving force behind this arrangement was the fact that Biocon India had already developed expertise in this field recognized by Quest International as a cost effective way of furthering technologies in which Unilever was interested.

Biocon India holds exclusive rights to use these new technologies or products for the Indian market, whereas Quest International has similar rights for the global market. If the results of the research are patentable, the rights will be held jointly by Biocon India and Quest International. It is envisaged that some of the products developed by this alliance will also be manufactured by Biocon India exclusively for Quest International and will be sold worldwide. If the production facilities at Biocon India are not suitable for taking up large-scale manufacturing of the new products, then Quest International manufactures them elsewhere and pays royalties to Biocon India. In such a case, Biocon India will transfer its technology to the chosen manufacturing site.

Its links with the Unilever group are boosting the competitiveness of Biocon India in several ways. For instance, Biocon India's knowledge of the procedures and complexities of patenting was limited. The company's focus had always been in getting the product into the market as quickly as possible, even before registering the patent. But with the help of Unilever it has enhanced its knowledge of issues related to patenting.

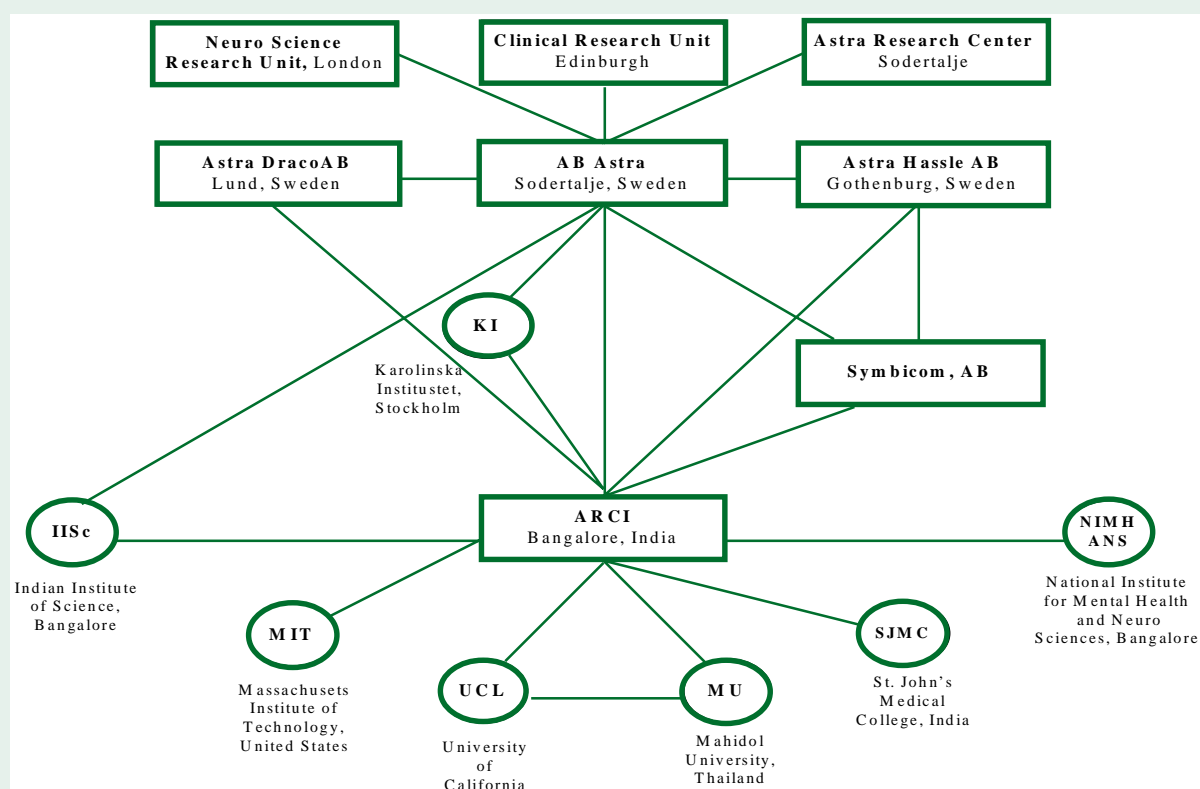
Source: Reddy, 1995.

Box III.4. Astra's global research network

The example of Astra Research Centre India (ARCI), established by Astra Draco AB (Sweden), illustrates the pattern of linkages between affiliates and universities and institutions in order to enhance a TNC-system's innovative capacities and competitiveness (accompanying figure). ARCI and Astra Draco AB, another affiliate of Astra AB, have collaborated in a research project on eosinophilcationic protein which has anti-parasitic properties, but that in large quantities can damage the lungs of asthma patients; Astra Draco AB has focused on the development of a protein inhibitor to be used in asthmatic therapy, while ARCI concentrated its efforts in isolating the anti-parasitic qualities.

ARCI has established linkages with external research institutes and universities (accompanying figure). For instance, ARCI is involved in a long-term research project on Thioredoxin with the Karolinska Institute in Sweden, with the latter supplying the peptides to ARCI for further research.

The global research network of Astra Research Centre India



Source: Reddy and Sigurdson, 1994.

In another project funded by AB Astra, ARCI is collaborating with the Massachusetts Institute of Technology (MIT), United States. The know-how is being developed by ARCI and the manufacturing and downstream processing are to be carried out at MIT. Within India, ARCI works in close collaboration with the Indian Institute of Science, in which Astra has established a "chair professorship", as well as with other national research institutes.

Source: Reddy and Sigurdson, 1994.

Linkages through non-equity relationships with firms outside their production systems have been an important channel for the transfer of technology and know-how by TNCs. Licensing and other contractual arrangements allow TNCs to exploit their proprietary technologies without direct involvement in production, while enabling the non-equity partner firm to acquire technology without ownership by the TNC. Technology licensing and other contractual arrangements were the dominant modes of technology acquisition from TNCs for firms in Japan and have played a major role in technology transfer to several developing countries in Asia and in Latin America, especially prior to the liberalization of FDI policies in the 1980s (UNCTAD, 1995d; UN-TCMD, 1992b). However, several factors are involved in the choice of licensing rather than FDI for the transfer of technology, including the age and sophistication of technology, industry characteristics, corporate strategies within particular industries, level of host country entrepreneurial, technological and human resource development (UN-TCMD, 1992b). In general, TNCs are reluctant to provide the more sophisticated technologies through non-equity or low equity arrangements, except when they can obtain complementary assets, e.g., skilled personnel for R&D.

Foreign affiliates involved in production activities often create strong linkages with host countries, especially with firms that supply components, materials and services. The linkage is particularly strong when foreign affiliates subcontract part of their work to local firms. Depending on the objective of establishing such linkages, they could be backward linkages, e.g., links with raw material and component suppliers, or forward linkages, e.g., product packaging, delivery, maintenance or customer training. However, the type and strength of linkages established depend to a large extent on the technological and other resource capacities of domestic firms.

The crucial contribution of these linkages to the host economy lies not only in the business generated for local firms, but in the knowledge and technology flow from TNC systems to local firms. Such flows could be in the form of designs, drawings, specifications, manufacturing knowledge/process know-how, quality control, productivity enhancing techniques, management know-how, training and the like. Linkages with subcontractors often involve joint preparation of specifications, designs and drawings. Often, personnel from foreign affiliates are deputed to train personnel in supplier firms in the production of required components or parts, leading to the upgrading of skills in local firms. As an increasingly common practice in recent years, whenever product or process changes are effected in foreign affiliates, they involve their suppliers and subcontractors in the process from an early stage so that the latter group can gain the know-how to effect changes in their products supplied to the affiliate. Japanese TNCs, especially in the automotive sector, are well known for this kind of relationship with their subcontractors. Such technology and skill flows contribute to a continuous upgrading of domestic firms and, thus, enhance their competitiveness.²⁷

(b) Spillovers and externalities

Even if proprietary technology and R&D activities stay within a TNC system, international production may still contribute to the technological capacities of indigenous firms in a host or

home country as a result of externalities and spillovers from foreign affiliates or parent firms. Spillovers and externalities are particularly important if the technologies used by foreign affiliates are not available in a country, or cannot be obtained through arm's length transactions or licensing. In particular, a technology that is exploited through majority-owned affiliates is often not likely to be licensed to local firms in the host country.²⁸ For these firms, the principal way of gaining access to that technology lies in spillovers and externalities:

- The movement of personnel with experience and training is one important source of technology spillovers, as indicated by the high incidence of former employees carrying out subcontracting work for their former employers and the high proportion of managers of indigenous firms in some countries that have received their training from TNCs (Behrman and Wallender, 1976; Gerschenberg, 1987; Katz, 1987).
- Research-and-development activities by foreign affiliates can encourage the emergence of entrepreneurs in host countries by licensing the know-how and technologies for commercialization of by-products (Reddy, 1993). For instance, Astra Research Centre (India) has transferred the know-how for producing the basic tools of DNA recombinant technology to a new company, GENEL, in India, which was founded by two scientists. Prior to this technology transfer, these tools were being imported into India; now GENEL exports these products to the United States and Europe.²⁹
- The presence of foreign affiliates also demonstrates the existence of profitable new products and processes and encourages local firms to adopt them. Direct or indirect contact with foreign affiliates that are users of different technologies allows information about the technology to be diffused. Imitation or reverse engineering often play a role in this context.
- Competition by foreign affiliates in host countries is an effective means of inducing technological change and productivity improvements in other firms (Rosenberg, 1976). Local producers faced with competition from technologically advanced firms may, in some cases, be forced out of the market. Often, local firms improve their performance by upgrading their technologies and using their leverage in terms of familiarity with local markets, distribution channels and overall business climate. This occurred, for example, when foreign affiliates introduced synthetic fibres in the Brazilian textile industry. The local producers of textiles that survived increased competition from foreign affiliates often did so by forming joint ventures with these affiliates in order to gain access to newer and more competitive technologies (Evans, 1979). Similarly, the entry of United States firms into European markets during 1955-1975 provided a beneficial competitive spur in industries where local firms had some traditional technological strength and where national markets were large enough to allow both kinds of firms to operate at efficient scale (Cantwell, 1989, p. 86). Also, in Mexico and Uruguay, a positive relationship was observed between the presence of foreign affiliates and the productivity of local firms where the gap between foreign and local firms productivity was not too large (Kokko, 1994; Kokko, Tansiniz and Zejan, 1994).

High value-added technological or R&D activities by TNCs are likely to be attracted by the most innovative and productive regions of a host economy with a concentration of entrepreneurial and technological abilities and supportive infrastructure. The clustering of sophisticated R&D activities may help to sustain centres of R&D activity which yield external economies of agglomeration (Dunning, 1993).

Most of the spillovers discussed above apply not only to foreign affiliate activities but also to those of parent firms, although their relevance for home countries may be more limited since the technological gap between TNC parent firms and others in home countries may be less than that between foreign affiliates and other firms in host countries, especially developing countries. In addition, transnationality itself might be a source of spillovers from outward FDI. The coordination of geographically dispersed R&D activities and the organization of a TNC's global technological system from the corporate centre in the home country require considerable managerial skills. A possible spillover arising from the dispersion of R&D activities by TNCs would be the establishment of training facilities for managers operating such activities. The training could benefit indigenous firms if they can hire such managers or if they are connected to foreign affiliates through various forward and backward linkages.

* * *

Transnational corporations are not only transferring technologies generated in their home countries to their foreign affiliates, but are dispersing their R&D more widely. A dispersed configuration of R&D activities allows TNCs to access an international pool of skills and capitalize on cost differentials to improve their competitiveness. Another outcome is the scope for increased specialization in R&D within TNC systems. Through increasing specialization, TNCs are able to capture scope and scale efficiencies in R&D. Hence, the geographical dispersion of R&D activities can strengthen a TNCs' technology base.

3. Implications for the economic performance of countries

The generation and transfer of technology, innovation capabilities and skills by TNCs within TNC systems and their effects on other firms through linkages and spillovers has important implications for country performance. Given the dominant role of TNCs in innovation and technology development, inward FDI and non-equity relationships with TNCs are an important means for host countries to advance their technological capabilities. At the same time, outward FDI can strengthen the technological capacities of home countries by allowing their firms to access technology otherwise difficult to obtain and spread R&D costs over a wider range of activities. The realization of these benefits, however, depends upon differing host country conditions and TNC objectives. Foreign direct investment and non-equity modes of participation by TNCs are not a panacea for the upgrading of technologies and skills in developing countries but they can, where suitable conditions exist, be an important and powerful mode of technology transfer and technological capacity building with favourable consequences for economic performance.

(a) Inward foreign direct investment

Innovatory activity and technologies brought into a host country by TNCs can enhance the performance of these economies through the greater productivity of foreign affiliates and by stimulating productivity growth of indigenous firms. But the contribution of inward investment depends considerably on the host countries' own accumulated technological capabilities, which are necessary to master an imported technology, adapt it to local conditions, upgrade it and improve on it (UNCTAD, 1995d, p. 203).

The dispersion of R&D activities by TNCs can increase the size of the technology base of host countries through the local R&D personnel employed in foreign R&D affiliates. At the same time, however, the use of host country resources by foreign R&D affiliates located there may pre-empt some domestic R&D capabilities, which would otherwise be available to indigenous firms. The impact will depend on the type of R&D that foreign affiliates perform, the type of indigenous resources used by them and the supply conditions related to those resources in a host economy.

Host countries in which R&D affiliates are established by TNCs are generally at a level of technological development high enough to offer the right skills and infrastructure mixture and attract such activities. For foreign affiliates in host economies that are not involved in R&D, it is the utilization of technology received from the parent firm and the associated upgrading of skills that matters. Empirical evidence suggests that, subject to constraints imposed by the nature of an industry, TNCs tend to adjust the factor-intensity of both product and process technologies to local conditions, (e.g., more labour intensive production in markets where labour is relatively less expensive, and scaling down product quality or production processes where markets are small and economies of scale impossible (Dunning, 1993, pp. 293-295)).³⁰ However, on balance, it also suggests that foreign affiliates are generally more productive than their domestic counterparts (see, e.g., Globerman, 1994; Okamoto, 1994), and the technological capacities of TNCs are an important factor in the productivity differences observed.

There is also considerable evidence that spillovers and externalities from foreign affiliates contribute to technological upgrading in host countries. For example, the transfer of technology from United States parent firms to their foreign affiliates has speeded the emergence of competing products or processes by host country-based producers by an average of 2.5 years in a third of cases examined in one study (Mansfield, Teece and Romeo, 1979); the activities of GENEL, which has links to Astra Research Centre (India) (see section 2) have resulted in India becoming an overall net exporter of the products concerned. Even when TNC activities create "high-technology enclaves", the need for local procurement of research personnel and materials is eventually bound to diffuse technologies and capabilities to the wider economy (Reddy, 1994).

As a consequence of their higher productivity, production affiliates can contribute to host country performance by increasing pressure on suppliers for quality inputs or by exposing

domestic suppliers to competition from international supply sources. This dynamic has been put forward, for example, as a partial explanation for increases in total factor productivity in Malaysia following the liberalization of inward FDI policies in the mid-1980s (Okamoto, 1994, p. 477). A gradual decrease in the productivity gap between foreign affiliates and indigenous firms was also noted in several FDI-intensive industries (Okamoto, 1994). In Canada, by contrast, this gap has remained constant over time, possibly suggesting a dynamic wherein foreign affiliates continually adjust to increases in local competitiveness by improving their own efficiency and performance (Globerman, 1994, p. 154). Even affiliates without R&D may have a dynamic effect upon host country technological capacity and overall performance in so far as foreign producers spur domestic producers to improve their own competitiveness.

As indicated earlier, the ability of inward FDI to contribute to technology capacity building in host countries depends on host countries' own technological capabilities. Where these capabilities are well developed, and indigenous enterprises are well equipped to "learn, train, adapt and compete" (UNCTAD, 1995d, p. 204), access to technology through inward FDI can speed up technological progress. Inevitably, among developing countries, those that are more industrially mature, and are able to invest more in human capital, are likely to benefit the most. Where the host economy is less developed, competition from foreign affiliates may cause indigenous firms to fail rather than benefit through technology linkages. Help may be needed to strengthen the capabilities of developing countries to maximize the technological gains from TNC participation in their economies (see chapter VI).

(b) Outward foreign direct investment

Despite the process of dispersion, most R&D by TNCs continues to be undertaken in home countries. Not surprisingly, R&D conducted at home typically has a positive impact on the productivity of TNCs' home-country operations in general (box III.5) and on the home country as a whole. For example, a survey of 15 United States chemical and petroleum firms in the mid-1960s showed positive effects on the parent firms from both home and overseas R&D (Mansfield, 1984). As regards R&D in foreign affiliates, a survey of 29 overseas R&D laboratories of United States manufacturing TNCs found that around 40 per cent of their R&D led to the development of technologies that were transferred back to the United States (Mansfield, Teece and Romeo, 1979). Evidence for Sweden (Fors, 1993) also suggests that overseas R&D strengthens the home technology base, although not necessarily by raising productivity in home country TNC operation (box III.5).

The dispersion of R&D activities implies that TNCs can increase competitiveness, and earnings, through a worldwide rationalization of activities. This should translate into gains for the home country through increased productivity growth. For the home country, there may also be an improvement in its balance of payments on royalties and fees (depending on the direction of these flows). As foreign affiliates use the know-how of their parent firms not only for production but also for R&D, intra-firm receipts of royalties and fees by parent firms will increase. This, of course, would have to be balanced against the increase in payments by parent firms to their foreign affiliates for the acquisition of the technology developed by them.

Box III.5. Who benefits from R&D by TNCs: the case of Sweden

Swedish TNCs accounted for over 80 per cent of aggregate industrial R&D in Sweden in 1990.^a In the same year, the 20 largest TNCs in Sweden, in terms of turnover, were responsible for practically all R&D undertaken by TNCs in Sweden.

Swedish TNCs undertake the majority of their R&D at home, although R&D performed abroad has been increasing steadily over time, both in absolute value and as a share of the total R&D. In 1990, around 18 per cent of R&D by Swedish manufacturing TNCs was located abroad, compared with around 7 per cent in 1965 and 13 per cent in 1986. Within manufacturing, machinery registered the highest share of overseas to total R&D (accompanying table).

Research and development undertaken by Swedish TNCs at home is mostly oriented towards new product and process development. Research and development undertaken in foreign affiliates is mostly adaptation of the technology created at home to local conditions, although a significant part also involves new products and processes. According to one study (Håkanson and Nobel, 1993), 32 per cent of R&D employment by foreign affiliates of Sweden-based TNCs involves the adaptation of home technology to host country conditions, and 34 per cent adaptation to local regulations.

The increasing trend in R&D performed abroad, in combination with the high degree of transnationalization of Sweden-based TNCs, has raised questions as to whether R&D undertaken abroad is a substitute or a complement for R&D undertaken at home, and what that means for Sweden.

- First, a correlation of the absolute real levels of domestic and overseas R&D, or of the absolute changes in these R&D levels, suggested that overseas R&D has not substituted for home-based R&D.^b A study on Sweden (Norgren, 1992) also did not find foreign-based R&D to be a substitute for home-based R&D.
- Second, it has been shown^c that domestic R&D by Sweden-based TNCs has a positive effect on the productivity of the firm's domestic operations^d in recent years.^e At the industry level, the positive effects of R&D on home productivity were higher for metal products, machinery and electrical machinery and electronics.
- Third, the effect of R&D undertaken by TNCs at home on the productivity of foreign affiliates was also positive and substantial: around 0.4 percentage points of the growth of the foreign affiliates' output could be attributed to knowledge transferred from Swedish parent firms to their foreign affiliates, as compared with 0.8 percentage points of the growth of TNCs' output in Sweden attributed to their R&D undertaken in Sweden.^f

In terms of total factor productivity, R&D undertaken in Sweden accounted for over 6 per cent of the total factor productivity growth of foreign affiliates; the corresponding figure for their parent firms was nearly 40 per cent. The impact of the R&D carried out at home on total factor productivity of foreign affiliates was particularly important in process industries (defined as food, beverages and tobacco, textiles, clothing and footwear, pulp and paper, paper products and printing, /...

(Box III.5, cont'd)

chemicals and iron and steel) (21 per cent) and basic industries (defined as a subgroup of the above industries, including pulp and paper and iron and steel) (64 per cent).

**Share of R&D undertaken abroad in total R&D by Swedish TNCs
in manufacturing, selected years, 1965-1990**

(Percentage)

Industry	1965	1970	1974	1978	1986	1990
Food, beverages, tobacco	–	–	8	–	13	13
Textiles, clothing, leather ^a	.	–	–	–	100	8
Pulp and paper	–	–	20	3	2	28
Paper products, printing ^a	–	–	1	8	38	60
Chemicals	8	10	13	13	13	17
Iron and steel	2	–	6	8	3	2
Metal products	2	1	–	14	16	21
Machinery	7	14	35	37	45	56
Electrical machinery, electronics	12	12	12	9	17	25
Transport equipment	–	–	9	4	4	6
All industries	7	8	14	13	13	18

Source: database of the Industrial Institute for Economic and Social Research (IUI), Stockholm, Sweden.

^a The level of Swedish R&D in these industries is low and, hence, even small changes in that level tend to produce large swings in the percentages reported.

As regards effects of R&D undertaken abroad by Sweden-based TNCs, no evidence was found in the study described above that significant reverse technology transfer has taken place, or that it has had an impact on the productivity of home country operations; separate estimates for two different time periods (1965-1974 and 1974-1990) and for individual industries did not produce any statistically significant results. This finding is not surprising given that much of the R&D undertaken overseas is geared towards adapting products and processes to local conditions and regulations and thus may not have much relevance for the productivity of home-based operations.

The impact of R&D undertaken by foreign affiliates on the productivity of these affiliates was found to be positive in all industries examined together; separately for engineering industries; but not for basic and other process industries considered separately. These results suggest that, in basic and other process industries, the technology of parent firms transferred to foreign affiliates is more important than local R&D, while much of the technology used by foreign affiliates in engineering industries was developed through local R&D activities.

Outward FDI has enabled Swedish TNCs to achieve the economies of scale lacking in the small size of the domestic market. As far as Sweden's innovatory capabilities are concerned, the location and the type of R&D activities undertaken by its TNCs at home are important. Although the share of total R&D located abroad increased between 1986 and 1990, the bulk of R&D by TNCs

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(Box III.5, cont'd)

continued to be undertaken in Sweden. Furthermore, the R&D intensity of firms acquired abroad by Swedish TNCs was, on average, only marginally higher than the R&D intensity of their greenfield investments, suggesting that sourcing of foreign technology had not been a major motive for FDI through acquisitions. For those TNCs that had internationalized their R&D activities, it appears that their global networks of affiliates had enhanced their capacity to absorb information and hence contributed positively to their productivity at home (Andersson, 1995).

Overall, the capabilities acquired by Swedish TNCs through outward FDI and globalization of R&D appear to have had a positive impact on the Swedish economy. In the early 1990s, when Sweden's economic performance began to slacken, by being able to invest abroad rather than remain locked in a weakened and stagnating domestic economic environment, Sweden's TNCs succeeded in upgrading their home-based operations, making a positive contribution to the country's economy.

To conclude, there are asymmetries regarding the impact of R&D by TNCs on the productivity of their home and host-country operations, depending on where that R&D is carried out, and this may have implications for a country's economic performance. In the case of Swedish TNCs, most R&D is still being carried out at home, and that R&D has a positive impact on the productivity of the home-country operations (as well as that of operations abroad). Furthermore, the absence of reverse technology transfer does not imply that Sweden does not benefit from R&D undertaken abroad in foreign affiliates. First, foreign-based R&D allows exploitation of the economies of scale and scope in R&D, which is important for a small country like Sweden. Second, the productivity of domestic R&D operations might have been lower if the absence of foreign-based R&D had prevented the country from exploiting these economies. The dispersion of R&D allows a small country like Sweden to maintain a technology base -- some of it located outside its boundaries -- that is larger than it might otherwise have been.

^a Industrial Institute for Economic and Social Research (IUI) data base.

^b Using data from the IUI data base, which are based on surveys of industrial TNCs in Sweden, absolute changes over four different time periods were considered and pooled. The estimated Pearson correlation coefficient equaled 0.31 and it was significant at the 1 per cent level.

^c The analysis was based on a single-equation model estimated using ordinary least squares (OLS):

$$\Delta Q_{it} = \lambda + \alpha \Delta c_{it} + \beta \Delta l_{it} + \rho_H \left(\frac{R_H}{Q} \right)_{it-1} + \rho_F \left(\frac{R_F}{Q} \right)_{it-1} + \eta_{it}$$

where ΔQ_{it} is the change in production measured as value added (wages and operating profits before depreciation and interest payments or receipts) in the company of i at the time of t , λ is the disembodied technical change, Δc_{it} is the change in the stock of physical capital (book value of equipment, machinery and buildings) in the company of i at the time of t and Δl_{it} is the change in labour in the company i at the time of t (average number of employees during the year in question), α and β are the elasticities relating to the factors of production, R is the R&D expenditure in a given year, (R/Q) is the corresponding R&D intensity in that year and ρ is the marginal productivity, or rate of return, of R&D capital. Subscript H denotes "home" and F "foreign" or "overseas". η is the error terms. Regressions were undertaken separately for domestic operations and foreign affiliates, respectively. The core sample comprised 223 observations (pooled cross section-time series data) on the R&D activities of Sweden-based TNCs in manufacturing for

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At the same time, the size of a home country's technology base may shrink, and some capabilities may disappear altogether as a result of the international division of labour in R&D. In a number of product areas of Sweden-based TNCs in the engineering industry, for example, the expansion in overseas R&D was found to have led to specialization and narrowing of technological competencies of R&D based in Sweden (Norgren, 1992). To the extent, however, that the dispersion of R&D by TNCs results in an upgrading of R&D conducted at home, contraction of some activities need not necessarily imply reduced technological competence. By locating some less sophisticated R&D activities abroad, such as product customization and process adaptation, resources can be freed at home for employment in more sophisticated R&D activities. Overall, the home country's performance could improve by reaping efficiency gains from participating more fully in an international division of labour in R&D and from achieving economies of scope and scale in R&D.

The dispersion of R&D can also widen the range of technologies and the pool of know-how available to a home country if it leads to the acquisition of capabilities not available at home. By having privileged access to technologies and talent throughout a TNC system, parent firms are in a position to acquire resources for their own R&D or production activities. A study on the motives for investing in the United States, found that while access to that technology was not a major motive overall, it did play a role in the case of FDI through joint ventures and acquisitions (Anand and Kogut, 1994). Other studies (Kogut and Chang, 1991) have supported this finding for Japanese FDI by showing that joint ventures between Japanese and United States firms were made to access technology in the United States.

The R&D activities of foreign affiliates may also help sustain R&D activities at home by allowing TNCs to take advantage of cheaper capabilities and personnel located elsewhere. Japanese TNCs in the automotive and electronics industries have been particularly efficient in this respect, incorporating design and engineering knowledge acquired from suppliers into their own products and production methods (Okada, 1991, cited in Dunning, 1993, p. 453). In many technologically advanced industries, such as semiconductors, electronics, chemicals, pharmaceuticals and telecommunications, the costs of R&D are high and rising. And access to cost-efficient R&D resources and personnel located elsewhere may be essential to retain and build up such industries or segments of them.

(Box III.5, cont'd)

the period 1965-1990. These include TNCs undertaking R&D solely at home, both at home and abroad or solely abroad. The same model was estimated for a sub-sample of 78 observations, including those TNCs that had undertaken R&D abroad.

^d This applied to the core sample as well as the sub-sample of 78 observations.

^e The sample for the period 1965-1974 consisted of the observation obtained by pooling the data for the periods 1965-1970 and 1970-1974, while that for the period 1974-1990 consisted of the pooled observations for the periods 1974-1978 and 1986-1990. Since no survey was undertaken by IUI between 1978 and 1986, there is a gap in the time series.

^f See footnote ^c and Fors, 1993.

Moreover, although the size of the home country's technology base may shrink as a result of the restructuring of some R&D activities, the size of the technology base might be smaller still. When R&D is carried out outside the home country, the commercialization of the new products and processes -- the outcome of foreign-based R&D -- can still be done by parent firms. A reverse transfer of technology (from foreign affiliates to parent firms) may also provide information and other spillovers to home country firms outside the TNC system.

* * *

Transnational corporations are expanding and dispersing their R&D more globally within their corporate systems so as to strengthen their competitiveness. At the same time, they are transferring their proprietary technologies, either packaged as an element along with related skills and other assets within the FDI package -- giving their foreign affiliates privileged access to their R&D capabilities -- or through non-equity arrangements with other firms outside TNC systems, to maximize the returns on their technological assets.

This has implications for the economic performance of host and home countries. Inward FDI and non-equity modes of participation by TNCs can contribute towards the strengthening of technological capacities in host countries, particularly developing countries with limited stocks of technological assets, capabilities and skills. Technology and innovatory capacities transferred through FDI or non-equity arrangements can enable countries to produce new products, upgrade productivity and shift towards higher value-added activities. The scope for these effects to occur, and their importance for long-run economic performance will, however, depend upon the kind of FDI a country attracts, its indigenous capabilities and efforts for absorbing technology and building up technological capacity, and the economic and policy environment in which domestic firms and foreign affiliates interact. Linkages between foreign affiliates and indigenous firms, as well as the human capital and infrastructure supporting indigenous enterprises are critical. Some of these factors are, in turn, quite closely related to the stage of development of countries, with the more advanced developing countries being in a better position to attract and to build upon the innovatory as well as production activities of TNCs for strengthening their technological capacities.

Outward investment by TNCs also has the potential to strengthen the technological capacities of home countries and, in general, a greater proportion of innovatory activities still tends to take place in home countries, even in TNCs with internationally integrated R&D. As long as outward FDI and domestic investment complement each other, and additions to technology assets and capabilities take place in home as well as host countries, international production is likely to contribute to a strengthening of the technological capacities and consequently, the economic performance of home as well as host countries.

C. Organizational and managerial practices

The previous sections of this chapter focused on resources that are key inputs into production and, hence, central to the competitiveness of firms and the economic performance of countries: capital, technology and skills. However, it is only the efficient utilization of these resources that makes them valuable -- precisely the reason why organization and management are major sources of corporate competitiveness. In fact, organizational and managerial practices (OMPs) are becoming more important than ever in terms of providing a competitive edge as the costs of capital converge, a good part of technology becomes standardized and skills become similar in their availability. In the light of this, this section examines the impact of OMPs and their transfer within TNC systems on the competitiveness of TNCs; the dissemination of those practices from TNCs to other firms through linkages and spillovers; and the implications that this has for the performance of countries. The focus of the section is on organizational and managerial techniques and not on the broader managerial expertise (including strategic, and common governance) issues related to international production within which OMPs are located.

1. The importance of efficient organization and management for competitiveness

Modern firms and institutions, regardless of their origin, seek to organize and manage themselves efficiently to obtain the best possible utilization of resources and highest levels of performance. In doing so, they are influenced to a significant extent by the cultural context in which they find themselves (Chang and Chang, 1994), including, in particular, the business culture, comprising the organizational values, attitudes and behaviour patterns of the corporate sector or business group to which a firm or institution belongs. Corporate culture -- the mix of management style, industrial relations practices and corporate values that a particular firm adopts -- is a subset of business culture and influences considerably the successful adoption or adaptation of particular OMPs. Arguably, it is the ability to synthesize constantly changing technology, business culture and best-practice OMPs that defines the successful modern firm, an ability captured in the concept of the learning organization (Senge, 1992).

Organizational and managerial practices are increasingly recognized as central factors to the competitiveness of firms (Doz and Prahalad, 1988), determining the efficiency of the entire range of activities of a firm. The resulting gains in competitiveness of a firm take the form of such quantifiable effects as cost savings and/or such qualitative effects as speed, flexibility and reliability in production. However, the methods used to achieve these objectives vary significantly. Table III.6 contains a non-exhaustive list of recognized OMPs. It is descriptive rather than prescriptive; some of the practices mentioned there, are, in fact, at variance with each other (for example "top down" and "bottom up" decision-making systems). Nonetheless, it conveys an idea of the range of newer practices in use. Many of them are closely linked to technology, sometimes overlapping with the latter, particularly in the case of service activities.

Table III.6. Selected organizational and managerial practices and their contribution to competitiveness

<i>Type of organizational and management practices</i>	<i>Description</i>	<i>Contribution to competitiveness</i>
Production		
Just-in-time system	A system in which suppliers deliver parts and components at the moment and at a volume that a factory needs.	Reducing inventory costs, handling costs and eliminating testing procedure for the products delivered.
Quality-control circles	Voluntary participation of employees in quality control in order to improve their work and capabilities.	Stimulating knowledge and developing capabilities through self-enlightenment and smoothing horizontal information exchange, thereby increasing a sense of unity within a company.
Flexible specialization	Skills and craft demarcations among workers are eliminated, and workers are trained to be multi-skilled.	Allows flexibility of production; frequent changes of product lines.
Benchmarking	Definition of precise performance targets.	Provides tool for assessment of performance; improves performance by setting clear targets.
Environmental management practices		
Definition of environment, health and safety standards	Defining precise environment, health and safety targets.	Reduces long-run environmental expenditure.
Human resource and labour-relations		
Promotion and compensation under mass production	Promotion is determined by the length of service in a particular company; wages are set according to the characteristics of the jobs, not to the individuals who hold them.	Ease of management in mass production system; wages and promotion are easily determined; stabilization of labour-management relations.
Performance-based reward system	Compensation determined in direct relation to output.	Increased output; eases wage determination.
<i>Kaizen</i>	Continuous improvements to manufacturing process, products and marketing skills by selecting and achieving higher standards through involvement of managers, workers and engineers.	Providing quick feedback through easy communication among managers, workers and engineers.

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(Table III.6, cont'd)

<i>Type of organizational and management practices</i>	<i>Description</i>	<i>Contribution to competitiveness</i>
<i>Teian</i>	Suggestion system; every worker can suggest her/his idea on anything related to management in writing to managers.	Improving workplace and working conditions, thereby enhancing company loyalty and feeling of participation, as in quality control circles.
Autonomy at shop floor	Autonomy of decision-making is given at lower levels (shop floor); related to bottom-up decision-making.	Low cost of coordination; quick decision-making and problem solving; strengthened sense of identification or unity within company.
Bottom-up decision making / <i>ringi</i>	In contrast to top-down decision making or unilateral orders from managers, workers at lower levels participate in the decision-making process and obtain consensus (<i>ringi</i>) before decisions are put before managers.	Workers can share information and strengthen their sense of identification with company through participation in the decision-making process.
Job rotation	Workers and managers move from one job to another, normally in a 2-3 year cycle, between different divisions, including secondment to foreign affiliates and other affiliated companies.	Organizational learning; familiarizing with various functions of company so as to increase capabilities for on-the-spot problem solving; commercialization of ideas and improvements to products through accumulated knowledge in various functions and increased cooperation among staff in different functions.
Lifetime-long employment	Provision of life-long (until retirement age) employment to each worker, in principle.	Enhancing loyalty to company through security of employment; contributing better to company as employees are acquiring more skills than the company needs.
Seniority-wage system/internal promotion	The more experienced and the more years of service, the higher the wages and posts offered.	Enhancing loyalty to company and improving relationship between managers and employees because higher motivation is given to employees.
Teamwork	Small teams of skilled workers build complete product; reduction of horizontal division of labour.	Increasing productivity of labour by converting fragmented and repetitive tasks into functionally coherent jobs.
Enterprise trade union	Independent enterprise union; unions organized on the basis of enterprises; unionized workers are organized into such unions.	Joint consultation among managers and workers improves communication and thereby reduces conflict and sabotage; consolidation of workers towards the common goal in the company.

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(Table III.6, cont'd)

<i>Type of organizational and management practices</i>	<i>Description</i>	<i>Contribution to competitiveness</i>
Organization		
Multidivisional structure	Splitting the company into product divisions, each with relative autonomy in day-to-day operations; a general office focus on the broader strategic issues of the enterprise as a whole.	Reduces administrative complexity; allows growth of industrial firms beyond the limits of single product lines.
Profit centre/strategic business unit	Decentralized management; independent operations within the corporations, where each centre/unit is responsible for optimizing its own profits.	Frees the top management of large corporations from bureaucracy and from operational decisions.
Supplier relations		
Supplier relations under the mass production system	Price the main determinant for supplier selection; firms encourage competition among suppliers; suppliers not tied to any one customer.	Reduction of costs of supplies.
Network connections	Networking of companies, affiliated or unaffiliated, through mutual stock holding (strong ties), assignment of directors (strong ties), cooperation between makers and distributors (loose ties), presidents' clubs (strong/loose ties) etc.	Sharing knowledge; source of information.
Subcontracting system	Outsourcing parts and components from an (outside) independent company with subcontracting agreements.	Permitting low cost and improving quality. Allowing flexible production.
New firm-supplier relations	Cooperation and trust with suppliers; emphasis on quality and reliable delivery.	Suppliers are additional source of knowledge.

Source: UNCTAD, Division on Transnational Corporations and Investment.

During the present century, first, United States and, subsequently, Japanese firms pioneered a number of crucial OMPs (related mainly to mass production and “lean” production, respectively) that led to substantial gains in productivity and quality (Chandler, 1977; Hoffman and Kaplinsky, 1988). More recently, a range of “best-practice” systems of organization and management are emerging in firms based in developed countries and, therefore, are becoming benchmarks for international production, especially of the integrated type. These systems have three broad dimensions (UNCTC, 1990a):

New OMPs have often been prompted by technological change, and have therefore been especially pronounced in industries where new or advanced technology is frequently introduced.

- The use of flexible, integrated automation technologies throughout a firm's activities.
- The incorporation of new management forms and production organization within firms, allowing the attainment of higher quality and flexibility standards.
- A new set of relations between firms and their suppliers, based on cooperation and trust.

Unlike mass production and lean production, these new methods are not connected to firms of any particular country though they may have originated elsewhere in attempts to respond to Japanese competition by adopting and adapting some Japanese practices. The key features that characterize the business re-engineering movement now influential in the United States (Hammer and Champy, 1995) -- such as the horizontal compression of skills (multiskilling), the vertical compression of work (flattened hierarchy), the case team (teamwork) and moving from just-in-case to just-in-time inventory -- are actually the same ingredients used in Japanese-style flexible production (Ozawa, 1994).

It is difficult to assess the relative importance of OMPs in explaining the competitive position of firms. The principal reasons relate to isolating the contribution of OMPs from that of other factors affecting competitiveness and measuring this contribution. Consequently, the recognition of their importance for competitiveness remains mainly intuitive.

2. Development and transfer within transnational corporate systems

(a) Development

Transnational corporations are at the forefront of organizational and managerial innovation since they have both a greater need for advanced organizational strategy and managerial practices compared with indigenous firms, and greater abilities to develop them:

- Greater need is a function of three principal factors. First, the strong competitive pressure that characterizes most of the industries in which TNCs operate requires a constant renewal of firms' competitive advantages, including through improvements in organization and management. Second, organizational and managerial tasks in TNCs are more complicated than those of indigenous firms because of the need to coordinate and manage operations spread across borders and operating in different commercial environments. Third, TNCs typically operate in the forefront of technology and need new organizational methods and management techniques to correspond to the requirements of new technologies.
- Greater ability to develop OMPs is a function of having more resources to invest in new systems and having access to a wider (and cross-cultural) pool of managerial talent and organizational experience. Empirical studies demonstrate, in fact, that TNCs often develop more efficient production and management methods than indigenous firms

(e.g., Richman and Copen, 1973; Enderwick and Buckley, 1983; UNCTAD-DTCL, 1994a).

As with their central role in the generation and dissemination of technology, TNCs are therefore important sources of new OMPs. Drawing upon their broad experience and the ideas of creative individuals within their systems, as well as outsiders -- such as consultants, consulting firms, academics and writers on management -- TNCs innovate new methods and practices and/or improve upon existing ones. Once created or developed, these practices are transferred among member-firms within the corporate systems of TNCs -- the more so the more integrated is the system (UNCTAD-DTCL, 1994a).

Indeed, there are many examples of this, including cases that significantly changed the competitive position of the TNCs involved. Thus, the innovation of the integrated injection logic by Philips (UNCTC, 1990a), the introduction of environmental standards (box III.6), and managerial innovation by Swedish automobile TNCs in the late 1980s are cases in point. Driven by the search for an approach that would respond to the specific nature of the Swedish labour market and the Swedish attitude to employment conditions, the companies in the latter case developed methods that combine elements of mass production with those of lean production to produce a distinct management style, which is less authoritarian, more informal and egalitarian, and less inclined to rely on the formal power of an organizational position than are the traditional practices of European and United States firms (Berggren, 1992). Finally, of course, perhaps one of the most outstanding contemporary examples is that of Toyota, which developed the lean production system (box III.7).

(b) Transfer within transnational corporate systems

Transnational corporate systems allow the sharing of OMPs among their member units, to the advantage of the system as a whole: foreign affiliates gain privileged access to OMPs used by the parent firm or by other affiliates, while the parent firm has similar privileged access to practices developed by its affiliates.

Traditionally, the transfer of OMPs, like that of technology, was largely a one-way movement of managerial and organizational methods from headquarters to affiliates. But, over time, other parts of a TNC's international network have also acquired innovatory capabilities in this area, with the result that now, at least in principle, every part of the corporate system can become the source of new OMPs (Kogut, 1990; Forsgren and Pahlberg, 1992). In fact, transnationality itself has become a source of advantage (Ghoshal and Bartlett, 1990; Kogut, 1989), especially where internal hierarchies of corporations have been replaced by more cooperative relationships between headquarters and affiliates (Hedlund, 1986; Bartlett, 1986). In this organizational structure, there is scope for a more fluid movement of OMPs, with parent firms and affiliates sharing their knowledge with each other. As a result, many overseas manufacturing affiliates of Japanese TNCs, especially in North America and Western Europe, are "hybrid factories" in the sense that Japanese OMPs are modified, adapted and harmonized with local practices (Abo, 1994). This is an example of a broader process whereby organizations learn from each other; in fact, the greater the cultural differences the higher the potential for synergistic learning (Nonaka and Takeuchi, 1995).

Box III.6. Environmental management practices in TNCs

Transnational corporations are increasingly taking a more strategic approach towards environmental management issues, tending to view the costs associated with environmental management as long-term investment central to successful business ventures. Amoco Corporation's statement that "environmental leadership produces business leadership" (UNCTAD-DTCI, 1993b, p. 17) is a direct expression of this attitude. This approach to environmental matters is becoming increasingly evident among TNCs based in developed countries, reflecting, among others, the increasing awareness of environmental issues in these countries.

In line with this approach, TNCs are increasingly establishing targets with respect to the environmental performance of their operations. To implement these targets successfully, a supporting organizational structure has to be created. A benchmark survey of environmental management practices in TNCs conducted by the UNCTAD Division on Transnational Corporations and Investment (UNCTAD-DTCI, 1993b) indicated that TNCs tend to assign full-time environmental personnel to work on environmental issues. It found that, quite commonly, managers in key positions dealt with environmental issues, reflecting TNCs' recognition of the importance of achieving sound environmental performance. For example, in 1989 Texaco (United States) created an Environment, Health and Safety Division, headed by a Vice-President. The Division was formed to maximize the effectiveness of environmental, health and safety programmes, to confirm the importance ascribed to these activities and to provide strategic guidance within these areas. Texaco also established a Public Responsibility Committee with overall responsibility for environmental, health and safety issues throughout the company that reports to the Board of Directors on the status of corporate policies and procedures.

Japanese TNCs tend to incorporate functions such as strategic planning and market research into environmental management more than TNCs based in other regions. This reflects their perception of environmental issues as part of the overall business objectives and as a source for business opportunity. Kawasaki Corporation provides an illustration: all of its divisions are involved in either initiating or implementing environmental programmes, and the work is supervised by the Environmental Management Committee, which reports to the President and Executive Vice-President.

Transnational corporations increasingly tend to create global standards for environmental management, in order to minimize liability and to avoid operating with too many environmental standards. This holds particularly for TNCs investing in developing countries, where environmental regulations are weaker compared with those in developed countries.

For example, Amoco Corporation (United States) applies its environmental standards, which are based on United States laws and regulations, worldwide. Amoco Corporation's introduction of its anaerobic wastewater treatment technology at a plant in Taiwan Province of China is an illustration of this approach. Borden Inc.'s introduction of an expanded safety, quality and productivity programme to its international sites is another example. The health, safety and environmental policy of BF Goodrich applies to all activities conducted by its headquarters and affiliates. Caterpillar Inc.'s water treatment centres at its facilities outside the United States were required to meet United States standards even in countries where laws requiring them do not exist.

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While, in principle, the flows of organizational and managerial practices and capabilities can take place between any two units within a TNC system, evidence relates mostly to the transfer from parent firms to their foreign affiliates. For example, a relatively high proportion of Japanese affiliates in Western Europe have typically tended to introduce several of the management practices of their parent firms, especially those that smooth the flows of communication and promote equality among workers and employers (table III.7). However, the proportion of affiliates adopting practices involving human resource management, labour relations and supplier relations was relatively low (table III.7). Significant degrees of transfers of OMPs within TNCs have also been observed with respect to foreign affiliates in Asia and Latin America (table III.8. and Weiermair, 1991) and in Australia (Dedoussis, 1994).

Several factors determine the extent and pattern of transfer of OMPs within TNC systems. To the extent that OMPs are culture- or business-culture specific, the "distance" between the cultures involved can influence their transfer, even within a TNC system (Ouchi, 1981; Sheti, Namiki and Swanson, 1984; Weiermair, 1991; Sullivan, 1992; Johnson, 1988). For example, the practice of quality-control circles was transferred to a little over one-third of Japanese manufacturing affiliates in Western Europe in 1992 (table III.7). On the other hand, it was adopted by a significantly higher proportion of affiliates in South, East and South-East Asia as well as in Latin America (table III.8; see also Yoshihara, et al., 1988). The higher rate of transfer to affiliates in developing countries may suggest that differences in the level of development may override differences in culture -- at least as far as production-related OMPs are concerned (table III.8). The situation probably differs, however, with regard to more general human resource management-related OMPs (Dunning, 1993).

Factors other than those related to business culture influencing the extent and pattern of OMPs transfer within TNCs include level of ownership and mode of entry of a TNC and the characteristics of the industry in which it operates. For example, OMPs have been transferred to a lesser extent within small and medium-sized TNC systems than within the systems of large firms (table III.8). This may be because the former tend to establish joint ventures (rather than fully-owned affiliates) in which the transfer of techniques from parent firms is less likely to take place due to proprietary considerations (UNCTAD-DTCI, 1993c). Similarly, entry of a TNC through acquisition of existing firms may deter, or delay, OMPs transfer because of special sensitivities to, as well as the difficulty of, transforming existing practices. On the other hand, the motives and conditions related to an acquisition may also influence the extent of transfer;

(Box III.6, cont'd)

Among the TNCs surveyed in the benchmark survey (UNCTAD-DTCI, 1993b), 57 per cent of the North American TNCs had formal arrangements for allocation of environmental management responsibilities between headquarters and foreign affiliates; only 32 per cent of the Japanese respondents had such programmes. This suggests that North American TNCs, with their generally longer experience of FDI, are relatively more sensitive to or aware of the international aspects of their activities than TNCs from other regions.

Source: UNCTAD, Division on Transnational Corporations and Investment.

Table III.7. Transfer of organizational and managerial practices by Japanese TNCs to their affiliates in Western Europe, by industry group, 1992

(Percentage)

Type of practice	All manufacturing	Assembling and processing industries	Parts manufacturing industries	Chemical products industries	Material purchasing industries	Others	<i>Memorandum:</i> design centres and R & D bases
Use of the same dining room	69	76	86	66	57	54	29
Use of open space offices	65	75	74	53	47	54	71
Uniform wearing system	41	50	60	26	34	27	4
Quality-control circles	37	42	46	28	38	19	8
Morning and other regular meetings	35	42	45	15	25	39	17
Bonus system	25	26	19	23	23	42	29
Internal promotion system	22	32	21	18	17	15	8
Just-in-time system	14	17	21	5	14	8	8
Life-long employment	11	11	8	10	10	15	21
Enterprise trade union	12	16	12	13	7	12	8
Seniority-wage system	2	3	1	7	-	-	-
<i>Memorandum:</i>							
Number of affiliates surveyed	406	133	85	61	77	26	24

Source: JETRO, 1993, table VI-II, pp. 54-55.

for example, more efficient OMPs may be needed to turn a firm around. The practices of working in open-space offices, the wearing of uniform dress and the practice of morning meetings were adopted by only 39 per cent, 29 per cent and 21 per cent, respectively, of firms acquired by Japanese TNCs, as compared to 71 per cent, 47 per cent and 38 per cent, respectively of newly established affiliates (JETRO, 1993). The extent of transfer may also depend upon a firm's strategies and industry characteristics; for example, TNCs having internationally integrated production systems would be expected to have more similar OMPs than TNCs with corporate networks in which foreign affiliates are free standing, due to greater interdependence and need for coordination. On the other hand, it has been observed that there is greater transfer of technology (especially soft technology, which is akin to OMPs) in the services sector, precisely because the free-standing nature of foreign affiliates required state-of-the-art technologies (UNCTC, 1990a). This may well apply also to OMPs.

(c) Impact on the competitiveness of transnational corporations

The development and transfer of OMPs can enhance the competitiveness of TNC systems by allowing them to utilize their resources and firm-specific advantages more efficiently, consequently contributing to a reduction in production costs and enhancing market share and profitability. Companies that are successful in adopting new or better OMPs are also likely to be better at tackling the complexities of international production.

Table III.8. Transfer of management technology and quality control by TNCs to their affiliates in host developing countries, 1992^a
(Percentage)

Region/ country	Management technology			Quality-control circles		
	All TNCs	Large TNCs	Small and medium-sized TNCs	All TNCs	Large TNCs	Small and medium-sized TNCs
<i>By home country</i>						
Japan	50	59	15	55	63	23
Western Europe	50	67	14	63	71	38
United States	50	56	15	59	69	23
<i>By host developing regions</i>						
South, East and South-East Asia	54	64	42	65	68	62
Latin America	49	62	10	60	70	30
Total ^b	52	63	34	64	69	56
<i>Memorandum:</i>						
Number of affiliates surveyed	231	143	88	231	143	88

Source: UNCTAD, Division on Transnational Corporations and Investment, based on its database on small and medium-sized TNCs.

^a The number of affiliates to which management technology/quality control was transferred as percentage of total number of affiliates.

^b Includes other regions/countries that are not specified in the table.

An outstanding example from earlier years in this respect is that of Ford Motor Company that adopted, further developed and transferred to its United Kingdom affiliate (established in 1911) the technique of mass production and related management methods, which brought about substantial improvements in productivity, acquiring for Ford a leading competitive position that lasted for decades (Chandler, 1977). A contemporary example is that of Toyota (box III.7). Similarly, the striking improvement in performance demonstrated by United States firms acquired by Japanese TNCs may, at least in part, be the result of the introduction of new OMPs (table III.9). These examples suggest that OMPs can have a major impact on the level of productivity of member firms within TNC systems, and thus on the competitiveness of the TNCs concerned.

3. Dissemination of organizational and managerial practices through linkages and spillovers

As in the area of technology, the effects of OMPs adopted by TNCs are not limited only to TNC systems but, through various linkages, can spill over to other firms and institutions in home and host economies:

- There are transfers of practices and learning effects directly, through channels such as training and knowledge transfer, between TNC systems and their local networks of suppliers and buyers and local institutions with which they collaborate, e.g., universities or government agencies.
- There are spillover effects or externalities arising from the movement of personnel between foreign affiliates or parent companies and indigenous firms in host or home countries, respectively, or business start-ups by former TNC employees, benefiting from the knowledge gained while employed by a firm within the TNC system.
- There are demonstration effects as indigenous firms imitate the practices of foreign affiliates that compete with them or that they consider superior. The very presence of foreign affiliates is often sufficient to act as a catalyst for change in management methods or the introduction of new methods, as seems to have been the case in the widespread adoption of quality-control practices in developing countries.

Several factors determine how effectively OMPs are transferred through the linkages and channels of influence mentioned above. The cultural specificity of a practice is a crucial determinant of the extent of its transferability (and transfer) to indigenous firms in a host economy -- much more so than of its transfer within TNC systems; the shorter the “cultural distance” between the different countries covered by a TNC system, the greater the chances of successful transfer of OMPs that are closely linked to business culture. This factor may be particularly important with respect to the transfer of methods and practices to economies in transition, from one type of economic system to another. For example, United States TNCs operating in China faced particular difficulty in trying to transfer their management practices to other firms in that economy, since they were based on assumptions that were alien to many

Box III.7. Toyota - NUMMI - GM

Toyota is credited with the introduction, in the 1950s, of just-in-time management practices (Womack, et al., 1990), which is considered a main reason for Toyota's strong market position. Underlying the just-in-time practices is a philosophy of production that rests on three pillars: the reduction of costs by eliminating waste; the use of minimum amounts of equipment, material, parts and working time; and the full usage of workers' capabilities (Hoffman and Kaplinsky, 1988).

In the early 1980s, Toyota, for the first time, transferred its unique managerial style to an affiliate abroad -- its United States affiliate New United Motor Manufacturing, Inc. (NUMMI). NUMMI is a joint venture between General Motors Corporation (GM) and Toyota Motor Corporation (Toyota) established in 1984 at the site of a former GM plant in Fremont, California.

NUMMI adopted Toyota's philosophies and concepts and its production system, *lean production*, the team concept, which is key to the management of production in Toyota,^a as well as Toyota's supplier-relations methods, based on long-term and stable relationships. A key ingredient in the latter is close connection between the manufacturer and suppliers, with regular meetings between NUMMI's employees and managers and its suppliers in order to increase communications and reinforce commitment to the production philosophy of NUMMI and its goals. This results in improvement of their products. Team members also play an important role in suggesting cost-cutting measures and continuous improvements ideas (*kaizen*) to suppliers.

In order to keep their practices as close to the original as possible and to transfer directly the ideas and philosophy behind them, Toyota continued to use the same language as in the parent company in Japan. For example, *andon*, *heijunka*, *jidoka*, *kanban*, *kaizen*, *muda*, *mura*, *muri*, *poka-yoke* etc. are terms used at NUMMI.^b

The actual transfer of the practices developed by Toyota to NUMMI was made through a series of training and teaching programmes. All newly hired team members attended a four-day orientation programme consisting of classroom exercises covering such subjects as the team concept, the production system, labour-management relations etc.. Some 450 group- and team-leaders were sent to Japan to learn the Toyota production system -- embodying continuous improvement and quality principles -- in a three-week training programme before NUMMI started to produce cars.

The adoption of Toyota's managerial practices rapidly improved NUMMI's performance. By 1986, NUMMI employed 2,500 team members (employees), about a half of the number at the former GM plant. In 1987, efficiency and productivity levels by some measures already reached those of Toyota's high performance plants at other locations (accompanying table).

General Motors executives were astonished by the performance of NUMMI at a former plant closed because of poor performance, and made active efforts to gain a thorough understanding of Toyota's management practices. Part of this effort was the establishment of a technical liaison office near the NUMMI plant, which documented Toyota's management practices and conveyed this information to GM.^c

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(Box III.7. cont'd)**Comparative performance of NUMMI, 1987**

Performance measure	NUMMI	GM ^a	Toyota ^b
Assembly hours per car	19	31	16
Assembly defects per 100 cars	45	135	45
Assembly space per car, per year (in square feet)	7.0	8.1	4.8
Average inventory of parts (in days of production serviced)	2 days	2 weeks	2 hours

Source: Womack, et al., 1990; reprinted in “How lean production can change the world”, *The New York Times Magazine*, 23 September 1990, p. 23.

^a Framingham (Massachusetts) plant (closed in 1989).

^b Takaoka plant.

Subsequently, GM adopted many of Toyota's practices and started using them in its other plants. The Spring Hill (Tennessee) Saturn plant started working with team management and the team concept (job rotation and reduction of job classification).^d Knowledge based on experiences of managers in working and associating with workers at the factory shop was transferred to the Lansing (Michigan) plant.^e Similar practices were introduced in other plants of GM. General Motors believes that these managerial practices provide a competitive edge to its organization.

Toyota's managerial practices have been further diffused to the United States automobile industry.^f The three largest United States automobile manufacturers (the “Big Three”) have recreated their management and production methods along Japanese lines. The two most important lessons that United States manufacturers learned from Toyota are related to quality consciousness and to attitudes towards employees, including the recognition that it is people, not machines or technology, that make cars. The presence of Japanese affiliates seems to have spurred learning and the adaptation of new practices, which United States automobile firms knew about earlier. FDI seems to have a catalytic role in this regard, helping firms overcome reservations that might be related, among others, to business culture.

Despite its strong performance, NUMMI is not independent of its parent firm. After one decade of operation, the parent company still assists NUMMI in implementing its production system.^g Several of the key posts in NUMMI, such as that of the president and those of general managers of finance and of purchasing, are held by Japanese expatriates -- Toyota employees assigned to Nummi for three to four years. In general, however, the attempt of Toyota to introduce its own management style appears to have been successful. Toyota's subsequent establishment of two fully-owned plants in North America (one in Ontario, Canada, and the other in Kentucky, United States, both established in 1988) was a reflection of Toyota's confidence in the transferability of its production system.

Source: UNCTAD, Division on Transnational Corporations and Investment.

Chinese firms (Castro, 1989). Other examples, including those of Western firms learning and emulating Japanese management methods, suggest, however, that cultural distance is a barrier that can be overcome where there is strong motivation and belief in the value of certain management methods for competitiveness (Sheti, Namiki and Swanson, 1994).

The characteristics and strategy of a TNC may also influence the scope for, and extent of transfer of, managerial practices to entities outside the TNC system. The ownership structure of a TNC may matter because wholly owned foreign affiliates may have fewer links to local firms in host countries, reducing the channels for transfer as compared with joint ventures. Where there is a strong commitment to hiring local staff, especially local executives, and to training and integrating them into the organization, the transfer of managerial know-how to other enterprises is more likely, since local employees may move to indigenous enterprises (Kobrin, 1988). The size of a TNC is also relevant (Dedoussis, 1994): there is less scope for internal training and job rotation in smaller TNCs and hence less scope for spillovers or externalities through turnover. So is the length of time that a TNC member firm has been operating: newer affiliates have weaker linkages with a host economy than those already established and hence transfer less organizational and managerial practices to firms or institutions outside the system (Johnson, 1977). Finally, the capabilities of indigenous firms and institutions to absorb and implement new methods of organization and management are a very important factor determining the extent of dissemination of OMPs through linkages and externalities. Among others, these are related to the existing pool of managerial skills and knowledge available to indigenous firms, and the scope for expanding that pool. In this regard, transnational business schools and consultancy firms may play an important role in supplementing domestic resources (box III.8).

There are many examples that illustrate the spillover of OMPs from TNCs to other firms in host and home economies, and its impact on competitiveness. Many of these relate to OMPs of Japanese TNCs, illustrating the dominant role of Japanese TNCs in this area in recent decades. One such example is provided by Kodak which, in the early 1980s, had lost considerable market share in photographic products to its major competitor, Fuji of Japan.³¹ Fuji had a better quality record, higher labour productivity and speed of product innovation. In 1983, Kodak embarked on a major restructuring of its operations based on imitating Fuji.

(Box III.7, cont'd)

- a "Shaking up Detroit", *Business Week*, 14 August 1989, p. 78.
- b Toyota adopted various practices to its own philosophy and also invented its own practices such as *kanban* (NUMMI, 1993).
- c Information directly provided by NUMMI.
- d "This team-up has it all - except sales", *Business Week*, 14 August 1989, p. 79; "The right stuff", *Time*, 29 October 1990, pp. 74-84.
- e "A new spirit at United States auto plants", *New York Times*, 29 December 1987.
- f "Shaking up Detroit", *Business Week*, op. cit.
- g Information directly provided by NUMMI.

As a result, labour productivity grew 20 per cent annually during 1984-1987, quality improved considerably and market share and profitability began to recover.³² Similarly, Goodyear Tire and Rubber Company approached the goal of 100 per cent first-time perfect quality after it adopted Japanese-style quality control at most of its plants.³³ A parallel phenomenon has been observed at Hewlett-Packard, which reduced its manufacturing costs by 42 per cent, increased its revenue per employee by 120 per cent, its market share by 193 per cent and its profits by 244 per cent after adopting Japanese methods of total quality control; additionally, the company managed to reduce the time for building integrated circuit boards from 15 days to one-and-a-half days and doubled output per employee.³⁴

Table III.9. Productivity increases in United States firms acquired by Japanese TNCs

Affiliate and industry	Parent firm	Investment value		Sales per employee				Increases in sales per employee ^a (Percentage)
				Before investment		After investment		
		Year	(Billion dollars)	Year	(Thousand dollars)	Year	(Thousand dollars)	
AVX Corporation (electrical)	Kyocera Corp.	1990	0.56	1987	35.1	1992	69.1	97
Firestone, Inc. (tires)	Bridgestone Corp.	1988	2.6	1986	58.4	1992	200	242
Lyphomed Inc. (Fujisawa USA, Inc.) (pharmaceuticals)	Fujisawa Pharmaceutical	1989	0.8	1989	135.3	1991	163.5	21
MCA, Inc. ^b (electrical)	Matsushita Electric Industrial Co., Ltd.	1990	6.1	1986	152.6	1991	183.3	20
National Steel Corporation	NKK Corp.	1984	..	1984	88.2	1993	254.6	189
Reichhold Chemicals Inc. (pharmaceuticals)	Dainippon Ink & Chemicals, Inc.	1989	0.29	1986	193.5	1993	363.6	88
Rheem Manufacturing Company (gasequipment)	Paloma Industries	1988	0.85	1987	150	1993	138	-8
Shaklee Corporation (pharmaceuticals)	Yamanouchi Pharmaceutical, Co., Ltd.	1989	0.4	1987	270.7	1992	1 083.3	300
Sun Chemicals Corp. (chemicals)	Dainippon Ink & Chemicals, Inc.	1986	..	1985	110.5	1991	158.9	44

Source: UNCTAD, Division on Transnational Corporations and Investment, based on company reports and other published sources.

^a Measured by percentage increase in sales per employee between the two years indicated in the table.

^b Sold 80 per cent equity share to Seagram (Canada) in 1995.

The experience of the Republic of Korea provides another illustration of the impact of the dissemination of OMPs that were brought to the country by Japanese TNCs and later by United States TNCs (Chang and Chang, 1994). Many ingredients of the Japanese management systems, such as lifetime employment and decision-making by consensus, have been widely adopted by Korean enterprises. Subsequently, managers in the Republic of Korea adopted many management concepts from United States firms (Chang and Chang, 1994). Another illustration of transfer of Japanese OMPs to developing countries is provided by the Brazilian car industry. According to managers at Brazil's General Motors plant, they have borrowed (and even improved on) Japanese manufacturing concepts, such as just-in-time inventory control; by adopting team-management techniques, the plant reduced the time for die-changing from one hour and forty-five minutes to just seventeen minutes.³⁵

Box III.8. Transfer of management practices by TNCs in Central and Eastern Europe

When TNCs began to invest in Central and Eastern Europe on a larger scale, they found that a majority of local managers lacked the basic corporate skills required for operating in a market economy. The difficulties TNCs encountered in finding competent managers locally forced them to hire expatriates to head affiliates. According to one survey, half of the affiliates in Central and Eastern Europe had expatriates in top operations management positions, and 40 per cent in top financial management positions in 1992 (Business International and Creditanstalt, 1992, pp. 11-12). However, over the past few years, the supply of competent indigenous managers has rapidly increased.^a

Transnational corporations have played an important role in this increase of managerial capabilities in the region. Foreign firms investing in the region have often embarked on extensive training programmes for their employees in the host country, including training for those in middle- and upper-management positions. These programmes are mainly cost-motivated. Indigenous managers cost substantially less than expatriates. From a strict cost-benefit perspective, training of local personnel is desirable to replace expatriates with local professionals as soon as possible.

The most frequent areas of training within TNCs in the region are in financial and management expertise, followed by technical training and English language training (Rojec, 1994). For example, all managers in ABB's affiliates have received training in general management practices and an average of 70 per cent in appropriate functional skills. To enhance further the competence of its managers, the company has developed so-called mini MBA programmes, modelled to suit different management functions.^b Ninety per cent of managers in ABB's Central and East European affiliates are now locally hired.

The Czech auto-manufacturer Skoda substantially changed its management training after VW (Germany) acquired a majority share in the firm. Skoda now uses "tandem" management -- two managers, one Czech and one expatriate, working together in one position -- to transfer management skills to indigenous managers. In addition, Czech managers at the Skoda plant do internships abroad, participate in seminars at the European Business School in Prague, and follow company specific in-house courses.^c

/...

(Box III.8, cont'd)

Management training by TNCs in the region takes various forms (accompanying table). Training programmes were earlier often conducted in TNCs' home countries, but TNCs have increasingly set up their own training centres within the region.^d In Slovakia and the Czech Republic, 70 per cent of foreign affiliates provided in-country training in management related areas.^e

Transnational consultancy firms are another major source for upgrading indigenous management skills in Central and Eastern Europe. They have poured into the region in large numbers since its opening up six years ago, and now play a significant role in the restructuring of many companies.^f They provide services ranging from developing business development plans to introducing total quality management to negotiating rescheduling agreements for heavily indebted companies. Management consulting firms not only transfer management know-how to domestic firms; they increasingly hire and train local talent within their firms, further adding to the transfer of management skills to Central and Eastern Europe.^g This is also the case with respect to TNCs in accounting and financial management services, especially the larger firms, which have focused heavily on training local talent.^h

Modes of management training by foreign affiliates in the Czech Republic

On-the-job	New or promoted managers are paired with experienced managers to learn management practices while on the job.
Training abroad	Used for exposing local managers to an international environment. However, as business climate has changed within the region, this sort of training has been increasingly replaced with in-country training.
Corporate training	Customized, in-house training in specialized countries.
Internships abroad	Usually held in a Western European affiliate for three to six months.
Management centres	TNC funded institutions providing courses ranging from full MBA programmes to company specific classes.
Public workshops	Used by TNCs to supplement in-house training programmes.
After-work	Many TNCs provide tuition reimbursement for classes taken after-hours to improve skills.

Source: Czech Information Series No 10, "Labour and social policy", MEN/01/95, CzechInvest, 28 March 1995, p. 4.

^a Tom Pullard-Strecker and Béla Papp, "Manager wanted", *Business Central Europe*, 1, 7, (December 1993/January 1994), p. 7.

^b Information provided by ABB.

^c Czech Information Series No 10, "Labour and social policy", MEN/01/95, CzechInvest, 28 March 1995, p. 4.

^d Pullard-Strecker and Papp, op. cit., p. 9.

^e Czech Information Series No 10, "Labour and social policy", op. cit., p. 3.

^f "Management consultants: quality control, professional services survey", *Business Central Europe*, 2, 17 (December 1994/January 1995), p. 43.

^g Ibid.

^h "Accounting: double entry", *Business Central Europe*, 2, 17 (December 1994/January 1995), p. 43.

There is also substantial dissemination of OMPs by TNCs to other firms in their home economies. For example, the mass production methods of Ford Motor Company were adopted by its main competitor, General Motors, during the 1920s, and increasingly dominated the entire United States automobile industry (Chandler, 1990). The expansion of computer-controlled production in the United States provides another example. This method of management of production was first introduced in the United States by firms, generally TNCs in the aerospace, appliance, automotive, computer and heavy equipment industries, such as Apple Computer, Boeing, Deere, General Dynamics, Hughes Aircraft and Rexnord. The push to automate moved to smaller companies several years later. The big TNCs actively encouraged their suppliers and subcontractors to link up electronically and to form networks of computer integration.³⁶

The transfer of OMPs brought in by, among others, TNCs has also reached the public sector. For example, total quality management was adopted by local government officials in the United States during the 1980s and benchmarking was introduced by London Underground to measure the relative performance of its tube lines. Similarly, the United States Air Combat Command has borrowed measurement techniques from the corporate world to benchmark the performance of its divisions. The State of Oregon introduced 270 benchmarks, measuring all aspects of the state's activities.³⁷

4. Impact on country performance

The impact of TNCs through OMPs on an economy begins with the adoption of more efficient OMPs by units of TNC systems located in a given country, which can make them more productive than indigenous firms. When TNC activity -- including licensing and other non-equity modalities of international production -- accounts for a significant share of an industry, this may increase the productivity and performance of the industry as a whole. The degree to which an economy derives benefits directly from these advantages is dependent on the degree to which gains from productivity increases accrue to host country factors of production, and remain in the host economy. The indirect benefits that occur when superior OMPs are further spread to the rest of the economy via linkages and spillover effects will, however, necessarily accrue mainly to indigenous firms and factors. Eventually, the adoption of more efficient OMPs and their dissemination to firms and institutions translates into more efficient operations of the firms and institutions involved and, hence, leads to increases in output and improved performance, eventually increasing per capita output and, in the case of export industries, also the volume of exports in world markets.

The magnitude of the impact depends, of course, on the extent of TNC linkages with the host economy, and on the importance of TNC activities involved relative to the size of an economy, and the conditions surrounding TNC activities. The larger the importance of TNC activity relative to the size of an economy, the larger the chances that host economies can harvest the performance increases arising from superior OMPs. On the other hand, when TNC activity remains relatively isolated from the rest of the economy, it will not have significant impacts on its performance. Furthermore, effects through competition will depend upon

whether units of a TNC system operate in a competitive industry environment; and demonstration effects depend on the abilities of indigenous firms to emulate TNC practices or improve their methods and practices through their own efforts.

Differences in the rate of introduction of innovatory OMPs are -- in some instances -- credited with bringing about changes in the competitive positions of national industries (Whipp, Rosenfeld and Pettigrew, 1989; Kogut and Parkinson, 1993), independent of whether they emanate from domestic or international sources:

- The strong competitive position of United States manufacturing industry in the inter-war period and after, until the 1960s, was partly due to the fact that United States firms, many of which were TNCs, pioneered a number of crucial managerial practices, notably mass-production methods that greatly increased the volume of output per worker (Chandler, 1977). As the new mass-production industries were capital intensive, there were strong pressures to make efficient use of capital by integrating and coordinating the flow of materials through the plant. These organizational challenges encouraged the professionalization of managers. The growth in size of enterprises raised the need for appropriate organizational structure, to which the multidivisional structure was a response (Chandler, 1977). The problems that United States manufacturing industry experienced in the 1970s and 1980s were, by contrast, partly due to the inadequacy of the mass-production system to deal with changing realities, which called for product differentiation and flexibility in production methods (Chandler, 1977; Piore and Sabel, 1984; Abernathy, 1978).
- In recent decades, the sustained competitive strength of Japanese manufacturing industries has been credited to the distinct management system of Japanese firms, including “lean” or “flexible” production -- an integrated system covering human resources management, production management, attitudes to work and competitiveness and other issues (Womack, et al., 1990; Ozawa, 1994). Lean production uses less human effort in the factory, less manufacturing space, less investment in tools, less engineering hours to develop a new product, when compared with mass production. It also requires less inventory on site, results in fewer defects and produces a greater variety of products (Womack, et al., 1990). In the components-intensive, assembly-based industries in which the lean production system originated and has been widely applied, Japanese firms enjoy the highest level of productivity and competitiveness in the world (Ozawa, 1994). This competitive strength may diminish, however, as the management techniques that created gains in quality and productivity for Japanese firms are disseminated to the rest of the world.
- During the 1970s and 1980s, it was the spread of Japanese OMPs to other countries that primarily shaped the world competitive arena (box III.7). Whole United States industries turned to Japanese-style quality control to combat quality problems that were characteristic of firms in the mass-production tradition competing with Japanese firms. The automobile and electronics industries, both of which suffered severe market-share

losses to Japanese firms, are prime examples, but other industries -- textiles, steel and major appliances -- also fall into this category.³⁸ The comeback of the United States automobile industry is a good example of the successful adaptation of Japanese OMPs. More generally, the recovery and growth of United States manufacturing productivity owed much to the generation of new OMPs by its TNCs, drawing partly on experience and knowledge gained in their transnational activities.

* * *

Transnational corporations are major innovators and disseminators of improved OMPs, and as such they can have a significant impact on the competitiveness of enterprises. To the extent that they improve the organizational and managerial capabilities of firms or other institutions in an economy, which in turn leads to a more efficient use of its resources, they contribute to the performance of the economy as a whole. That is, TNC systems can act as conduits for the acquisition and dissemination of OMPs, a fact that is of particular relevance for developing host countries. However, there may be some costs associated with this contribution, particularly in the short run, because improved efficiency may make labour redundant unless new avenues of employment are generated at the required rate. The long-run impact on productivity and competitiveness of countries is, nevertheless, likely to be at least as important as that of technology and technical progress.

Conclusions

Transnational corporations and the individual units comprising their corporate systems are well situated to generate and obtain key resources for production, drawing upon the interaction between their own firm-specific assets and the location-specific assets of the countries where they undertake FDI. Transnational corporate systems act as conduits for the transfer of these resources, providing privileged access to member units, while employing them wherever they yield the highest returns and maximize the competitiveness of a system as a whole. Advantageous access to the resources associated with FDI can also be made available to firms outside TNC systems with which TNCs have linkages in home and host economies, while spillovers can further spread the effects. Thus, directly and indirectly, TNC activity can contribute to enhancing the production capabilities and economic performance of the countries in which TNCs operate.

Financial capital is raised by TNCs wherever it is least expensive, including, to a significant extent, internally from profits, and used wherever it is most conducive to increasing the competitiveness of the TNC system. Innovatory activity is being expanded, and research and development dispersed more globally within corporate systems, so as to strengthen TNCs' competitiveness. At the same time, TNCs continue to transfer the technologies they generate, and the skills required to apply them in production, to member units within their corporate systems, as well as to other firms through non-equity arrangements, with a view towards maximizing the returns on their technological assets. And the organizational and managerial

practices that are central to remaining competitive are constantly being developed or upgraded and made available to the different parts of corporate systems.

All of this opens up, for host economies, prospects for additions to the capital stock, technological upgrading, skills development, and improved organizational and managerial practices simultaneously through the FDI package. Similar, although not symmetric effects can occur in home countries. For these prospects to be fully realized and contribute to a sustained improvement in the performance of the economies concerned, the establishment of foreign affiliates in a host country or the transnationalization of a home country's firms must be followed by strong linkage and catalytic effects on domestic producers. This suggests that the implications of expanded access to resources for home and host economies depend quite considerably upon the extent to which indigenous capabilities are built up in those economies.

NOTES

- ¹ Although the quantity and quality of human resources are important factors for the competitiveness of firms as well as the economic performance of countries, the discussion does not focus on issues related to labour or human resources, since they were the focus of attention in *World Investment Report 1994* (UNCTAD-DTCI, 1994a).
- ² Net income is defined as sales, income from equity investments, capital gains and other income less costs of goods sold and related expenses, income taxes and other expenditures.
- ³ Equity capital comprises all foreign-owned shares in foreign affiliates, equity in branch enterprises and other capital contributions (IMF, 1993b).
- ⁴ Loans from parent firms to their foreign affiliates excluding repayments of loans obtained from these affiliates, less repayments of loans by foreign affiliates to their parent firms and new loans by these affiliates to their parent firms.
- ⁵ United States, Department of Commerce, *Survey of Current Business*, various issues.
- ⁶ But it can be quite important in some industries, e.g., for supplies of Japanese firms; see Fruin, 1992.
- ⁷ "Little needs large", *The Economist*, 11 November 1989.
- ⁸ Ibid..
- ⁹ Ibid..
- ¹⁰ Mark Nicholson, "Maruti wins backing for share offer", *Financial Times*, 23 March 1995.
- ¹¹ Ibid..
- ¹² United States, Department of Commerce, *Survey of Current Business*, various issues.
- ¹³ "Together forever?", *Business Central Europe*, March 1995, p. 7.
- ¹⁴ Peter Marsh, "VW supplier plans Chinese venture", *Financial Times*, 12 July 1995.
- ¹⁵ Technology can be defined in many ways. The key concept, however, relates to knowledge useful in production. For a brief discussion, see Chen, 1994.
- ¹⁶ For a full discussion of the role of TNCs in the generation, transfer and dissemination of skills, see UNCTAD-DTCI, 1994a, chapter V.

- 17 For example, the total cost of carrying out R&D in India, with R&D personnel possessing qualifications equivalent to those of their counterparts in developed countries, is estimated to be one-tenth of that in developed countries (Granstrand, Håkanson and Sjölander, 1992).
- 18 For example, India's improved intellectual property rights regime has motivated Novell (United States) to establish its first product development centre outside North America in that country (EIU and UNIDO, 1995).
- 19 In certain industries, firms have apparently been locating innovation activities in affiliates abroad for some time: data on patents granted by the United States during 1920 - 1990 to large firms (mostly TNCs) from different countries suggest that United States electrical companies and European chemical companies have historically internationalized their technology development activities significantly (Cantwell, 1995b).
- 20 "Samsung Group: Lee Kun-Hee's first five years", *Business Korea*, 10, 6 (December 1992), p. 37.
- 21 "Goldstar to set up joint TFT-LCD research firm", *Business Korea*, September 1994, p. 53.
- 22 "WIPRO R&D goes global", *The Hindu*, 4 November 1994.
- 23 For a discussion of transfer of technology by TNCs, see UNCTAD, 1995d.
- 24 R. Seltzer, "Ford China R&D fund awards first grants", *Chemical and Engineering News*, 72 (4 April 1994), p. 7.
- 25 A. M. Thayer, "Companies find benefits, and barriers, in cooperative R&D with federal labs", *Chemical and Engineering News*, 72, (29 August 1994), pp. 17-19.
- 26 "France in Asia: drive to attract Asian investors", *Asian Business*, July 1994, p. 54.
- 27 For further discussion, see Ernst, Ganiatsos and Mytelka, forthcoming.
- 28 Technologies transferred to affiliates have generally been found to be of a more recent and sophisticated vintage than those sold to outsiders (Mansfield and Romeo (1980); Behrman and Wallender (1976); and McFetridge (1987)).
- 29 "Sci-tech: GENEI - tools of the trade", *The Economic Times*, 28 September 1991.
- 30 However, across industries the capacity of TNCs to adjust their technologies to factor conditions varies. For example, TNCs in resource-based industries and high-technology industries are less able to adjust their technological and capital intensity levels than many other manufacturing industries, for which a wider range of possible technological and capital intensity levels are economically viable (Dunning, 1994).
- 31 L. Helm, "Why Kodak is starting to click again", *Business Week*, 23 February 1987, pp. 80-82.
- 32 Ibid..
- 33 C.P. Work, et. al., "How to beat the Japanese", *U.S. News and World Report*, 24 August 1987, pp. 38-44.
- 34 B.J. Feder, "Hewlett accepts automation", *New York Times*, 10 September 1987.
- 35 "Brazil's car industry: party time", *The Economist*, 17 September 1994, p. 72.
- 36 "High-tech to the rescue: more than ever, industry is pinning its hopes on factory automation", *Business Week*, 16 June 1986, pp. 84-90.
- 37 "Managing the public sector", *The Economist*, 20 May 1995, pp. 25-26.
- 38 "The push for quality", *Business Week*, 8 June 1987, pp. 64-77.

CHAPTER IV

EXPANDING MARKET ACCESS

Introduction

The economic performance of countries depends not only upon their capacity to produce goods and services, but also upon their ability to utilize that capacity in the best possible manner. Consequently, countries are not only interested in acquiring access to resources for strengthening their production capabilities, but also in obtaining markets for their goods and services that are sufficiently large and wide to enable them to exploit their resources fully and efficiently. This is most directly evident in the importance attached to international trade, which allows countries to access markets beyond their national boundaries and gain from increased specialization and improved resource allocation.

In addition to the opportunities for gains from specialization and enhanced efficiency that they provide, wider and larger markets, international or domestic, affect the economic performance of countries in a number of ways. Larger markets for a country's products provide greater opportunities for reaping economies of scale, with positive effects on output and productivity, and they contribute to greater capacity utilization in economies with underutilized production capacity. In a dynamic context, expanding markets are essential to ensure that the potential for output growth and upgrading created by supply side factors are realized and strengthened. In the case of developing countries or countries that are relatively small in size, a particularly important role in these respects is likely to be played by export markets, which can contribute to growth in demand for output as well as to strengthened import capabilities for essential inputs into domestic production. Export expansion also contributes to strengthening

the foreign exchange position, an important consideration for many developing countries. Finally, expansion of markets through international trade also contributes to productivity growth for an economy through learning effects and competition. Contacts with foreign producers and consumers lead to the exchange of information related to production. Induced learning by exporters to meet competition and higher quality standards in foreign markets may spill over to other domestic firms. At the same time, competition from increased imports made possible by export growth may act as an incentive for local enterprises to introduce technological improvements and upgrade product quality (UN-TCMD, 1992b).

In today's globalizing world economy, foreign direct investment (FDI) complements trade in enabling countries to gain from international specialization and in expanding the size and scope of markets. International production is an important means for transnational corporations (TNCs) to secure and expand markets for their products as well as to internalize cross-border transactions based on an intra-firm division of labour, with a view towards minimizing transaction costs. Securing access to markets -- be they domestic or international -- affects the competitiveness of TNCs in several ways: it allows firms to benefit from economies of scale; it allows locational specialization of activities along the value-added chain, leading to improved efficiency and lower costs; it increases the financial base of firms; and it forces them to respond to the more competitive environment and the nature of demand in international markets.

The markets that TNC systems and individual units of these systems service are:

- international markets serviced by intra-firm exports;
- international markets serviced by arm's length exports;¹
- domestic markets serviced by parent firms and their domestic affiliates in home countries, and by foreign affiliates in host countries ("establishment trade").²

Sales by TNCs account for a substantial share of sales in market for goods and non-factor services, as illustrated by figure IV.1, showing the share of TNCs in world exports.³

This chapter examines how TNCs create and expand their access to markets through international production, how that affects access to markets for other firms in the economies in which TNCs operate, and the implications this has for firm competitiveness and the economic performance of countries. Section A discusses the characteristics and significance of international intra-firm markets within TNC systems. Section B focuses on the international markets serviced by TNCs outside their own production systems and on the domestic markets that TNCs service. Section C examines the implications for country performance.

A. The transnational corporate system as a market

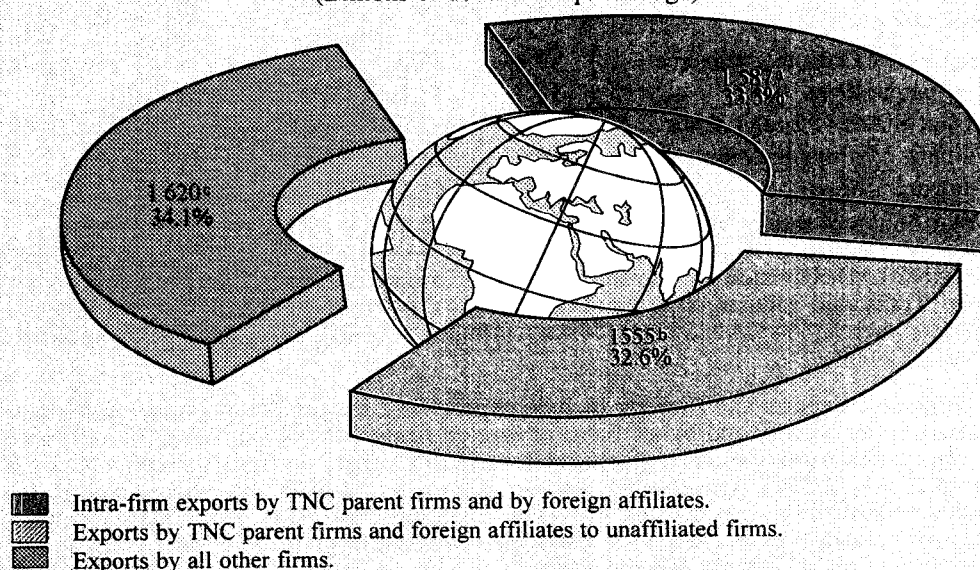
The international production system of a TNC constitutes an internal market for the flow of goods and services -- a market to which its individual member firms have *privileged access*. The size of this market is worldwide an estimated \$1.6 trillion (in 1993), or about one-third of total world trade (table I.13 and IV1). The size of this intra-TNC system market has more than

doubled during the past decade, judging from data for Japan, Sweden and the United States (table IV.2, Mataloni, 1995 and table IV.1), although its share in total trade has remained more or less stable. As discussed below, having privileged access to such a large market has a number of advantages for countries.

A TNC-system viewed as an internal but international market comprises three types of transactions: sales by the parent firm to its foreign affiliates; sales by foreign affiliates to their parent firms; and sales by affiliates in one country to affiliates of the same TNC system in another country. These transactions are not entirely determined by market forces or valued at market prices but represent the internationally integrated production and distribution operations of a TNC. They are valued at transfer prices set for internal accounting purposes and used for customs declaration (Hipple, 1995, p. 27).⁴ The advantage of internalizing these transactions lies mainly in greater control over upstream supplies and downstream markets than would be provided by arm's length purchases and sales. Associated with that are lower transaction costs, especially for goods and services that embody proprietary technological and marketing assets.⁵ The size and nature of trade within a TNC system is related to the strategy and structure of a TNC (UNCTAD-DTCI, 1993a):

- In the case of a TNC with a multidomestic structure (that is, with stand-alone affiliates, intra-firm trade is likely to be relatively low and its direction is mainly from the parent firm to the affiliate.
- In the case of a TNC pursuing simple integration strategies, a parent firm constitutes an important market for its affiliates if the latter produce inputs for the former; if affiliates

Figure IV.1. TNCs in world trade: exports of goods and non-factor services, 1993
(Billions of dollars and percentage)



Source: UNCTAD, Division on Transnational Corporations and Investment.

^a Estimated as in table I.13.

^b Estimated on the basis of the assumption based on the United States data in table IV.6 that arm's length trade by TNCs accounts for 32.6 per cent of world trade.

^c Derived as the difference between total world exports and estimated exports by TNCs.

are downstream relative to a parent firm (as, for instance, in the case of marketing affiliates), they would constitute the main internal market within the system.

- In the case of a TNC pursuing complex integration strategies, a TNC-system is characterized by flows of goods and services in various directions (from the parent firm to affiliates and from affiliates to the parent firm, as well as among affiliates).

The pattern also varies according to industry and size of home and host countries. In some industries -- e.g., such as electronics (box IV.1), automobiles and telecommunications -- the economies of scale and technological intensity are such that competitive production requires

Table IV.1. Japan and United States: intra-firm international trade and its share in total trade^a

(Billions of dollars and percentage)

Item	Japan ^b			United States ^c		
	1983	1989	1992	1982	1989	1992
Value of intra-firm exports^d	32.8	65.9	89.1	72.1	130.1	163.9
Shipped by parent firms	31.4	62.9	85.6	47.1	89.4	106.0
Shipped by affiliates of foreign firms	1.4	3.0	3.5	25.0	40.7	57.9
Value of intra-firm imports^e	17.2	29.4	29.3	91.2	204.3	228.2
Shipped to parent firms	5.0	19.4	15.5	39.2	74.4	93.9
Shipped to affiliates of foreign firms	12.2	10.0	13.8	51.9	129.9	134.3
Share of intra-firm exports in country exports (percentage)	22.5	24.5	26.9	34.2	36.0	37.2
Share of intra-firm imports in country imports (percentage)	15.1	15.3	14.8	36.8	42.8	42.5
Memorandum item:						
Intra-firm exports by firms in commerce	17.8	38.0	11.0			
Shipped by parent firms	17.3	35.4	8.1			
Shipped by affiliates of foreign firms	0.5	2.6	2.9			
Intra-firm imports by firms in commerce	19.9	61.7	18.2			
Shipped to parent firms	17.6	51.1	10.1			
Shipped to affiliates of foreign firms	2.3	10.6	8.1			

Source: UNCTAD, Division on Transnational Corporations and Investment, based on Japan, Ministry of International Trade and Industry (MITI) (1985), (1986), (1991a), (1992) and (1994b); United States, Department of Commerce (1985a), (1985b), (1992a), (1992b), (1994d), and (1995); International Monetary Fund (1990) and (1994e).

^a Intra-firm exports and imports include exports and imports, respectively, by parent firms of TNCs originating in the country and by affiliates of foreign firms that are located in the country.

^b Data cover primary and manufacturing sectors and "other" services, including business services, hotels, motion pictures, utilities and other miscellaneous services. Data for firms in commerce are reported separately in the memorandum item because of double counting in the MITI's survey of exports by firms in manufacturing and wholesale trade. Data for affiliates of foreign firms for 1989 are for 1990.

^c Data include all sectors and industries.

^d Value of intra-firm exports shipped by United States/Japanese parent firms to all their affiliates abroad, plus value of exports shipped by United States/Japanese affiliates of foreign companies to their foreign parent firms.

^e Value of intra-firm imports shipped to United States/Japanese parent firms by their affiliates abroad, plus value of imports shipped to United States/Japanese affiliates of foreign companies by their foreign parent firms.

the linking of international markets and production on a scale that extends beyond even the largest national market (Kobrin, 1991). In addition, the size of a home economy may matter for the direction of flows in an integrated international production system. Flows from affiliates to parent firms are likely to be relatively large in TNC systems headquartered in a large home country as compared with those in TNC systems from a small home country, as illustrated by intra-TNC-systems trade flows for United States and Swedish TNCs (table IV.2).

Table IV.2. Intra-firm trade by parent firms and their foreign affiliates, various home countries and years

(Billions of dollars and percentage)

Item	Japan ^a			Sweden ^b		United States ^c		
	1983	1989	1992	1986	1990	1982	1989	1992
Parent TNCs								
Intra-firm exports								
Value	31.4	62.9	85.6	10.1	13.7	47.1	89.4	106.0
Share ^d	28.3	40.3	32.1	49.0	47.0	30.6	40.1	42.4
Intra-firm imports								
Value	5.0	19.4	15.5	..	..	39.2	74.4	93.9
Share ^e	20.8	29.9	28.7	..	..	36.2	41.9	45.7
Foreign affiliates								
Intra-firm exports								
Value	..	..	..	1.2	2.9	131.7 ^f	207.1 ^f	277.7 ^f
Share ^g	..	..	..	18.2	17.0	52.2	62.9	63.8
Memorandum item:								
Japan: intra-firm trade in the commerce sector								
Intra-firm exports								
Value	17.3	35.4	8.1					
Share ^d	18.2	24.4	5.7					
Intra-firm imports								
Value	17.6	51.0	10.1					
Share ^e	30.6	28.3	6.1					

Source: UNCTAD, Division on Transnational Corporations and Investment, based on Japan, Ministry of International Trade and Industry (MITI) (1986), (1991) and (1994a); Sweden, Industrial Institute for Economic and Social Research (unpublished data); United States, Department of Commerce (1985b), (1992b), and (1995).

^a Data cover primary and manufacturing sectors and "other" services, including business services, hotels, motion pictures, utilities and other miscellaneous services. Data for firms in commerce are reported separately in the memorandum item because of double counting in the MITI's survey of exports by firms in manufacturing and wholesale trade.

^b Includes data only for firms in manufacturing.

^c Data include all sectors and industries.

^d Share in total exports of parent firms.

^e Share in total imports of parent firms.

^f International sales of goods of majority-owned foreign affiliates to parent firms and other affiliates.

^g Share of intra-firm in total exports/international sales of foreign affiliates.

Box IV.1. TNCs, intra-firm trade and market access in the semiconductor industry

The world semiconductor market, which is dominated by TNCs, was estimated at \$111 billion in 1994. The largest markets are North America and Japan, each with around 30 per cent of the world market, followed by Western Europe and the developing Asia/Pacific region, each with around 20 per cent.^a Semiconductors are intermediate goods, the customers being industrial corporations: independent customers on the open market and "captive" users belonging to the same TNC system. Traditionally, most Japanese manufacturers and some United States firms, such as Texas Instruments and Motorola, have sold part of their semiconductor production in the open market and used part of it internally. Other (more vertically integrated) groups like IBM or Hewlett Packard manufacture components mainly for intra-company use, but are more and more selling to other firms. Horizontally specialized groups like Intel or Samsung work almost exclusively for independent customers.

For United States manufacturers, estimates of the share of "captive" production in total semiconductor output in 1994 range from 12 to 23 per cent.^b For firms that follow a strategy of vertical integration, this share is likely to be significantly higher (see accompanying table).

**Value of semiconductors made, sold and bought
by selected United States producers, 1993**

(Millions of dollars)

Firm	Production	Sales	Purchases
IBM	4 000	200	800
Hewlett Packard	475	65	950
DEC	240	5	880
GM-Hughes	433	62	600
Rockwell	345	80	475
Northern Telecom.	145	-	475

Source: "Captive IC operations push into merchant world", *Electronic Business Buyer*, October 1994, p. 30.

Developments in design and manufacture of semiconductors cause production capacity to fluctuate considerably, whereas demand follows a more steady path of growth. Non-integrated customers are therefore in a weak position when there is a general shortage of components, while they may benefit from discounted prices in periods of overcapacity. Vertically integrated TNCs use their internal production in part to protect themselves against cyclical fluctuations. However, even these companies continue to source on the open market in order to take advantage of low prices in periods of oversupply. Companies that use but do not manufacture semiconductors are in a weaker position. First, they are often obliged to buy semiconductors from firms that are also competitors on the market for final products. Secondly, in periods of restricted supply and high prices, the first to be served are captive users, then the largest external customer TNCs, and lastly the smaller, often domestic clients. Thus, there is pressure on electronics firms that use semiconductors to integrate upstream activities.

Reinforcing the pressure to integrate further both upstream and downstream is the fact that, at present, firms working exclusively for the open market, such as some Korean firms, must also

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Judging from data on TNCs from Japan, Sweden and the United States (table IV.2), the share of intra-TNC-system trade in total TNC trade has been increasing, and is particularly high in intermediate products and industries such as transport equipment and electronics. This highlights a tendency towards greater integration of activities within the international production system of TNCs, driven by increased global competition, converging demand conditions and new technologies facilitating communications, and enabled by the liberalization of trade and FDI regimes (boxes IV.2 and IV.3; see also UNCTAD-DTCI, 1993a).

B. Markets and linkages outside the transnational corporate system

1. Markets served by transnational corporate systems

While the international production system of a TNC provides a market with privileged access for the parent firm and its affiliates, from the viewpoint of a TNC that market is simply a mechanism for the efficient organization of production and distribution in order to exploit more efficiently the markets *outside* the system, either through arm's-length exports to outside markets either located abroad or through arm's-length domestic sales to outside markets located either at home or abroad, that is establishment trade. The relative importance of arm's length exports and arm's length domestic sales for a TNC-system varies, however, according to the industry and the strategy of a TNC:

- In industries with non-tradable products (e.g., many service industries), the only way for a firm to obtain access outside markets is to establish operations in the individual markets where demand exists. The smaller the size of the national market in a TNC's country of origin, moreover, the more important international production becomes for expansion.
- In industries with tradable products, by contrast, the location of production operations and of markets need not coincide. Trade, FDI and non-equity arrangements are combined so as to organize production and distribution activities in the most efficient manner possible.

(Box IV.1, cont'd.)

rely on the few independent manufacturers of production equipment, located in the United States and Japan, since integrated producers of components and electronic goods, including most Japanese manufacturers, are reluctant to provide competitors with the latest equipment. Simultaneous upstream and downstream movements in the industry are likely to increase the share of captive production in time, whether for use within the same TNC system or for other TNC systems closely linked to it through strategic alliances.

^a United States, Department of Commerce (1994e); and "Captive IC operations push into merchant world", *Electronic Business Buyer*, October 1994, p. 30.

^b United States, Department of Commerce (1994e) and *Electronic Business Buyer*, op. cit..

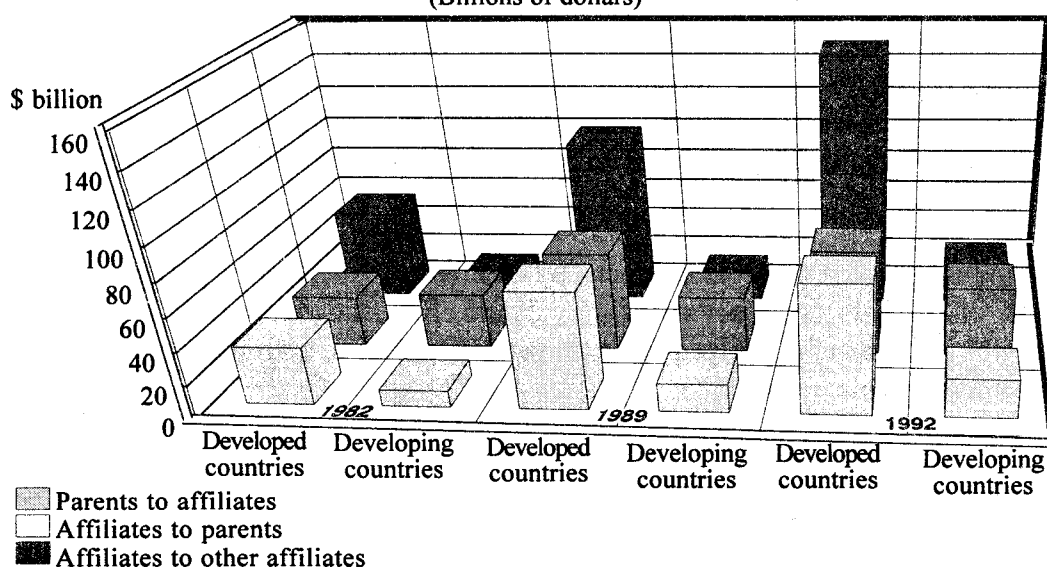
According to combined data for Japan, Sweden and the United States, the value of arm's length exports by TNCs exceeded that of intra-firm exports. The importance of such arm's length exports varied, however, between the three countries (table IV.3 and IV.2). Many TNCs have a long experience in exporting, which often precedes FDI as a method of expanding beyond national markets for firms. In some industries, such as natural resource extraction and processing, TNCs are mainly export oriented, because of the concentration of resources in a few locations and the spread of markets over a much wider space. In manufacturing, TNCs are increasingly pursuing integrated strategies that combine FDI and trade in such a way as to reap improved scale economies from multiple market entry, interdependence of country markets and specialization.

Despite the sizeable magnitude of TNC exports outside their production networks, arm's length sales in domestic markets -- be they in home or host countries -- dominate, accounting for shares ranging from over 75 per cent to over 90 per cent of sales by TNCs outside their

Box IV.2. Changing characteristics of trade within TNC systems

Within the overall trends described in the text, changes in the pattern of intra-system trade are taking place (table IV.2 and accompanying figures 1 and 2):

Figure 1. United States TNC systems: pattern of intra-firm trade by linkage and by area, 1982, 1989, 1992 (Billions of dollars)



Source: United States, Department of Commerce (1985b, 1992b and 1995).

Intra-TNC system exports have risen absolutely and relative to total exports for parent firms as well as for foreign affiliates, reflecting the increasing importance of integrated international production for the competitiveness of TNCs. But while the rates of growth of parent firm and affiliate exports were similar for United States TNCs, in the case of Swedish TNCs, intra-firm exports by foreign affiliates grew faster than those by parent firms.

intra-firm networks (table IV.3).⁶ To the extent that these shares reflect sales in host countries, they attest to the importance of establishment trade and FDI as a modality of delivering goods

The importance of establishment trade by TNC systems reflects two factors. One is the growing importance of services in the world economy. As already noted above, TNCs have to expand markets through sales based on operations abroad, given that many services are not tradable. The second is that, although obstacles to exports have declined, economic logic often still dictates to locate production in the national markets to be served. Production for sale in domestic markets is particularly important for goods for which local responsiveness to customers is crucial, as well as in markets where there is rapid growth of, or changes in, demand. This last aspect is particularly important for capturing markets that are large and considered strategically important, as illustrated by the expansion of FDI in China after the opening up of its economy (box IV.8). The importance of local sales is also greater for TNCs from smaller home countries, judging from data on Swedish TNCs as compared with TNCs from the United States.

The implications of expanding international production for the competitiveness of TNCs may be gauged from several indicators of the performance of TNCs. In the case of United States TNCs, for example, output, employment and exports of TNC systems expanded more (or declined less) during 1982-1992 than that of other firms in both the home country and several host countries (ECAT, 1993; OECD, 1994c). Furthermore, within the United States,

Box IV. 3. Nestlé's international production and integration of markets

Firms in the food and beverage industries generally need to be close to the markets they serve, because of the need to adapt products to local taste, local market regulations, differences in climate and distribution or, in some instances, perishability of products. However, even in this industry, there is scope for organizing production to take advantage of economies of scale and specialization, supported by intra-firm trade.

Like other food and beverage companies, Nestlé has followed a strategy of establishing affiliates to serve local markets, relying on local production and supplies as far as possible from 473 factories, worldwide. Now, however, it is restructuring its operations to take advantage of the wider markets created by economic integration. In Europe, the Nestlé group has reduced the number of manufacturing units while increasing its volume of sales during 1989-1994. Production has become increasingly specialized and flows of goods and services among affiliates have increased, with some facilities catering to the entire European market. Economies of scale and other restructuring in Europe are expected to create cost savings of around \$750 million for the group.

In North America, a first step was made in a similar direction by restructuring existing capacity in anticipation of NAFTA's extension to Mexico. In the Andean Pact region, Nestlé has formed a regional business group, widening the range of products offered in each of the countries by importing additional products from one of the other factories in the region. It has similarly responded to MERCOSUR by better coordinating its investment programmes and raw materials purchases and increasing exchange of products between countries of that region. Finally, in Asia, Nestlé has taken advantage of the tariff reductions granted under the ASEAN Industrial Joint Venture (AIJV) Scheme by forming an AIJV in 1991; under the scheme, five new factories were established in five different ASEAN countries, each one specializing in one product group.

Source: Information obtained from Nestlé.

Table IV.3. Arm's length and total sales by TNC systems and their member firms, 1982 and 1992

(Billions of dollars and percentage)

Home country/item	Parent firms		Foreign affiliates		TNC systems	
	1982	1992	1982	1992	1982	1992
Japan^a						
Arm's length domestic sales ^b (1)	368.9	1 201.0	20.7	117.6	389.6	1 318.6
Arm's length international sales ^c	79.5	181.5	8.3	38.0	87.8	219.5
Total arm's length sales (2)	448.4	1 382.5	29.0	155.6	477.4	1 538.1
Share of (1) in (2) (percentage)	82.3	86.9	71.4	75.6	81.6	85.7
Total sales^d	479.8	1 468.1	29.0	155.6	508.8	1 623.7
Sweden^e						
Arm's length domestic sales ^b (1)	18.4	25.4	15.6	40.2	34.0	65.6
Arm's length international sales	10.7	15.4	5.5	14.4	16.2	29.8
Total arm's length sales (2)	29.1	40.8	21.1	54.6	50.2	95.4
Share of (1) in (2) (percentage)	63.2	62.3	73.9	73.6	67.7	68.8
Total sales^d	39.2	54.4	22.3	57.6	61.5	112.0
United States^f						
Arm's length domestic sales ^b (1)	2 067.5	2 978.6 ^g	449.8	814.3	2 517.4	3 792.9
Arm's length international sales	171.4	156.8 ^g	120.5	157.2	291.9	314.0
Total arm's length sales (2)	2 238.9	3 135.4 ^g	570.3	971.5	2 809.2	4 106.9
Share of (1) in (2) (percentage)	92.3	95.0	78.9	83.8	89.6	92.4
Total sales^d	2 348.4	3 330.9	730.2	1 291.6	3 078.6	4 622.5
Memorandum item:						
Japan: sales in the commerce sector						
Arm's length domestic sales ^b	404.9	1 009.8	61.9	145.7	466.8	1 155.5
Arm's length international sales ^c	77.5	135.1	48.0	96.0	125.5	231.1
Total sales in the commerce sector^d	499.8	1 152.9	109.9	241.7	609.7	1 394.6

Source: UNCTAD, Division on Transnational Corporations and Investment, based on Japan, Ministry of International Trade and Industry (MITI) (1986) and (1991); Sweden, Industrial Institute for Economic and Social Research (unpublished data); United States, Department of Commerce (1985b) and (1995).

a Data cover primary and manufacturing sectors and "other" services, including business services, hotels, motion pictures, utilities and other miscellaneous services. Data for firms in commerce are reported separately in the memorandum item because of double counting in the MITI's survey of exports by firms in manufacturing and wholesale trade. Data under 1982 are for 1983.

b For Japan and Sweden, including total sales by parent firms and their local affiliates in the home economy, including sales to local affiliates. For the United States, data exclude the latter, i.e., intra-firm sales.

c For Japanese parent firms, arm's length international sales by parent firms represent the value of exports by parent firms to unaffiliated firms. For Japanese affiliates, arms'length international sales are assumed to be equal to their sales to third markets.

d Including, also, intra-firm sales; the value of intra-firm sales included here is not directly comparable with that for intra-firm exports reported in other tables, because it represents the value of intra-firm international sales, while the figures in the other tables generally represent export values.

e Data are for 1986 and 1990, respectively, and refer only to the manufacturing sector. Arm's length international sales show the value of exports by parent firms and their affiliates to unaffiliated persons.

f Data are for firms in all sectors. Sales of foreign affiliates include United States non-bank majority-owned affiliates of non-bank United States parents.

g Arms'length sales for the year 1992 are available only for services. The share of arm's-length sales in goods has been therefore estimated on the basis of data provided in the previous surveys that reported both goods and services.

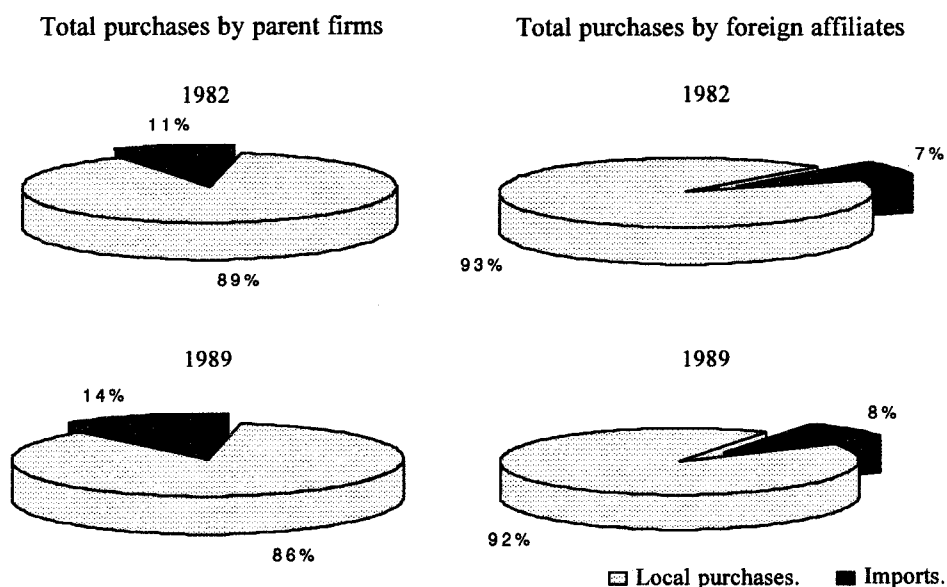
industries with the highest share of assets overseas grew (in terms of domestic output) during 1982-1989 at nearly double the rate of all manufacturing industries (ECAT, 1993, p. 21); and, during 1982-1990, the percentage of total shipments exported by manufacturing TNCs as a group from the United States was consistently in the 12 to 17 per cent range, while that of all other United States manufacturers ranged from 1 to 7 per cent. Finally, the rate of return on FDI averaged 12 per cent during 1980-1992 for United States TNCs,⁷ as compared with an

(a) Linkages with suppliers

Besides their linkages with customers, sourcing from suppliers (figures IV.2 and IV.3) is the most important linkage established by TNCs with enterprises outside their own organizational structures.⁸ Suppliers, whether from the home, host or other countries, benefit from advantageous access to markets for their products, often on the basis of long-term, exclusive contractual relationships (box IV.4). One common mode of such relationships is subcontracting, which affords suppliers the benefits of state-of-the-art logistics, marketing and distribution and, often, of specifications, designs and training provided by the TNCs which they supply. Established suppliers of TNCs may in turn become managers of a second and third tier of subcontractors, while retaining responsibility in terms of price, quality and delivery schedule *vis-à-vis* a client. These networks open up markets and export opportunities for large numbers of small and medium-sized firms.

Much of this sourcing is from producers in the domestic economies of home and host countries. Local suppliers account for the majority of purchased inputs of both parent firms and foreign affiliates in United States TNC systems (figure IV.3). In the case of Japanese TNCs, parent firms rely much more on local sourcing than do foreign affiliates.⁹ Furthermore, during 1989 and 1992, while Japanese parent firms reliance on imports has slightly decreased, their imports from Asia have increased (figure IV.2).

Figure IV.3. Purchases of United States TNC parent firms, 1982 and 1989
(Percentage)



Source: UNCTAD, Division on Transnational Corporations and Investment, based on Mataloni and Goldberg (1994).

Component supply through subcontracting relations with foreign affiliates has created a major niche for domestic component producers in several host developing countries to enter the vertically integrated production chains of TNCs geared to export markets. In Mexico, for example, 59 per cent of a sample of 63 manufacturing affiliates surveyed in 1990 subcontracted nationally (UNCTC, 1992a, p. 43). Subcontracting in this sample of firms was concentrated mainly among foreign affiliates in technology-intensive and export-oriented industries, notably the automotive, computer, electrical and electronic and chemical (excluding pharmaceuticals) industries. Assistance provided by foreign affiliates to subcontractors included technical, administrative and financial assistance, as well as training in quality control, the last by 87 per cent of affiliates surveyed (UNCTC, 1992a, p. 45). Similarly, in South-East and East Asia, networks of local producers (mainly joint ventures with TNCs) have been established for component-supply to automobile and electronics TNCs, with specialization among plants in different countries to supply the regional market. In the automobile industry, these networks mainly belong to Japanese TNCs; all major Japanese automobile TNCs source automobile parts through their foreign affiliates and their local subcontractors, taking advantage of ASEAN regional cooperation provisions. In the electronics industry, such networks have been established by United States as well as Japanese TNCs, beginning with labour-intensive operations and moving towards increasingly sophisticated networks of operations with much cross-hauling of products across national boundaries (Graham and Anzai, 1994).

Box IV.4. Supplier relations in automobile assembly

There has been a broad trend for automobile assemblers to make greater use of external sources of supply for components and parts ("outsourcing") (OECD, 1993b). At the same time, stable and close relationships with external suppliers have become particularly important for firms in the industry. Outsourcing has been stimulated by competitive pressures from Japanese automobile TNCs much of whose competitiveness has been attributed to the close relationships established in particular with their "first-tier suppliers". The supplier system serving automobile TNCs in Japan is organized in a pyramidal structure with some five hundred first-tier suppliers, a few thousand second-tier suppliers, and more than 20,000 tertiary automotive-parts suppliers. The parent company plays a key role by structuring linkages and coordinating flows within the network, but has direct financial links only on key first tier-suppliers, who in turn coordinate a second tier, and so on. The "just-in-time" system of supplies that Japanese automobile firms use is characterized by close geographic proximity of suppliers to producers, long-term relationships and tight interfirm linkages that assure reliable and timely deliveries of inputs. The activities of Japanese automobile TNCs in international markets have, in turn, provided benefits in terms of enhanced competitiveness for the network of small and medium-sized firms used by them.

Moreover, Japanese TNCs have played an active role in facilitating the establishment of operations by key suppliers at foreign locations close to their own affiliates' plants. According to one survey of suppliers in Japan, more than 75 per cent of suppliers to Japanese automobile TNCs also invested in production facilities in the United States in order to maintain close ties to the TNC system (Reid, 1991). There is a relatively low level of linkages directly with indigenous suppliers

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Linkages with TNCs can be an avenue for market expansion for component suppliers in home as well as host and third countries. For example, close subcontracting relationships between large German TNCs such as Daimler Benz and Robert Bosch have opened up large markets not only for firms located in Baden Württemberg, where the TNCs themselves are headquartered, but throughout Germany and abroad. Parties involved share know-how, services and information about developments in markets. In order to ensure that subcontractors remain responsive to changes in technology and market conditions by remaining open to competition, Bosch attempts to prevent subcontractors from becoming dependent on its purchases, typically buying only 20 per cent of a subcontractor's output (Herrigel, 1993).

For TNCs, strong linkages with suppliers allow flexible and dependable arrangements for strengthening production capacity. For suppliers, they provide dependable and advantageous access to markets. The pattern of benefits generated depend upon the kind of linkages established. For example, Japanese networks tend to be based on stable, long-term business relationships which only slowly become open to new suppliers. Thus, initially at least, they provide market access and the attendant benefits mainly to firms that supply to their home

(Box IV.4, cont'd)

in host countries which is partly related to the relatively recent growth of Japanese FDI, and the time required to localize satisfactory sourcing of inputs. However, links are usually forged by the first-tier of suppliers with local producers, extending the supplier networks of Japanese TNCs and their Japanese suppliers to include local companies. Such links with local suppliers have been growing. These relationships have sometimes succeeded in building industrial competencies in new areas as in the case of Honda in Ohio. For example, one small machine shop in rural Ohio has capitalized its previous expertise in rebuilding engines and farm machinery and become a rebuilder of robot heads for Honda and Honda suppliers (Audretsch, 1995). In addition, after years of establishment in the United States market, Toyota began to expand purchases of parts and materials from local suppliers both for export to Japan and for United States production -- the value of these purchases increased four-fold from \$1.1 billion to an estimated \$5.28 billion between 1988 and 1995. Toyota has projected that in 1995 locally produced vehicles will outnumber imports in North America for the first time since 1957, the beginning of its operations in North America.

A number of major automobile producers competing with Japanese TNCs have introduced external sourcing systems akin to the Japanese systems. This is reflected, for example, in the fact that the value added in automobile production of major automobile companies has declined. Furthermore, the average number of suppliers per firm has decreased and long-term contracts with suppliers have been introduced, replacing short-term contracts and price competition among multiple suppliers (OECD, 1993b). This new system enables suppliers to establish tight links with

country operations, or the affiliates of those suppliers in host countries. United States TNCs tend to establish production networks that are relatively open to new suppliers, typically structured through formal but nevertheless flexible legal relationships. Participants in these networks compete on the basis of cost, quality and delivery time and, in the process, build up the competences required to compete in wider markets. For example, United States networks in the electronics industry in East Asia have helped generate direct competition in Asia to Japanese firms even in markets or products like memory chips and consumer electronics (Borrus, 1994).

(b) Transnational corporations as marketing intermediaries

Linkages to TNCs may be important in helping smaller firms in the international marketing and distribution of their products. These linkages may take the form either of final product supplies to TNCs for wholesale and retail distribution, or of subcontracting and similar arrangements. As to the former, transnational service corporations have long provided firms with distribution services, often including their first exposure to foreign markets (Czinkota et al., 1995, p. 208); the latter have also been growing in importance in some industries (Westney, 1994; Gereffi, 1994).

Transnational trading corporations play a special role in providing marketing services, including stockholding, distribution, generating new customers and promotion (Buckley et al.,

Box. IV.5. Sogo shosha: traders and investors

Unique to Japan, *sogo shosha* -- Japanese trading companies -- operate both inside and outside Japan. Trading firms have existed in Japan since the mid-nineteenth century dealing in diverse products and services, but their evolution is tied up with the development of Japan's modern industries. After World War II, there was a regrouping of small specialized trading firms into large groups, and diversification of products and services. The *sogo shosha* were the engine of Japan's export-led growth in the post-war period (Tsurumi, 1980). They channelled imports of machinery, technology and raw materials, and played a lead role in establishing markets abroad for Japan's exports. The *sogo shosha* were and are also characterized by a substantial involvement in the domestic distribution sector. They were able to offer their clients, as a result of this experience:

- knowledge of markets, including as regards business contacts, distribution, trading procedures and intra-company communication channels;
- economies of scale, derived from dealing with large information and distribution networks;
- a large internal market, helping clients to locate customers within the *sogo shosha* networks and to sell or barter goods and services among themselves (Tsurumi, 1980).

The *sogo shosha* were also the first Japanese firms to undertake FDI by setting up branch offices and various manufacturing affiliates abroad. As Japanese FDI took off, the *sogo shosha*'s function to provide organization services for investment projects grew in importance. They planned new investment projects based on information they collected from their networks. They facilitated

/...

(Box IV.5, cont'd)

the expansion of FDI geared to market access and natural resources and, since the mid-1980s, helped to re-establish cost competitiveness for manufacturing products to counter the yen appreciation. However, as shown in the accompanying table, the export-sales ratios of Japanese foreign affiliates, in the manufacturing sector and in commerce including trading affiliates, declined over time, suggesting that an increasing number of Japanese TNCs are undertaking FDI to access overseas markets through local production.

Export-sales ratios for Japanese foreign affiliates, 1980, 1989 and 1992

(Percentage)

Activity	1980	1989	1992
Manufacturing	26.4	20.4	23.3
Commerce	56.8	50.5	39.7

Source: Ministry of International Trade and Industry (MITI), 1983, 1991a and 1994a.

Over time, the role of sogo shosha in Japanese trade has diminished. In 1991, the sogo shosha handled 43 per cent of Japan's total exports and 76 per cent of total imports, while in 1970 the corresponding ratios were 69 and 81 per cent, respectively (Hsu, 1991). Many Japanese manufacturing firms have become more internationalized, selling their products through their marketing departments or through their own affiliate networks. Trading companies have diversified into new areas and activities (Hsu, 1991). For example, most of them have set up special investment and financing departments, particularly for small and medium-sized enterprises (SMEs). Investment projects abroad by SMEs now account for nearly half of Japanese FDI projects (JETRO, 1994). Many joint ventures involving sogo shosha and Japanese SMEs are found in developing countries, where the latter are establishing operations, generally in labour-intensive industries, in order to lower their production costs.

Source: UNCTAD, Division on Transnational Corporations and Investment, based on various sources.

Box IV.6. IKEA's network and its benefits for suppliers

IKEA (Netherlands) has a retailing network that (in 1994) has opened up markets worldwide for its 2,700 subcontractors located in 67 countries, 400 of them in Nordic countries. These firms enter into long-term contracts with IKEA and receive technical advice and leased equipment. The contract is often exclusive and involves a commitment to sell IKEA as much as 50-60 per cent of their output at capacity. Firms that supply IKEA are also customers of the group's business and technical services, which strengthen their ability to take advantage of the economies of scale made possible by the large retailing business selling the same furniture around the world. In Sweden, where IKEA originated in 1975, suppliers' affiliation with the firm was found to have a catalytic effect in large segments of the furniture industry. IKEA's headquarters are now located in the Netherlands, but the company still maintains its Scandinavian identity as regards marketing and brand name image, and retains strong ties with suppliers in the Nordic countries, which account for one-third of the company's purchases and sales.

Source: Information obtained from IKEA.

1990). Although many large firms internalize their marketing functions, including their international marketing, many others must procure theirs externally. For example, the *sogo soshu* provided a number of Japanese manufacturing firms with their first exposure to international markets, and subsequently assumed an important role in FDI (box IV.5). Buying offices (as well as visiting buyers) from large United States and European retail stores are an important channel for exports to markets in the United States and Europe. Transnational trading corporations provide such linkages to markets for primary commodities as well as manufactured goods.

Subcontracting arrangements are common for consumer goods such as consumer electronics, footwear, furniture, garments, houseware and toys. They carry the same advantages for the subcontractors as those mentioned earlier for component suppliers: production is generally carried out by locally-owned producers, while the specifications are supplied by brand name TNCs or large retailers that design the products, provide technical assistance and manage marketing and distribution. Subcontracting relationships are also often structured in tiers, with established primary suppliers retaining the responsibility for price, quality and delivery, while managing lower tiers of supply. These networks open up market and export opportunities for many small and medium-sized firms (boxes IV.6-7). While subcontractors do not obtain access to international markets under their own names, they benefit from the increased sales to TNC-systems. Linkages with export-oriented TNCs also provide local firms with knowledge about overseas market conditions including, for instance, foreign preferences regarding design, packaging and product quality. Such knowledge could help firms branch off into direct export as well.

Box IV.7. The importance of long-term supplier-relations for market access and international competitiveness in garments: the example of Benetton

Benetton, a garment manufacturer and retailer, provides a good example of a TNC with competitive operations based on a long-term association with subcontractors. The company, which had annual sales of \$1.4 billion in 1994, subcontracts about 95 per cent of its activities in manufacturing, distribution and sales, while it achieves economies of scale in the activities it retains internally -- raw material purchases and a limited number of high technology manufacturing processes such as dyeing and cutting (Rugman and D'Cruz, 1994, p. 108). A network of between 350 and 400 mostly local (Italian) subcontractors, small and very small, work exclusively for Benetton, enjoying a guaranteed market and full-capacity utilization. The risk of producing for only one client is mitigated by the stability and predictability of sales, the prestige of working for the company, and the opportunity offered by the system for small entrepreneurs to start a business with strong export opportunities. About 30 per cent of the company's value added in manufacturing is accounted for by subcontractors. Recently, the company has expanded subcontracting to firms located abroad, mainly in France, Spain, Tunisia and in Eastern Europe. In distribution and sales, Benetton uses 80 independent agents located in various countries to manage over 4,000 investor-owned stores, providing the company with market knowledge and linking the market-place to the company.

Source: Information obtained from Benetton.

Linkages of suppliers with TNCs may take forms other than subcontracting and sales through transnational trading companies. One popular form is original equipment manufacturing, in which producers manufacture finished products that are sold under another company's brand name, but not, as in subcontracting, under contract with a commitment by the client to buy, or with the assistance and support of the client in production. These arrangements, like subcontracting, strengthen the competitiveness of manufacturers by providing them access to markets, but only when the manufacturers already possess the capabilities to meet buyers' quality, price and delivery conditions. In developed countries, reliance on original equipment manufacturers is a common strategy for diversified TNCs that use multiple distribution channels. For example, Japanese TNCs in the electronics industry rely heavily on original equipment manufacturers (Khan and Yoshihara, 1994, p. 52). In some developing countries, original equipment manufacturing has provided a useful export niche for small and medium-sized firms. Firms in East and South-East Asia in particular have made wide use of it (Gereffi, 1994).

(c) Linkages through licensing and franchising

Non-equity arrangements under which producers outside a TNC system acquire from a TNC the right to produce and market a product in return for a royalty or fee are a common mode of internationalization of production by TNCs. Licensing arrangements are frequently used for transferring technology to firms outside the system, but they are also widely used for the marketing or distribution of the licensor's products or the use of its proprietary assets, including trademarks or brand names. Under such an arrangement, the international marketing function shifts to the licensee. Licensing and other non-equity modes of participation (including franchising, which is especially common in services) carry advantages as a means of market access when FDI is not permitted, involves high risks, or is not sufficiently profitable and cross-border trade less attractive due to transport cost, perishability of products or other factors.

C. Implications for country performance

The benefits of market access for firms can translate into benefits for the countries in which they are located in the form of increased efficiency, economies of scale, induced investment and learning. However, the extent and nature of effects may vary according to the prevailing conditions and, moreover, inward and outward FDI are not symmetric in their impact.

1. Implications of inward foreign direct investment

Inward FDI that secures or expands markets for the products of a TNC through foreign affiliate sales, directly contributes to an economy if it thereby adds to the volume of real investment and output in the economy. This would generally be the outcome if unemployed complementary resources (especially labour) are available, as is the case in many developing

Table IV.4. Food and manufactured exports by United States and Japanese foreign affiliates, by host area, 1982, 1989, 1992

(Millions of dollars and percentage)

Area	Food and manufactured exports ^c	United States ^a			Japan ^b		
		Exports of foreign affiliates	Share ^d	Export propensity ^e	Exports of foreign affiliates	Share ^d	Export propensity ^e
		(Million dollars)	(Percentage)		(Million dollars)	(Percentage)	
Developed countries							
1982	976 424	80 663	8.3	36.6	1 630	0.2	16.6
1989	1 831 540	165 218	9.0	37.9	7 493	0.4	13.1
1992	2 351 109	212 580	9.0	40.5	17 693	0.8	19.5
Developing countries							
1982	189 155	11 168	5.9	22.0	5 067	2.7	33.5
1989	470 398	27 458	5.8	36.3	10 913	2.3	32.9
1992	662 723	37 989	5.7	37.8	14 593	2.2	30.7
Latin America and the Caribbean							
1982	47 403	4 692	9.9	11.9	556	1.2	28.0
1989	75 415	10 613	14.1	22.0	810	1.1	30.1
1992	85 395	13 995	16.4	22.7	675	0.8	22.0
Africa							
1982	11 271	169 ^e	1.5	18.2	38	0.3	8.2
1989	17 445	561	3.2	46.6	62	0.4	27.9
1992	20 597	..	..	..	31	0.2	14.7
South, East and South-East Asia and the Pacific							
1982	118 486	5 954 ^f	5.0	59.9	3 700	3.1	31.3
1989	345 546	16 095	4.7	64.4	9 692	2.8	32.6
1992	516 116	22 700	4.4	62.4	13 583	2.6	31.0
World							
1982	1 253 563	91 832	7.3	33.9	6 698	0.5	26.8
1989	2 404 370	192 676	8.0	37.8	18 406	0.8	20.4
1992	3 065 225	250 579	8.2	40.2	32 294	1.1	23.3

Source: UNCTAD, Division on Transnational Corporations and Investment, based on Japan, Ministry of International Trade and Industry (MITI), (1986), (1991) and (1994a); UNCTAD, *Handbook of International Trade and Development Statistics*, various issues; United States, Department of Commerce (1985b), (1992b), and (1995).

^a Data are for majority-owned foreign affiliates.

^b Data for Japan under 1982 are for 1983.

^c Food and manufacturing exports include food (SITC 0+1+22+4); chemical products (SITC 5); primary and fabricated metals (SITC 6); machinery and equipment (SITC 7) and other manufacturing (SITC 8).

^d Share in total food and manufactured exports of the area.

^e Calculated as the share of international sales of foreign affiliates (to other countries and to the home country) in their total sales.

^f Including only the countries in the region for which data are available.

countries (see chapter III). In developing host countries especially, one of the most important contributions that FDI and other modes of international production can make lies in increasing exports. This is because access to international markets is often more difficult for firms in developing countries -- due to lack of information and lack of trading networks.

Data on exports by foreign affiliates bear this out. Foreign affiliates of United States and Japanese TNCs taken together accounted (in 1992) for 8 per cent of total manufactured exports from developing countries taken as a group, and almost 10 per cent of total manufactured exports from developed countries (table IV.4). Estimates of the share of Japanese and United States foreign affiliates in total merchandise exports from developing countries place the contributions much higher: 19 per cent in both 1986 and 1989 (Ramstetter, 1992). There is considerable evidence to suggest that foreign affiliates have high export propensities and tend to be more export-oriented than domestic firms (table IV.5). Moreover, the export propensity of foreign affiliates has generally been rising over time. In addition, the composition of foreign

Table IV.5. Export propensity of United States majority-owned affiliates in selected host countries,^a and of host countries, 1977, 1982, 1989 and 1992

(Percentage)

Host country	United States affiliates ^b				Share of total exports in GDP			
	1977	1982	1989	1992	1977	1982	1989	1992
Brazil	7.1	8.9	13.4	15.1	7.2	7.1	7.7	9.5
Chile	..	..	21.4	30.0	19.0	22.1	31.8	24.2
France	23.8	27.2	26.4	28.0	16.1	16.9	17.8	17.0
Japan	7.2	8.7	14.9	11.0	11.4	13.0	9.4	9.0
Malaysia	44.3	47.4	49.5	55.9	46.3	46.3	65.7	68.3
Mexico	10.0	10.3	31.9	27.3	6.2	12.4	11.4	8.4
Singapore ^c	..	82.0	73.7	55.8	118.2	130.2	153.6	127.8
United Kingdom	31.1	31.0	25.1	30.4	22.6	20.2	18.1	18.0
Memorandum item:								
Export propensity of foreign affiliates in the United States ^d	12.8	12.6	11.6	8.2				
Export propensity of the United States economy ^e	6.4	7.0	7.0	7.4				

Sources: UNCTAD, Division on Transnational Corporations and Investment, based on United States, Department of Commerce, (1985b), (1992b) and (1995); UNCTAD, (1987) and (1995); and International Monetary Fund (1990) and (1994e).

a Non-bank majority-owned affiliates of non-bank United States parents.

b Share of exports of majority-owned foreign affiliates in their total sales. Exports of majority-owned foreign affiliates are the sum of their sales to the United States and to other countries.

c Value in billion dollars of total exports and GDP are respectively 7.7;19.4;43.5 and 62.1; GDP: 6.5;14.9;28.4;48.6.

d Value of total exports of foreign affiliates in the United States divided by the value of total sales of foreign affiliates in the United States.

e Value of total exports of the United States divided by United States GDP.

Box IV.8. TNCs, market access and competitiveness: the experience of China

During the 1960s and the 1970s, several *small* countries skilfully positioned themselves as export platforms for TNCs. Malta, Mauritius and Singapore are cases in point. In the mid-1990s, China has proved that the strategy of harnessing FDI for a more outward looking development pattern is not restricted to small developing countries. From the perspective of TNCs, market access has been the *leitmotiv* for FDI in China (see chapter II). At the same time, China has attracted significant amounts of FDI into labour-intensive manufacturing for export.

Foreign affiliates have become major vehicles for China's trade, and close to some 100,000 foreign affiliates and other TNC-related enterprises participated directly in it in 1994. Total trade by these firms reached \$87.8 billion in 1994 (box table 1) -- an order of magnitude of the *total* trade of Brazil, Indonesia or the Russian Federation. The ratio of foreign trade by TNC-related enterprises to GDP is high, with an average of 16 per cent for the country as a whole in 1993, although there are significant variations among the provinces.

Box table 1. Value of international transactions of foreign affiliates and non-equity joint ventures in China, 1994

(Billions of dollars)

Type of firm	Exports (except processing)	Imports (except processing)	Exports after processing	Imports for processing	Total exports	Total imports
Fully foreign-owned	0.6	4.7	10.7	9.2	11.3	13.9
Equity joint venture	3.2	15.8	14.9	14.1	18.1	29.9
Non-equity joint venture	0.4	4.4	5.0	4.8	5.4	9.2
Total, above	4.2	24.9	30.6	28.1	34.8	53.0
Total, all firms	64.0	68.0	57.0	47.6	121.0	115.0

Source: International Trade Centre UNCTAD/GATT, calculated on the basis of enterprise-level trade data provided by the Statistics Department, China Customs General Administration.

Note: Exports and imports under the processing customs regime.

On the export side, TNCs have played a lead role in the expansion of export-oriented processing activities, in particular in the special economic zones. Processing trade -- trade under the special customs regime for imports for and exports after processing -- has been the most dynamic component of China's foreign trade: exports (after processing) reached 47 per cent of total exports in 1994. Foreign affiliates and other TNC-related firms handled more than a half of these transactions, and their share appears to be growing. The massive investment by TNCs in export-oriented production to China is particularly visible from the high share of foreign affiliates and other TNC-related enterprises in China's exports to Japan (box table 2).

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(Box IV.8. cont'd)**Box table 2. Share of foreign affiliates and other TNC-related enterprises in China's processing exports, by destination, 1994**

(Percentage)

Type of firm	Hong Kong	Japan	United States	Western Europe	Total exports
Fully foreign-owned	13	21	24	17	19
Equity joint venture	28	35	23	23	26
Non-equity joint venture	12	6	9	7	9
Total, above	53	62	56	47	54
Total, all firms	100	100	100	100	100

Source: International Trade Centre, UNCTAD/GATT, calculated on the basis of enterprise-level trade data provided by the Statistics Department, China Customs General Administration.

Note: Exports under the processing customs regime.

The leading export items under processing trade are consumer electronics, textiles and garments and footwear. Typically, processing exports comprise goods in which the activities in China relate to labour-intensive production, whereas product development and international marketing is done elsewhere by TNCs. Accordingly, the large value of processing trade must be seen in conjunction with the net value of exports. Net exports (exports minus imports) were 16 per cent of the export contract value under processing trade; for TNCs, the corresponding value was lower -- only 9 per cent. Interestingly, this rate was twice as high for fully foreign-owned firms (12 per cent) as for equity joint-ventures (6 per cent).

The contribution of foreign affiliates to other (non-processing) exports, is relatively small and has been declining, from 8 per cent in 1993 to 6 per cent in 1994 and 4 per cent in March 1995. Exports to Japan are the exception, with as much as 15 per cent of China's exports to that country being handled by foreign affiliates, as compared to 7 per cent for exports to North America and 5 per cent for those to Western Europe. Transnational corporations have made a below-average contribution to the diversification of exports into non-traditional markets in Latin America and Africa. However, in terms of products, textiles account for about one-third of the otherwise fairly diversified exports.

Foreign affiliates have also become a major vehicle for imports into China. In 1994, over a third of China's total imports for the domestic market (imports excluding processing trade) were channelled through foreign affiliates and non-equity joint ventures (table 3). The bulk of these imports consisted of investment goods: initial investments of foreign affiliates accounted for 83 per cent of all TNC imports for the domestic market in 1994. Imports of machinery represented more than two-thirds of all TNC imports for the domestic market. In fact, TNCs were responsible for 55 per cent of China's machinery imports in 1994. This brings out clearly the contribution of TNCs to the modernization of China's production facilities as well as their participation in the investment boom and growth of domestic market to which as much as two-fifths of China's GDP has been dedicated.

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affiliate exports appears to be shifting towards manufacturing, and to include a higher proportion of technology-intensive manufactures than those of host country exports taken as a whole (UN-TCMD, 1992b).

Contributions to international competitiveness and export performance have been particularly high in developing economies that are open to both trade and FDI, as the experience of several East and South-East Asian countries attests. For example, in the late 1980s and early 1990s, shares of foreign affiliates in exports were as high as 57 per cent in Malaysia (all industries), 91 per cent in Singapore (non-oil manufacturing), 24 per cent in Hong Kong (manufacturing) and 17 per cent in Taiwan Province of China (manufacturing) (Ramstetter, 1994). This not only applies to relatively small economies with limited domestic markets, but also to larger economies, as the recent experience of China shows (box IV.8). In several economies, FDI has been instrumental in starting new export-oriented industries, including particularly the electrical and electronics industry or parts of it, with privileged access to export markets within TNC systems and advantageous access to markets due to linkages with TNCs. The participation of TNCs has also contributed towards expanding exports by existing industries, such as textiles and apparel, in several countries of the region (see chapter V).

In addition to exports, local purchases and subcontracting of parts and components by foreign manufacturing affiliates have an impact on host economies by helping local entrepreneurs establish links with international markets. The extent of contribution of the latter has varied among Asian economies, depending on the extent to which FDI is (or was) permitted, as well

(Box IV.8, cont'd)

Box table 3. Share of foreign affiliates and non-equity joint-ventures in China's imports for the domestic market, by region of origin, 1994

(Percentage)

Type of firm	Hong Kong	Japan	United States	Western Europe	Total imports
Fully foreign-owned	13	11	4	3	7
Equity joint venture	36	30	15	29	24
Non-equity joint venture	12	8	3	8	7
Total, above	61	49	22	40	38
Total, all firms	100	100	100	100	100

Source: International Trade Centre UNCTAD/GATT, calculated on the basis of enterprise-level trade data provided by the Statistics Department, China Customs General Administration.

Note: All imports other than imports under the processing customs regime.

Source: International Trade Centre UNCTAD/GATT, Geneva, based on the Centre's Database on China's exporters and importers. (The Database disseminates export and import data for China from customs sources at the enterprise level -- including company names and addresses of some 150,000 firms -- by product, province, partner country, customs regime and other criteria.)

as the capabilities of indigenous entrepreneurs. For example, in Taiwan Province of China where FDI, while allowed, faced some restrictions, purchases from local subcontractors by foreign affiliates were an important factor in the building up of an export-oriented electrical and electronics industry in the 1960s and 1970s (Dahlman and Sananikone, 1990). On the other hand, in Malaysia, where there have been fewer restrictions on FDI in the industry, export-oriented production by foreign affiliates has played a much greater role in building up the industry (Salleh and Meyanathan, 1993). In general, such countries in the ASEAN subregion as Malaysia, Singapore and Thailand have relied more on FDI for securing access to international markets as well as access to resources, while such East Asian countries as the Republic of Korea and Taiwan Province of China have relied more on non-equity arrangements; but in both cases, a key factor for building up long-run competitiveness has involved the acquisition of technological and managerial capabilities *as well as* access to international marketing networks and capabilities from TNC systems. With this in view, Asian countries are focusing on strengthening supplier industries as well as encouraging TNCs to increase and deepen their linkages with domestic firms in these industries (see Ernst, 1994d).

Transnational corporations in retailing, and other trading firms have also played an important role in the building up of export capabilities of several Asian economies. In addition to linking local producers to foreign customers, they have deepened the ties of those economies to the international market-place. As discussed earlier, their role has been particularly important in the earlier stages of development of export capabilities; e.g., in the early 1960s, about 60 per cent of textile exports by firms from Taiwan Province of China were marketed by Japanese trading companies (sogo shosha) (Dahlman and Sananikone, 1990, p. 44).

Despite the perceptible contributions of TNCs to the export performance of several Asian countries, the *share* of TNCs in exports from that region is declining somewhat (table IV.4). The decline is explained by the relatively faster growth of exports by domestic firms operating under national policies that emphasize greater outward orientation and economic growth through export expansion (UN-TCMD, 1992b, p. 202). While indigenous firms' growth and export efforts explain a good deal of this expansion, non-equity links with TNCs, discussed earlier, are also responsible for some of the export growth.¹⁰

In other developing regions, the contribution of TNC activities towards enhancing host countries' competitiveness by linking them to export markets has been less significant:

- In *Africa*, only a few countries have been able to expand their exports and build export capabilities on the basis of access to TNCs' trade and marketing networks. Mauritius is one of the few, benefiting mainly from FDI and non-equity links to Hong Kong firms seeking to develop manufactured (mainly textiles and apparel) exports to Europe and other markets (UNCTAD, 1995b). Foreign direct investment has also contributed to Botswana's successful implementation of a resource-led growth strategy: FDI from South Africa, mainly by the De Beers Corporation, is involved in the mining, sorting and exporting of diamonds, which accounted for well over three-quarters of total exports of Botswana during the 1980s (UNCTAD, 1995b). Elsewhere in Africa, TNCs continue

to play a significant role in activities related to primary commodity exports, but the implications of those exports for the growth and competitiveness of the countries have not so far been significant.

- In *Latin America*, judging from data for United States and Japanese TNCs, the average export propensity of foreign affiliates was lower than that of foreign affiliates in Asia and the Pacific (see table IV.4). None the less, foreign affiliates had a higher (and rising) share in exports from the region than in Asia and the Pacific -- though, in this case, this indicates lower volumes and slower growth of exports by domestic firms rather than impressive exports by foreign affiliates. Transnational corporations have played an important role in strengthening linkages to world markets for certain countries and industries. In Brazil and Mexico, which together accounted for over 80 per cent of total sales by foreign affiliates in the manufacturing sector of the region (Mortimore, 1995c), exports by foreign affiliates accounted for 44 and 58 per cent, respectively, of total manufactured exports in 1990 (UNCTAD-DTCI, 1994c). Foreign affiliates played a particularly important role in exports by the transportation-equipment industry of Mexico and the non-electrical machinery industry of Brazil (UNCTAD-DTCI, 1994c). The Mexican automobile industry was transformed during the 1980s from being domestic market-oriented to becoming export-oriented, thanks to successful restructuring led by foreign affiliates of United States TNCs (UNCTC, 1992a). It has become one of the most internationally competitive industries in Latin America. Affiliates of United States TNCs also contributed significantly to the non-electrical machinery industry in Brazil by almost doubling its export propensity (from 15 per cent to 27 per cent) and increasing its exports from \$0.3 billion to \$1.6 billion during 1977-1989 (Mortimore, 1995c).

It is clear that TNCs have played an important role in expanding exports, and that access to international marketing networks is one of the important contributions that TNCs make towards the performance of host countries. However, both the Asian and Latin American experience suggests that TNCs prefer to control their export-oriented foreign affiliates closely through high ownership shares, treating access to their marketing networks as a proprietary asset. Thus, the export contributions of TNCs may be related to the degree of foreign ownership allowed. Where foreign equity shares are restricted by host economies, export-oriented FDI may be limited, either because TNCs forgo FDI under those conditions or because they may prefer joint ventures in which international marketing is constrained (Ramstetter, 1992).

Foreign direct investment can also contribute to host countries' economies through efficient forms of import substitution. Until recently, such import substitution often took place within a protected market. Increasingly, however, a recognition of the high costs of protection has led to a shift of developing countries towards more open markets and FDI regimes that are conducive towards greater efficiency of affiliate production, whether for the domestic market or for export. In addition, in several other industries or products, inward FDI can create new markets -- by introducing new or better products that attract customers not only for foreign affiliates but also for domestic firms; such FDI often takes the form of joint ventures with

indigenous firms. This is particularly the case with markets for consumer products in countries with rapidly rising per capita incomes and purchasing power with increased scope for discretionary spending by households (box IV.9).

Finally, in developed economies, most FDI in recent years has taken place through acquisition, generally replacing other investments rather than establishing new enterprises (see chapter III). Contributions towards generating additional sales and raising production may therefore have been limited. In developed countries taken together over the period 1980-90, the level of economic activity in foreign affiliates as measured by employment in manufacturing rose (from one million to two million persons), while declining in domestic firms. The only exception was the automobile industry (OECD, 1994c), in which there was considerable restructuring within TNCs during that period. Although net additions to investment and output due to FDI were limited, foreign affiliates may have contributed positively to maintaining

**Box IV.9. Foreign firms and the growth of domestic markets in developing countries:
an example from the apparel industry in India**

The emergence of a vibrant and vital middle class with discretionary income to spend on improving its quality of life is a characteristic of recent economic growth in many developing countries and economies in transition. Asia, in particular, is adding to its middle class at a rapid rate: it is estimated that, if the 5 per cent to 8 per cent economic growth in the region continues, the middle-class in Asia could top 700 million people by the year 2010, having \$9 trillion spending power -- 50 per cent more than the size of the United States economy today. Transnational corporations are targeting this new influx of consumers into the global market, and many of them that produce consumer goods envision a future when profits from emerging markets will outstrip those in the industrialized world. In addition to per capita income growth in these markets, the convergence of tastes and demand in a globalizing world has contributed to such an expectation.

The recent entry of brand name producers of jeans into the Indian market provides an example of how TNCs are not only capturing shares in new markets, but also of how, in the process, they may add indirectly to the markets for the products of domestic producers. Following the liberalization of FDI regulations in India, Levi Strauss & Co. established a wholly owned affiliate that will contract its production to a local producer already serving the Indian market under its own brand name. Another major TNC, Lee, has entered into a joint venture with an Indian producer of jeans to produce 500,000 pairs a year initially for local sale as well as export. Other Western jeans producers have established sales outlets in India. While the advent of foreign participation, especially by internationally known brandname producers, is expected to increase the competition faced by indigenous producers, the size of the market (an estimated 22 million pairs in 1995) and its rapid growth (at 25 per cent per year), is expected to leave plenty of room for everybody. Moreover, the expectation is that price differences between the internationally known brand names and local brand names will allow each brand to develop its own niche, and that the promotional drives by the foreign entrants will generally create a larger market for the product. For the consumer, increased competition will increase options, and ensure better quality.

Source: "Getting and spending", *Business Week*, 19 December 1994, pp. 56-61; "The swinging blue jeans", *Sunday* (Calcutta), 18-24 June 1995, pp. 78-82.

output (and employment) levels and growth in developed countries during the 1980s, due to the overall resilience and export marketing ability of TNCs. As in the case of developing countries, foreign affiliates in developed countries are more export-oriented than indigenous firms (table IV.5) (OECD, 1994c). As noted earlier, United States and Japanese foreign affiliates taken together, for example, accounted for about 10 per cent of manufactured exports from developed countries (table IV.4); and the overall share of foreign affiliates in major host countries is much higher, reflecting their greater access to markets within TNC systems.

It should be noted that, while foreign affiliates can contribute to an expansion of export and domestic markets for developing countries in the ways discussed above, they also have a relatively high propensity to import. Available evidence, though scanty, suggests that the propensity of foreign affiliates to import exceeds that of indigenously-owned firms (Dunning, 1993, p. 386). As noted earlier, TNCs often favour foreign sources of supply over domestic ones in host countries, particularly in the earlier stages of their production activities. In developing countries, initial investments may account for the bulk of foreign affiliate imports (box IV.8). The high overall propensity of foreign affiliates to import is also illustrated by intra-firm imports of foreign affiliates located in Japan and the United States, which are significantly higher in value than intra-firm exports (table IV.1). At the same time, however, as noted earlier, local suppliers account for the majority of purchased inputs by United States foreign affiliates, although in the case of foreign affiliates of Japanese TNCs, reliance on imports from the home country remains high.

Given the high import propensity of foreign affiliates, as far as macroeconomic effects through the trade balance are concerned, the impact of inward FDI on market-expansion for exports may well be offset, or more than offset, by increased imports. From the viewpoint of long-term economic performance and welfare, however, to the extent that foreign affiliates' imports relieve domestic supply constraints, particularly of intermediate and capital goods, the competitiveness-enhancing activities of TNCs can impact host country performance favourably (UN-TCMD, 1992b, pp. 200-212). In many host countries, efforts are made to capture the positive effects on exports as well as of import expansion by promoting export-oriented activities by TNCs while, at the same time, encouraging domestic sourcing by foreign affiliates to complement imports as far as feasible, particularly over time.

Another issue that must be considered is whether certain business practices of TNCs affect the extent to which host countries can benefit from the expansion of access to markets. It has already been noted that a competitive environment is essential if these benefits are to be fully reaped. Evidence with respect to the effects of TNCs on the extent and form of rivalry between firms in host countries is mixed (Dunning, 1993, p. 433). These depend to a considerable extent on the impact of FDI on industrial concentration. In the long run, moreover, they will depend not only on the conduct and performance of TNCs and their affiliates, but also on that of their competitors in host countries. The effects are likely to vary between countries and sectors. In the case of countries with small domestic markets and which do not attract export-oriented investment, inward FDI is more likely to drive out competitors than in countries with large internal markets with strong technological capability (Burstall et

al., 1981), or with a government that plays an active role in supporting domestic entrepreneurial activity. The consequences will also depend upon the extent to which firms in an industry need to exploit economies of scale or scope, so that they may minimize their production and/or transaction costs. Competition may also be affected by the strategy of TNCs, which could be reflected in the activities of their foreign affiliates, as, for example, if a foreign affiliate is restricted as regards its value-added or export activities or in the case of exclusive dealing arrangements between TNCs or their affiliates and their suppliers or customers that make it more difficult for new firms to source their inputs or to enter new markets (Dunning, 1993, p. 435). Moreover, the nature of TNC systems allows certain business practices (e.g., abuses of transfer pricing) that may impose costs on host countries.

To conclude, in developing as well as developed countries, TNCs play an important role in establishing and expanding links to world markets through their export (and import) activities and their relationships with indigenous firms. The effects are likely to contribute positively to output and income growth, provided that the expansion of market opportunities takes place in an environment that is competitive and conducive to the development of entrepreneurial activity within host countries.

2. Outward foreign direct investment

The relationship between outward FDI that strengthens market access for TNCs, and the performance of the economy from which such investment emanates is less straightforward than the corresponding relationship between inward FDI and that of a host economy. (Box IV.10 provides an illustration from the experience of Sweden as a home country.) The main reason is that outward FDI -- regardless of whether it is made to access resources or markets -- may, at least under certain conditions, have adverse implications for investment and for output and employment in the home country, particularly in the short or medium term. If, however, an economy is operating at or near full utilization of its resources, outward FDI that increases market access and expands the sales of a TNC system -- whether through domestic sales or exports in its various locations -- can contribute positively to the economic performance of the home economy by allowing its firms to mobilize resources over and above those available at home and expanding sales beyond those that would be permitted by production for the domestic market alone, or for the domestic market plus markets served through trade. If an economy has unemployed resources, especially labour, much depends upon whether FDI by TNCs is at the expense of domestic investment. This depends, among other factors, upon whether TNCs face a financial constraint forcing them to choose between domestic and foreign investment, or have access to outside funds (see chapter III). It also depends upon TNCs' strategies, including those related to market access and expansion. Moreover, in both cases the possible negative effects of certain business practices mentioned earlier need to be taken into account.

Taken as a whole, it is possible to envisage a range of potential effects on home country performance, assuming that there are no financial constraints leading to a trade-off between FDI and investment in a home country:

- Foreign direct investment that allows TNCs to establish a local presence where this is necessary for market access (as with non-traded services), will have no direct effects on the level of production at home. There may be indirect stimuli to exports induced by foreign affiliate activities. At the same time, there will be net investment income, royalties, fees and service charges associated with FDI.
- The effects of FDI that allows firms to have better access to foreign markets by establishing local production facilities abroad for goods that are (or could be) exported from a home country to the same markets are more ambiguous. Exports often precede FDI as a strategy for entering markets and may be substituted by local production in a host country once a foreign affiliate is established. If they are, outward FDI may impact negatively on home country production, unless the effects due to the substitution of exports by affiliate production are offset by positive effects due to increased exports of intermediate products to foreign affiliates and dynamic effects stemming from improved performance. On the other hand, in the case of differentiated consumer goods or intermediate goods, exports may continue to supplement local production abroad, and there may be no change in home country production levels. In both cases, there are flows of investment income, royalties, etc., from foreign affiliates, affecting the final outcome.

**Box IV.10. FDI, market access and competitiveness:
Swedish TNCs and the Swedish economy**

Sweden has one of the highest outflows of FDI relative to its size, being next only to the United Kingdom, Switzerland and the Netherlands in this respect. Swedish FDI, undertaken mainly by very large TNCs, has been primarily market-oriented. In addition to serving to penetrate host country markets, FDI has been undertaken by Swedish TNCs in order to achieve a more efficient pattern of production worldwide. This is partly illustrated by the increasing tendency to export from foreign affiliates: the share of output exported by Swedish manufacturing affiliates rose from 17 per cent in 1970 to 30 per cent in 1990 (Andersson et al., 1995).

Foreign direct investment increased access of Swedish TNCs to foreign markets and has generated for them the economies of scale and financial strength needed for the development of firm-specific assets, especially by laying the basis for increased research and development at home, while enabling them to restructure their activities in an efficient manner. Considering these contributions, there is little doubt that outward FDI has strongly contributed to the competitiveness of Swedish TNCs. As regards the impact on the Swedish economy, too, the overwhelming evidence points towards a mostly beneficial impact until the 1980s, as Swedish TNCs expanded at home as well as abroad and engaged suppliers, employees, customers, etc. in expanding industrial ventures subject to international competition and exposure. However, in the late 1980s, the situation changed as Swedish parent firms displayed a weak performance at home, with an absolute reduction of employment, a relative decline in output and exports, a fall in productivity and a stagnation in research and development. In fact, substitution effects have been verified between investment by Swedish TNCs abroad and at home, as well as between increases in production and exports in foreign affiliates and exports from parent companies. Meanwhile, the yearly repatriation of profits was below 3 per cent of the stock of total FDI during the late 1980s.

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- Foreign direct investment that is undertaken for cost rather than solely market-access reasons will likely alter the nature of the production activity taking place in TNC operations in the home country. It may, for example, lead to an upgrading of the production activities undertaken at home, especially if labour-intensive activities are moved to foreign affiliates.

In terms of quantifying the effects, empirical studies have come to varying conclusions (see, e.g., Blomström, 1991; Dunning 1993; Hufbauer et al., 1994). The balance of evidence (based not only on FDI that is market-seeking but on FDI of all kinds) suggests that the overall effects of outward FDI on home country economic activity, as judged by employment levels are marginally positive; nevertheless, in certain industries, they have been quite negative (Dunning, 1993, p. 365), imposing significant costs of adjustment on particular groups. The majority of studies show that outward FDI has a positive effect on home country exports, although, according to some studies, outward FDI has tended to promote imports more than exports (Hufbauer et al., 1994, p. 50).

For the few countries for which data are available, evidence suggests that the increased competitiveness of firms due to expanded market access through outward FDI has influenced home country economic performance in a number of ways:

- *Income earned abroad.* In the United States, direct investment income from abroad increased steadily at an annual average of 5 per cent during the past decade, to reach \$28 billion in 1993. In the same year, for Sweden, \$1.8 billion was contributed by the activities of TNC abroad, while for Japan this value amounted to \$8.3 billion. The growth of income from abroad during this period for both Japan and Sweden was

(Box IV.10, cont'd)

This development exacerbated the economic problems Sweden encountered in the early 1980s, which included a major downturn in gross national product and economic performance in general. These hardships depended on shortcomings in domestic economic policy, coupled with Sweden's former position as an outsider with respect to the European Single Market. In this situation, the ability of Swedish TNCs to invest abroad, rather than being locked within the weakening domestic economy, is likely to have been even more important for their ability to defend or upgrade positions against competitors.

As the Government of Sweden revises its economic policy and seeks to restore growth in the 1990s, the competitiveness of Swedish TNCs -- which still retain crucial governance, strategic and research functions at home -- constitutes a major asset from the perspective of the national economy. Indeed, Swedish TNCs have substantially upgraded their domestic operations in the past few years. Furthermore, since 1995, the amount of repatriated profit has exceeded that of profits reinvested abroad. At the same time, gross domestic investment has grown rapidly, particularly in manufacturing. Most indications point towards a restored favourable relationship between the competitiveness of Swedish TNCs and the Swedish national economy for the years to come.

Source: Andersson et al., 1995.

high -- 13 per cent and 17 per cent, respectively -- reflecting the dramatic expansion of the international investment of these countries in the past decade. For United States and Sweden, the ratio of repatriated income to reinvested earnings was also high. The average share of repatriated income to total earnings on FDI was over 60 per cent for the United States, and 44 per cent for Sweden during the period 1982 and 1992 (International Monetary Fund, 1994d).

- *Export performance.* A significant positive relationship has been observed between parent firm exports and the ratio of foreign affiliate production to total TNC system production (Pearce, 1993). The high export propensities of TNC parent firms have led

Table IV.6. International trade by TNC parent companies: Japan, Sweden and the United States

(Billions of dollars and percentage)

Item	Japan ^a			Sweden		United States ^b		
	1983	1989	1992	1986	1990	1982	1989	1992
Total exports by parent companies								
Value	110.9	156.1	267.1	20.8	29.1	153.8	223.3	249.9
Share of home-country exports	75.6	56.7	78.4	59.6	54.4	71.1	61.4	55.8
Arm's length exports by parent companies ^c								
Value	79.5	93.2	181.5	10.7	15.4	106.7	133.8	143.9
Share of home-country exports	54.7	34.6	55.0	29.0	27.1	50.5	37.0	32.1
Total imports by parent companies								
Value	24.1	64.9	53.9	..	..	108.7	178.2	205.3
Share of home-country imports	19.1	30.8	23.1	..	..	42.6	36.1	37.1
Arm's length imports by parent companies ^c	..	..				
Value	19.1	45.5	38.4	..	..	69.4	103.7	111.3
Share of home-country imports	15.2	21.6	16.6	..	..	27.2	21.0	20.1
Memorandum item								
TNC export propensity ^d (%)	23.1	15.8	18.2	53.0	53.4	6.9	7.1	7.5
Country export propensity ^e (%)	12.3	9.4	9.0	28.2	25.0	7.0	7.0	7.4

Source: UNCTAD, Division on Transnational Corporations and Investment, based on Japan, Ministry of International Trade and Industry (1985a), (1992a) and (1995a); Sweden, Industrial Institute for Economic and Social Research (unpublished data); International Monetary Fund (1990) and (1995); and United States, Department of Commerce, (1985b), (1992b) and (1994e).

^a Data cover primary and manufacturing sectors and "other" services, including business services, hotels, motion pictures, utilities and other miscellaneous services.

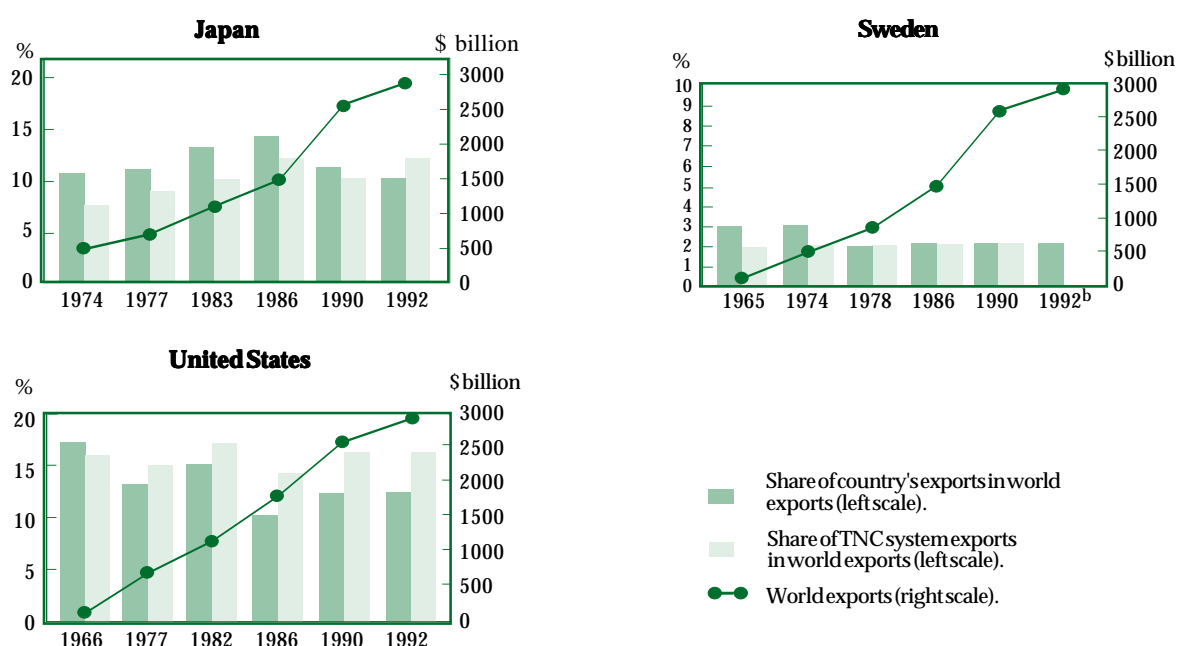
^b United States parent company exports/imports are the sum of exports/imports shipped by/to United States parent companies to/by all affiliates, as reported on parent company forms, and arm's length exports/imports, here comprising exports/imports shipped by/to United States parent companies to/unaffiliated foreigners, including foreign parent groups of United States parent companies.

^c Arm's length exports/imports shipped by/to parent companies are the difference between total exports/imports shipped by/to parent companies and exports/imports shipped by/to parent companies to/by their foreign affiliates, both flows as reported by parent companies.

^d Exports by parent companies divided by sales by parent firms.

^e Exports by country divided by GDP.

Figure IV.4. Share of TNCs^a and their foreign affiliates in world manufacturing exports, various years



Source: Lipsey (1995).

- ^a Including parent companies in the country and their foreign affiliates.
^b Share of TNC system exports not available.

to high shares in exports from home countries for these firms (see table IV.6 and figure IV.4) and contributed to a stronger export performance by those countries than might have otherwise been achieved. In the case of the United States, the country's TNCs were able to maintain their position in world markets, while the home-country share of world exports of manufactures fell by a third between 1966 and 1987 (figure IV.4). Similarly, Sweden lost about 20 per cent of its export markets for manufactures between 1965 and 1990, while, during the same period, Swedish parent firms maintained a high propensity to export (over 50 per cent) and a stable position in world export markets (figure IV.4). At the same time, the average propensity to export of Swedish non-TNC firms was lower and decreased over that period from 35 to 33 per cent (NUTEK, 1994).

- *Changing composition of exports.* The interlinkage of outward investment and trade is also reflected in a changing pattern of trade, typically leading to large increases of exports of intermediate products. For example, the bulk of United States exports in electric and electronic equipment and transport equipment comprised intra-firm exports by United States TNCs; such exports accounted in 1992 for 67 per cent and 37 per cent, respectively, of the country's total exports in those products.

Conclusions

Foreign direct investment and other modes of international production are important means for TNCs to secure and expand markets for their goods and services. Access to larger markets strengthens the competitiveness of TNCs through economies of scale, specialization and learning effects, and by providing a larger financial base for reinvestment and technology development. Foreign direct investment also strengthens market access and the competitiveness of other firms in host and home countries through backward and forward linkages. These firm-level effects have implications for the economic performance of host and home countries. In particular, several developing countries have been able to improve their export performance due to the export-oriented activities of foreign affiliates and of indigenous firms with linkages to them. The implications for home countries are less clear-cut; from a long-run perspective, however, it seems likely that the improved export and sales performance of TNCs has positive implications for home countries as well. More importantly, given that most home countries are also host countries (although the reverse is not the case) it is important to consider the interplay of inward and outward investments and their respective effects in assessing the overall effects of FDI that firms undertake to strengthen access to markets.

Notes

- ¹ See Hipple, 1995, pp. 23-29, for definitions of trade relationships in terms of the identity of trade transactors.
- ² The term "establishment trade" is usually applied to sales by foreign affiliates in the (domestic) markets of the countries in which they are established. From a TNC-system perspective, they could also refer to parent company sales in the (domestic) market of the home country.
- ³ The share of TNCs in domestic markets cannot be derived in a similar fashion due to lack of data on total sales and double counting in sales figures. However, it is interesting to note that in 1992, sales by United States TNC parent firms amounted to an estimated \$3066 billion and sales by affiliates of foreign firms in the United States to \$387 billion (based on data from United States, Department of Commerce, 1994d and 1995).
- ⁴ See Plasschaert (1994) for a comprehensive review of issues related to transfer pricing.
- ⁵ See Markusen (1995), for a conceptual discussion of reasons why firms choose FDI and internalization of transactions rather than arm's length arrangements.
- ⁶ There may also be some overestimation of the share of arm's length domestic sales because intra-TNC system sales within domestic markets have not been excluded, unlike intra-firm exports, in the case of TNCs from Japan and Sweden.
- ⁷ Return on FDI is defined to include reinvested earnings and other direct investment income. Rates of return are expressed as percentages of the stock of net reproducible assets valued at current replacement cost (United States, Department of Commerce, 1994d).
- ⁸ Reliance on external suppliers is particularly high in the automobile and electronics industries, whose complex value chains make a combination of desegregation of activities into separate firms *and* integration through dense linkages both possible and advantageous (Westney, 1994, p. 266). Reliance on external suppliers differs among firms. For example, about 70 per cent of the components that go into assembling a vehicle are purchased from suppliers in the case of Japanese automobile firms. Comparable figures for General Motors, Ford and Chrysler are 30 per cent, 50 per cent and 60 per cent, respectively (Fruin and Nishiguchi, 1993).

- ⁹ Company level information suggests, however, that, more recently, the share of local purchases by foreign affiliates of Japanese TNCs has risen.
- ¹⁰ There is also some underestimation of affiliate exports because the data shown in table IV.4 cover only majority-owned foreign affiliates of United States TNCs and do not include low-equity joint-ventures in the case of foreign affiliates of Japanese TNCs.

CHAPTER V

TRANSNATIONAL CORPORATIONS AND ECONOMIC RESTRUCTURING

Introduction

The analysis in the previous chapters of Part Two has dealt with individual components of the competitiveness of transnational corporations (TNCs) and their potential contributions to a country's economic performance. It is, however, one of the characteristics of foreign direct investment (FDI) that it is a package of assets which can, in interaction with domestic factors, produce performance-enhancing effects that extend beyond the sum of its parts. In particular, FDI can enhance a country's ability to restructure its economy in a manner leading to higher productivity and income. This chapter examines how TNCs -- in the process of improving their own competitiveness -- can contribute to industrial restructuring in home and host countries and reviews some country experiences in this respect. This examination is preceded by a short introductory section outlining the link between industrial restructuring, economic performance and TNCs.

A. Restructuring, economic performance and the role of transnational corporations

To improve their performance -- raising productivity over an extended period of time -
- countries need to be able to restructure, i.e., to change the composition of their economic activities (output, employment, exports etc.) across sectors, industries or types of activities

within an industry. Restructuring has to take place because of changes in demand, relative factor supply and prices or in comparative advantage triggered by technological progress; changes in tastes or demand conditions abroad and at home; and because of capital accumulation and population growth at home. The need to restructure arises, for example, when initial development is based on an abundant supply of (cheap) labour. Success in development will usually lead to an increase in wages and loss of comparative advantage in labour-intensive industries, triggering the need to develop other industries. Development entails a continuing process of "creative destruction" (Schumpeter, 1942). Industrial restructuring is both a consequence and one of the driving forces of productivity and income growth.

This is reflected in the fact that differences in productivity and per capita income are closely associated with differences in structural characteristics of countries. Broadly speaking, a structural shift from the primary sector through the secondary sector and towards the modern tertiary sector is indicative of economic progress (Clark, 1935), although this can be qualified by a substantial variation in productivities existing within sectors. For example, a number of developing countries have a large pre-industrial services sector dominated by low-productivity services. When these countries industrialize, initially the services sector typically shrinks, but regains or overtakes its previous position at a later stage of development. In the process, however, its composition changes substantially from low-productive services (petty trade, domestic services etc.) towards modern productive services, many of which are supportive to the goods sector.

In general, three categories of restructuring related to economic growth and development can be distinguished:

- Sectoral restructuring of an economy, from the primary sector, especially agriculture, through manufacturing to services. Industrialization describes the transformation from the primary to the secondary sector, while the growing importance of the modern services sector reflects partly the information revolution.
- Restructuring within a sector, e.g., from low-productivity, labour-intensive (typically low-technology) light industries to high-productivity (usually high-technology) knowledge-based industries.
- A shift within an industry -- for example, from low-technology, low-value added goods or services to higher-technology, higher-value-added ones.

Transnational corporations can assist the economic restructuring of home and host countries by introducing, in their own interest, new activities that would otherwise be unlikely to evolve -- or would evolve more slowly -- or by upgrading existing ones (Gereffi and Newfarmer, 1985). This has been recognized at least since the late 1950s (Dunning, 1958) and has been substantiated in a number of country studies.¹ Transnational corporations can supply a mutually-reinforcing package of resources -- consisting of capital, research-and-development capabilities, technology, skills and organizational and managerial practices (chapter III), as

well as access to markets (chapter IV) -- and link these resources to those available in host and home countries. Transnational corporations can play their role by utilizing various equity and non-equity forms of involvement, ranging from wholly-owned foreign affiliates through joint ventures to licensing and subcontracting agreements. The common characteristics of all these forms is that TNCs retain control over key assets, and hence over key parts of the production and distribution process, although the degree of control differs. This becomes particularly important in rapidly changing high technology industries.²

The control of key assets aside, TNCs have a great deal of flexibility concerning the contents of the package. Its composition depends on the complementary resources available in a country in which a foreign affiliate is established. Once made, an investment will incorporate indigenous factors of production both directly and through linkages. Linkages are particularly important because they allow foreign affiliates to serve as a transmission mechanism that furthers the upgrading of indigenous factors of production. The greater the number of areas of interface between local and foreign factors of production, the greater will be the potential multiplier effect.

The introduction by TNCs of a package of productive resources suggests that there ought to be a general predisposition in favour of a positive relationship between FDI and restructuring and, ultimately, country performance (see the Introduction to Part Two and chapters III and IV). However, the introduction of this package can also be neutral in terms of restructuring, as when new lines of production merely replace one kind of output with another that has the same total factor productivity, or when TNCs exploit monopoly power. This may occur in the context of intra-industry restructuring, when a new variant of a good or service pre-empts the production and sale of an existing similar good or service. It is also possible for FDI to reverse a restructuring process, e.g., when TNCs introduce activities characterized by lower value-added. It is also possible that a positive impact on restructuring comes at a social cost (e.g., higher unemployment) to a country, e.g., when TNCs that are more capital intensive put inefficient local firms out of business through competitive pressures.

For restructuring -- including TNC-assisted restructuring -- to bring lasting gains for countries, it needs to take place under conditions of openness and access to competitive markets and technology. Otherwise, gains may be temporary, the outcome may not pass the test of efficiency in international competitive markets and the restructuring process may become truncated, with units of TNC systems becoming inefficient as, for example, could happen when they operate behind protective tariff walls.

B. Transnational corporation-assisted restructuring

Transnational corporations -- which, since long, have played a role in national economies, especially in manufacturing (table V.1) -- have also contributed to industrial restructuring, in developing and developed countries alike:

- In Latin America, for instance, TNCs have played a role in the establishment, during the post-war period, of a sizeable manufacturing sector in a number of countries. As one observer put it (Gereffi, 1990, p. 17):

**Table V.1. The importance of TNCs in selected host economies' manufacturing industries:
various indicators, most recent year***
(Percentage share of foreign affiliates in industry total)

Industry/sector	Host country and share of foreign affiliates (in per cent)			
	1-5 per cent	6-10 per cent	11-50 per cent	51-100 per cent
Textile, apparel and leather	Bolivia (4); Mexico (5); the Republic of Korea (3)	Uruguay (6); Colombia (7); Hong Kong (7); Peru (10)	Argentina (14); Brazil (13); Philippines (13); Malaysia (44) ^b ; Thailand (46)	
Food, beverages and tobacco	Bolivia (2); Taiwan Province of China (4); the Republic of Korea (5)	Colombia (8)	Uruguay (12); Mexico (16); Brazil (19); Argentina (19); Hong Kong (26); Malaysia (25); Thailand (25); Peru (27); Philippines (30)	
Paper	Taiwan Province of China (0.1); Bolivia (1); the Republic of Korea (3)	Malaysia (10)	Argentina (12); Hong Kong (12); Philippines (14); Brazil (15); Colombia (17); Mexico (19); Thailand (24)	
Metals	Taiwan Province of China (3); Bolivia (5)	Philippines (6); the Republic of Korea (8)	Hong Kong (12); Malaysia (18); Uruguay (21); Brazil (29); Argentina (36)	Thailand (61)
Chemicals		Taiwan Province of China (5); Bolivia (7); the Republic of Korea (7) ^c	Malaysia (17); Uruguay (27); Colombia (32); Argentina (33)	Brazil (51); Hong Kong (51); Peru (55); Philippines (61); Thailand (72); Mexico (78)
Mechanical equipment	Hong Kong (2)		Philippines (11); Argentina (39); Brazil (45)	Mexico (66); Thailand (80)
Electrical and electronic equipment			Bolivia (21); Taiwan Province of China (29); Uruguay (29); Colombia (32); Brazil (49)	The Republic of Korea (56); Peru (61); Mexico (64); Philippines (66); Hong Kong (87); Malaysia (87); Thailand (89)

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“Foreign firms in the post-war period typically came to establish new industries (like automobiles, petrochemicals, and electrical and non-electrical machinery) to supply the domestic market, or they sought to modernize certain traditional industries (like textiles or food-processing) which resulted in the displacement of many of their domestic rivals. ... Foreign companies were authorized by the state to enter certain segments of the domestic market where local capital was relatively weak or absent.”

As a result, the region's FDI stock made it, until the early 1980s, the most important host region for TNCs in the developing world. However, while TNCs played an important positive role in the initial phase of the industrialization of a number of countries in the region, operating in highly protected national markets gave them little incentive to upgrade their operations. As a result, industrial restructuring of these countries became truncated (Fajnzylber, 1983) and, lacking verification through the international market, many industries became internationally uncompetitive.³ However, this may be changing, as the recent experience of Mexico's automobile industry suggests (box V.1).

(Table V.1, cont'd)

Industry/sector	Host country and share of foreign affiliates (in per cent)			
	1-5 per cent	6-10 per cent	11-50 per cent	51-100 per cent
			Uruguay (14) ^c ; Malaysia (18); Philippines (22) ^d ; Colombia (25) ^c ;	Thailand (60) ^d ;

Box V.1. Restructuring in the Mexican automobile industry

The automobile industry was established in Mexico when Ford built an assembly plant in 1925 (Shaiken, 1991). Other foreign firms, most notably General Motors and Chrysler, followed during the 1930s and 1940s. Transnational corporations have played a dominant role in the industry ever since. In 1980, they included Chrysler, Ford, General Motors, Nissan, Renault and Volkswagen (Bird, 1988). Their investment was of a market-seeking type and was encouraged by the import-substitution policies pursued by the Government of Mexico until the mid-1980s. As a result, the industry produced only for the relatively small domestic market and was widely criticized for high prices and the poor quality of its products (Shaiken, 1991). Moreover, the lack of competitive domestically produced components caused large imports of components by vehicle producers, with implications for the country's balance of payments (Mortimore, 1995a).

Mexico's debt crisis led to a drastic decline in domestic demand for passenger cars, and during most of the 1980s the industry was in crisis. Only by the late 1980s did the production of passenger cars regain the level of 1981. Since then the industry has experienced accelerated expansion. By 1995, Mexico was the world's number one manufacturer of engines, and the country manufactures more automobiles than the Republic of Korea.^a Exports have increased so rapidly that, in 1990, Mexico enjoyed a trade surplus of \$1.3 billion in vehicles (Calderon et al., 1994).

TNCs in the passenger-car industry of Mexico, sales, 1978-1994

(Thousands of units and percentage, annual averages)

Sales	1978-1982	1983-1987	1988-1992	1993-1994
Total ^a (thousand units)	296.1	249.7	577.3	839.3
Leading TNCs: ^b				
Domestic market (thousand units)	244.3	180.7	334.9	377.5
Exports (thousand units)	14.8	56.4	242.4	461.8
Exports as percentage of total	(4.9)	(22.6)	(42.0)	(55.0)

Source: ECLAC/UNCTAD Joint Unit on Transnational Corporations.

a Excluding imports amounting to 54,285 units in 1994.

b Chrysler, Ford, General Motors, Nissan and Volkswagen.

Several factors explain this transformation. The Japanese challenge to United States automobile manufacturers in their own market led the latter to move parts of their production to lower-cost production sites. Mexico was a favourable location due to its geographic proximity to the United States (an important factor in an industry in which transportation costs account for a significant part of total costs). This strategy was encouraged by Mexico's liberalization policy which reduced Government control over the industry, and -- through the accession to the North American Free Trade Agreement -- led to the liberalization of cross border economic activity. Automobile TNCs responded by integrating their Mexican production facilities into their global production systems (most notably TNCs from the United States and Japan). Consequently, efficiency-seeking FDI replaced the market-seeking FDI that was typical in this industry in the 1970s and 1980s.

Transnational corporations in the automobile industry have brought to Mexico the following assets:

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(Box V.1, cont'd)

- *Capital invested.* During 1984-1989, investment in the Mexican automobile industry accounted for about 16 per cent of total FDI inflow to Mexico (Mortimore, 1994). During the early 1990s, major investments were undertaken by Volkswagen (\$1.5 billions) and Nissan (\$1 billion). In 1994 alone, registered FDI projects amounted to \$2.5 billion, out of which Ford, General Motors and Chrysler planned to invest \$1 billion, Volkswagen and Nissan \$1.2 billion, and newcomers (BMW and Honda) \$246 million (Calderon et al., 1994).
- *Technology.* Most TNCs introduced state-of-the-art technologies. For instance, General Motors' Mexican affiliate made a conscious effort to imitate advanced technologies of Japanese automobile firms. This approach was evident in the body shop, which was designed, fabricated and tested in Japan and shipped from there to Mexico. The stamping area (which converts coils of metal into the structural parts and outer skin of the car) is located next to the assembly plant -- a concept pioneered by Japanese auto-makers (Shaiken, 1991).
- *Organizational and managerial practices.* Transnational corporations have been using advanced organizational practices in their Mexican affiliates, significantly improving their performance. In terms of productivity and quality, the Mexican production facilities have caught up to, and in certain cases surpassed, the benchmarks established by the United States automobile industry, including the Japanese plants operating in the United States (Mortimore, 1995a).
- *Skills.* Transnational corporations have invested heavily in training, with many employees sent to production facilities abroad to acquire experience in advanced working methods. General Motors' Mexican affiliate provides an example: all new employees receive four months of intensive training before starting work, and most continue to receive advanced training on the job (Shaiken, 1991).
- *Markets.* Automobile TNCs provided access to larger markets for the Mexican automobile industry, particularly those that have integrated their Mexican affiliates into their international production systems. In 1992, exports by the automotive industry represented 16 per cent of all Mexican exports to the OECD countries and accounted for three of the five principal exports of manufacturing (occupying first, second and fifth spots). In 1993, the Mexican affiliates of Chrysler, Ford, General Motors, Nissan and Volkswagen exported about \$7.8 billion.^b In addition, exports of motor vehicle parts to the United States from the maquiladora reached \$5.8 billion in 1992 (Mortimore, 1995a).

To conclude, the Mexican automobile industry has been transformed during the past decade from a fragmented and low-productivity industry kept alive by protectionist policies, into a fast growing, internationally competitive industry. It increased its share in the manufacturing sector from 8 per cent in 1980 to 21 per cent in 1991^c and thus contributed significantly to Mexico's restructuring. Transnational corporations have played a major role in this transformation. Their changing strategies coincided with the liberalization policies of the Government of Mexico, which encouraged TNCs to integrate their Mexican operations into their global production systems, in line with Mexico's dynamic comparative advantage.

^a S.H. Toledano, "National and State of Mexico auto industry takes off in high gear", *Business Mexico*, September 1995.

^b "Los 200 mayores exportadores de America Latina", *America Economia*, September 1994, special issue.

^c *United Nations Statistical Yearbook and United Nations Industrial Statistics Yearbook*, various issues.

- In Western Europe, there have been many cases of TNC-assisted restructuring. In recent years, many of them have been related to the Single Market programme and the enlargement of the European Union, events that have led TNCs in many industries to reorganize their operations with a view towards adjusting them to the larger market (UN-TCMD, 1993c). A well-known case in point of successful TNC-assisted intra-sectoral restructuring is the transformation of the British automobile industry, which recovered its competitiveness by the early 1990s (box V.2).

The example of the automobile industry in the United Kingdom illustrates restructuring that is largely limited to one industry in one country. Although this kind of limited restructuring has many multiplier and spillover effects in the respective economies, it does not involve

Box V.2. Revitalizing the United Kingdom automobile industry

In 1975, three years after a production record of 1.9 million cars, the United Kingdom

(Box V.2, cont'd)

Japanese car factories in the United Kingdom

Company	Location	Year of establishment	Estimated 1995 production
Nissan	Sunderland	1986	300,000 cars and engines
IBC vehicles ^a	Luton	1987	50,000 vans and other vehicles
Honda ^b	Swindon	1989	200,000 engines
Honda ^b	Swindon	1992	100,000 cars
Toyota	Deside	1992	100,000 engines
Toyota	Burnaston	1992	100,000 cars

Source: *The Economist*, 3 October 1992, p. 70.

^a Joint venture between General Motors and Isuzu.

^b 20 per cent share of equity held by Rover.

Kingdom automobile industry turned into a highly successful competitive industry. In 1995, it is expected to produce about 1.6 million cars, the highest number for more than 20 years.^a

The revitalization of the industry became possible because Japanese and other TNCs brought a package of assets needed to restore the industry's competitiveness:

- *Capital.* Between the first greenfield investment in 1986 by Nissan and the end of 1994, Japanese automobile TNCs invested more than £3 billion in the United Kingdom's automobile industry. In 1994, BMW purchased the Rover Group for another £800 million. New investment by Ford Motor Company in Jaguar Cars Ltd. added another £400 million in 1995. In addition, Ford plans to invest about £300 million in the development in the United Kingdom of a new generation of engines for its small cars.^c These figures do not include FDI in the components industry.
- *Technology.* With the establishment of new plants, Japanese TNCs brought new, state-of-the-art technology, including technology especially adapted to the organizational and managerial methods that are considered key to their competitiveness (see, e.g., Womack, et al., 1990).
- *Organizational and managerial practices.* Honda's cooperation with Rover introduced Japanese organizational practices into the British firm, which became a model of Japanese lean production, based on just-in-time production, close ties with suppliers and quality control (Hoffman and Kaplinsky, 1988). Employment in the firm declined from 96,000 in 1984 to 33,000 in 1993, compared with a decrease in output of 10 per cent, denoting a significant increase in productivity, while defect rates fell by over 50 per cent. Similarly, Nissan's success in blending Japanese management practices with local practices resulted in a productivity rate equal to that of Nissan's plants in Japan: about 80 cars per worker a year (compared with a European average of about 45).^d In September 1995, Nissan announced plans to expand its factory in the United Kingdom and to begin producing a new model -- the fourth product launch in the plant's ten years life, a record among European automobile manufacturers.^e

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d)

Japanese TNCs give priority to human resource development and allocate substantial training which is essential for the maintenance and improvement of individual and performance. Nissan's affiliate in the United Kingdom, for example, introduced training programmes covering all occupational categories. In 1993, training accounted for about eight per cent of total payroll costs (UNCTAD-DTCI, 1994a,

Japanese automobile manufacturers have obtained access to markets previously closed to indigenous manufacturers. In 1992, the British plants of Toyota, Honda and Nissan exported about 80 per cent of their annual output. In 1993, the Nissan plant was the United Kingdom's largest car exporter (UNCTAD-DTCI, 1994a, p. 196). As a result of the entry of the Japanese affiliates, the export performance of the United Kingdom automobile industry as a whole has increased from 280,729 units in 1989 to 616,680 units in 1994.

The entry of Japanese firms has influenced the entire industry as it forced other automobile manufacturers to restructure in order to survive. They are now ranked among the most efficient in Europe. For example, General Motors reported that its United Kingdom affiliates increased productivity by more than 60 per cent between 1988 and 1992.^b A similar increase in productivity took place among component suppliers.

The United Kingdom automobile industry illustrates how a declining industry can be upgraded with the assistance of TNCs; given the earlier failure of the industry to attract FDI has, in all likelihood, prevented it from elimination. In fact, the industry now appears healthier than ever before during the past 30 years.

* * *

This is the first time that TNCs restructured the United Kingdom automobile industry. A similar process had already occurred during the early part of this century, when United States automobile manufacturers established a presence in the United Kingdom (Dunning, 1958). The strength of United States TNCs was such that they quickly acquired a large share of the industry and changed its structure (Morales, 1994). The technology of mass production was transferred to Ford's United Kingdom affiliate and was rapidly imitated by other manufacturers into a handful of large, highly competitive producers (Dunning, 1958). By the mid-1950s, the United Kingdom was producing more than one million cars annually and was the world's largest automobile exporter (Morales, 1994).

Several lessons can be drawn from the United Kingdom experience with the automobile industry. First, TNCs can assist in restructuring an industry. Second, the positive effects of their entry are not necessarily long lasting. When overall economic and industrial conditions in a host country deteriorate and a country loses locational advantages, TNCs will share in the demise of the industry along with local firms. Unlike local firms, however, they can downsize their operations or leave it altogether. Therefore, adequate government policies that create, maintain and subsequently protect the locational advantages of a country are crucial for the survival of an industry.

^a "Decrepit wreck hauls itself back onto the road", *Financial Times*, 4 September 1995.
^b "Car industry: Hai Swindon", *The Economist*, 3 October 1992, p. 70.
^c *Financial Times*, 14/15 October 1995.

^d "Car makers: then there were seven", *The Economist*, 5 February 1994, p. 21.

^e "Hard for car makers is smashing for customers", *The Economist*, 30 September 1995, p. 95.

(Box V.2, cont'd)

- *Skills.* Japanese firms provide funds for training of their company personnel. This extensive training expenditure is reflected in p. 228).
- *Markets.* Japanese firms have access to markets previously unavailable to indigenous firms. Nissan exports about 80 per cent of its United Kingdom production to other countries. Activities of Japanese firms in the industry as a whole have increased from 280,729 units in 1989 to 616,680 units in 1994.

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^a J. Griffiths

^b "Britain's

^c *Financial*

^d "Europe's

^e "When hori

interaction between inward and outward FDI and strong links between restructuring processes in different countries. As countries develop, such interactions usually occur, as suggested by the investment-development-path model showing the emergence and evolution of both inward and outward FDI as countries go through stages of economic development (box V.3). While limited restructuring is, of course, beneficial, an interactive process, involving several countries over time in a continuous, mutually reinforcing manner has broader development implications.

Box V.3. The investment-development path

The notion of an investment-development path puts forward the idea that the outward and inward FDI positions of a country are systematically related to its economic development relative to the rest of the world.^a It suggests that countries tend to go through five different stages of development and that these stages can usefully be classified according to the propensity of those countries to be outward and/or inward investors (Dunning and Narula, forthcoming). This propensity, in turn, rests on the extent and pattern of the ownership-specific advantages of each country's indigenous firms, its location-specific advantages, and the extent to which indigenous and foreign firms choose to utilize their ownership-specific advantages jointly with the country's location-bound endowments through an internalization of the cross-border markets for these advantages, rather than by some other organizational route.

The five different stages in terms of per capita income and the related position on the investment-development path are (Dunning and Narula, forthcoming):

- Stage one. At very low levels of income, countries are presumed to have few location-specific advantages to attract FDI, with the exception of advantages arising from natural assets; at the same time, they possess no firms with ownership advantages strong enough for outward FDI.
- Stage two. As per capita income increases, the attractiveness of the economy as a host for inward FDI grows (due, for example, to growing internal markets or improved infrastructure to offer foreign investors); outward investment emerges, thanks to improved ownership advantages of domestic firms, especially where government policies have generated a virtuous circle of created asset accumulation, but is likely to remain too low to offset the rising rate of growth of inward FDI. Thus, countries increase their net inward investment position.
- Stage three. In this stage, as per capita income increases further, countries are marked by a gradual decrease in the growth of inward FDI and an increase in the rate of growth of outward FDI that results in an increase in net outward FDI flows. Factors conducive to this shift include changing technological capabilities, demand for higher quality goods, deteriorating advantages in labour-intensive activities, and domestic wage-increases.
- Stage four. This stage is reached, with further increases in per capita income, when a country's outward investment stock equals or exceeds the inward investment stock and the rate of growth of outward FDI is still higher than that of inward FDI.

/...

Nowhere is interactive TNC-assisted restructuring and its role in development clearer than in Asia. The role of TNCs is particularly visible in the ASEAN-4 countries (Indonesia, Malaysia, Philippines and Thailand, see table V.1), while many other countries (including China, India and Viet Nam) are beginning to feel their impact as well. Moreover, as will be shown in the next section, even in countries that are considered textbook cases of successful restructuring and development based principally on indigenous capabilities -- Japan, the Republic of Korea and Taiwan Province of China -- TNCs have assisted the restructuring process. In Japan, this is clear as regards outward FDI (with the country's own TNCs helping

(Box V.3, cont'd)

The increased competitiveness of domestic firms both at home and abroad reflects state-of-the-art production processes and products and location-specific advantages based almost completely on created assets. Inward investment in this phase is increasingly sequential and directed towards rationalized and asset-seeking investment by firms from other stage-four countries.

- Stage five. In this stage, at still higher levels of income, the net outward FDI position of a country first falls and later fluctuates around zero. At the same time, both inward and outward FDI are likely to continue to increase. This is the position that a number of developed countries are now approaching. Its key features are, first, an increasing propensity for cross-border transactions to be conducted internally by and within TNCs and, second, a more even balance between the FDI positions of countries as countries converge in the structure of their location-bound assets.

The investment development path suggests that there is a dominant tendency for countries to invest in countries with smaller per-capita GDP than their home countries, at least until they reach the fifth stage. A positive net outward FDI position of a country offers a measure of the transfer of created assets to lower-income countries and is compatible with a technological advantage in the home country of the investing TNC, although this measure must be qualified by other types of FDI such as market-seeking investments (which indicate little in the way of technological transfer). While this interpretation of net outward FDI has less validity for the developed countries, the tendency to invest in countries with lower per-capita GDP conforms with accepted theories of FDI. However, the tendency towards downstream investment is not absolute. A wide variation of net ownership advantages across industries is fully compatible with TNCs from countries in stages three and four investing in countries with higher per capita GDP.

Clearly, there are other determinants of a country's FDI position than its per capita GDP. Most notably, at any given level of per capita GDP, in developing and developed countries that depend upon access to created assets for their prosperity, net outward investment per capita is likely to be higher than in the case of natural resource-rich countries. At the same time, government measures to stimulate or restrict the level of either inward or outward investment can significantly affect a country's net outward FDI per capita.

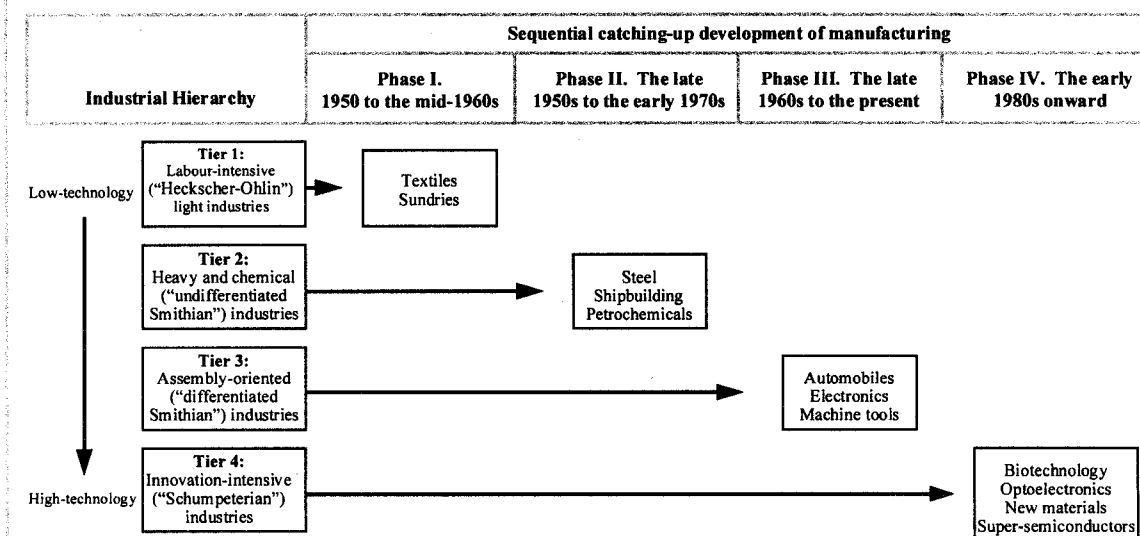
^a The concept was first developed by Dunning (Dunning, 1981). It has since been revised and extended in several papers and books (Dunning, 1986, 1988, 1993; Narula, 1993, 1995; Dunning and Narula, 1994).

to restructure Japanese manufacturing), and it is also identifiable, although to a limited extent, as regards inward FDI in the early post World War II period. The Republic of Korea and Taiwan Province of China needed some TNC-controlled assets in the initial phase of industrialization (as illustrated by the case of the textile and apparel industry), and more of these assets when they were moving up the ladder of industrial upgrading (as illustrated by the case of the electronics industry). At a certain stage of development, these economies gave rise to their own TNCs which actively contributed to a further industrial upgrading and restructuring of their newly-emerged home countries.

1. Transnational corporations and restructuring in Asia: the case of Japan

Japan's success has owed much to its ability to restructure its economy -- especially its manufacturing sector -- continuously towards more productive and competitive industries (figure V.1). Japan built on an industrial foundation consisting of light and heavy industries (tiers 1 and 2 in figure V.1) created before and during the second World War. These served as a launching pad for postwar industrial upgrading towards higher value-added manufacturing industries in a manner consistent with the country's changing level of technological sophistication (Ozawa, 1992). Transnational corporations played a role, although government policy made national companies the principal agents of this process, including through measures initially restricting inward equity investment (but not necessarily other forms of TNC participation) and allowing -- and eventually promoting -- outward FDI.

Figure V.1. Sequence of postwar structural upgrading of the manufacturing sector of Japan



Source: Based on Ozawa and Hine (1993).

(a) Inward foreign direct investment and links with foreign transnational corporations

In the early post-war period, inward FDI to Japan was discouraged and the development of new growth industries by domestic enterprises promoted. Still, Japan did use foreign TNCs, mainly through contractual arrangements (mostly licensing agreements and subcontracting), to obtain advanced technologies, rather than technology transfer through inward FDI (Ozawa, 1974).

United States TNCs played a particularly important role in helping to make Japanese light industries internationally competitive in the immediate post-war period. This period is referred to in Japan as "the days of blind trade" because Japanese companies did not have overseas commercial information-gathering outposts and were entirely dependent on foreign firms (including TNCs) for product and packaging specification, including design, style, sizes and prices of products. United States TNCs taught, for example, Japanese apparel makers the needed product design and styling skills and provided them with access to their own marketing channels, in the context of a broader opening of the United States market to Japanese exports. In fact, Japan was the first country that served United States apparel TNCs as their major low-cost labour subcontracting base in the early 1950s. As one study noted: "The early apparel importers worked almost exclusively with the large Japanese trading companies, especially Mitsui. US importers would take sample products they had either bought or made themselves and have them made in Japan at a lower price." As another source put it, "We taught them how to make the garments, about thread tension, how to pack a carton, etc." (Bonacich and Waller, 1994b, p. 81). This "teach-in" practice often even involved "knocking-off" (copying styles) (ibid., p. 84). Similar developments took place in other light industries -- such as sports goods and footwear -- where early post-war Japan built comparative advantages by using export activities as a form of learning, with Western TNCs in retailing as their tutors.

Likewise, the Government of Japan encouraged Japan's automobile companies to learn from TNCs by approving joint ventures and allocating scarce foreign exchange to imports of components for a knockdown assembly of foreign models.⁴ These knockdown-assembly ventures were short term in nature and helped Japanese automobile makers to learn the basic techniques of mass production (Ozawa, 1994, p. 37). Starting with technology transfers from Western automobile TNCs, Japanese automobile producers revolutionized organizational and management practices to such an extent that they eventually became leaders in this industry and ultimately helped, through their outward FDI, to restructure the automobile industry in countries such as the United Kingdom and the United States.

Japanese firms also built their own capabilities in the textile and electronics industries, allowing Japan to capitalize fully on the country's low-cost labour-based comparative advantage. When these industries began losing competitiveness (as discussed in the next section), the firms involved faced the choice of either shifting operations abroad or rationalizing them at home. Increasingly, companies relocated production abroad and, thus, became TNCs; many of them were small-and medium-sized producers that were marginally efficient firms. Larger firms were able to rationalize production at home at that time.

When Japan was moving up the hierarchy of manufacturing industries, the Government and private industry cooperated to acquire technology from foreign TNCs through various non-equity forms. Transnational corporations played an important role in this institutionally arranged channel of technology transfer and knowledge absorption, although not through FDI. Undoubtedly, the technological competitiveness of Japan's industries improved in this process, and so did their export competitiveness.

(b) Outward foreign direct investment and Japanese transnational corporations

During the 1950s, foreign exchange restrictions prevented Japan's outward FDI. As such restrictions were gradually abolished, outward FDI in manufacturing took place, reinforcing the internal process of structural transformation (Kojima and Ozawa, 1985). Four types of outward FDI have been distinguished: labour-seeking; resource-seeking and later, "house-cleaning"; assembly-transplanting; and alliance-seeking FDI (Ozawa, 1990, 1992). These various types of FDI accelerated the process of Japanese industrial restructuring by scaling down industries losing competitiveness (thus releasing resources for industries gaining competitiveness), and by strengthening the existing structure and helping to capitalize on its competitiveness (when, for example, FDI was undertaken to avoid trade friction). They occurred in a wave-like sequence, as an integral part of industrial restructuring at home (table V.2).

- The first surge of outward FDI occurred in response to the need to move away from the light, labour-intensive industries that initially drove Japan's industrialization but then started to lose competitiveness because of shortages of unskilled labour and rising wages. In 1955, these industries (food, beverages and tobacco, textiles and apparel, leather products and other manufactures) dominated manufacturing, accounting for 75 per cent of manufacturing output and (without "other manufacturing") 44 per cent of exports. When the share began to shrink rapidly, it generated the first wave of FDI: during 1969-1973, light industries accounted for 44 per cent of manufacturing FDI. Japanese manufacturers of labour-intensive goods, mostly small and medium-sized firms, relocated production to neighbouring economies, especially Taiwan Province of China, the Republic of Korea, Hong Kong and Singapore, where an abundant supply of unskilled labour was available and where socio-cultural barriers were relatively low and hence involved low transaction costs.

This type of outward FDI permitted the smooth redeployment of resources released from the declining industries, notably labour and industrial sites. As Japan's economy was characterized by a full utilization of resources, restructuring could not have taken place smoothly without the release of such resources. Restructuring also released resources specific to the declining industries (e.g., technology, machinery) which, instead of being wasted at home, were deployed to other countries to extend the competitive advantage that Japanese firms had acquired, permitting these countries to utilize or enhance their comparative advantage (Ozawa, 1979, p. 63).

- By 1970, Japanese manufacturing relied much less on light industries and much more, in production and exports, on heavy and chemical industries, which were modernized in the meantime, and on machinery and transport equipment (table V.2). But a need to restructure again soon emerged, as heavy and chemical industries -- relying on the extensive use of industrial space and imported natural resources (including energy) and, above all, being pollution-intensive -- encountered physical and environmental limits to further growth. A concerted national drive was launched to restructure Japanese manufacturing towards less resource-consuming, more pollution-free and more knowledge-intensive industries like vehicles and electronics. As seen in the rising share

**Table V.2. Structural changes in the manufacturing sector of Japan:
output, exports and FDI**

(Percentage of manufacturing total)

Year	Labour-intensive light industries				Capital-, assembly- and knowledge-intensive industries			
	Food, beverages and tobacco	Textiles, apparel and leather	Other manufacturing ^a	Total	Chemicals, petroleum and coal products	Basic and fabricated metal products	Machinery transport equipment and electronics	Total
A. Manufacturing output ^b								
1955	42.5	11.9	20.3	74.7	7.2	10.7	7.3	25.2
1970	17.4	7.6	21.4	46.4	14.0	16.6	22.8	53.4
1980	14.4	6.1	18.4	38.9	13.8	16.3	31.1	61.2
1990	9.1	3.5	15.6	28.2	13.7	12.4	45.7	71.8
B. Manufacturing exports								
1955	6.2	37.3	..	43.5	5.1	19.2	..	24.3
1970	3.4	12.5	11.8	27.7	6.4	19.7	46.3	72.4
1980	1.2	4.8	9.5	15.5	5.3	16.5	62.7	84.5
1990	0.6	2.5	9.6	12.7	5.5	6.8	74.9	87.2
C. Manufacturing FDI outflows								
First wave 1969-1973	5.0	23.8	14.7	43.5	18.9	14.7	22.9	56.5
Second wave 1978-1985	4.3	5.2	10.5	20.0	16.6	25.2	38.2	80.0
Third wave 1986-1990	5.2	3.3	17.9	26.4	12.2	8.9	52.5	73.6

Sources: UNCTAD, Division on Transnational Corporations and Investment, based on Ozawa (1995b); Pilat (1994, p. 74); and JETRO (1994).

^a Including mostly labour-intensive industries such as toys, table and kitchenware, sporting equipment, travel luggage, etc..

^b Measured by GDP at constant 1985 market prices.

^c Based on approvals and notification.

of the metal products industry and the continued high share of chemicals, petroleum and coal products industries in FDI outflows during 1978-1985, FDI played a similar role as in the first phase of Japanese industrial restructuring: it helped to "push out" industries that were no longer in the vanguard of competitiveness, thus releasing resources for rapidly expanding industries. In particular, Japan began to transplant resource-intensive manufacturing such as ore-processing and aluminum-smelting activities to resource-supplying countries, as a way of "house-cleaning" the domestic industrial structure.

- By 1980, automobiles and electronics (especially consumer electronics) accounted for close to two-thirds of the country's manufactured exports. Firms in these industries generated large trade surpluses that led to trade frictions in Japan's major export markets, notably North America and Europe, and the imposition of trade restrictions. Assembly-type FDI expanded as a way of alleviating frictions while, at the same time, continuing to capitalize on the competitiveness of Japanese firms by using FDI rather than exports as a way of accessing these markets. During the third surge of Japan's overseas investment (1986-1990), "machinery and transport equipment" alone was responsible for a half of the total value of outward manufacturing FDI (table V.2). In addition to helping Japan's industries to adjust FDI in the automobile industry contributed to the restructuring and increased competitiveness of host countries' automobile industries, including those in the United Kingdom and the United States.

Most recently, a good part of Japan's industry, especially that based on relatively low value-added activities, has come under pressure as a result of a sharp appreciation of the Japanese yen. Japan's manufacturing FDI is on the rise again, providing support to the next round of industrial restructuring, this time mainly to alleviate the brunt of the yen appreciation by relocating certain types of production to lower-cost countries, mostly in Asia (Tejima, 1995). The production affected includes parts and components (giving the domestic assembly-based industries the benefit of cheap imported inputs) and low-end final consumer goods such as radios, colour television sets and microwave ovens in which Japan (but not necessarily Japanese firms) has been losing comparative advantage, while demand has been expanding, especially in the fast-growing Asian economies.

By the mid-1990s, Japan found itself in the midst of consolidating idea-driven, research-and-development-intensive industries (tier 4 industries in figure V.1). While the relocation of other industries is making room for these industries, as well as service industries, another type of TNC activity -- strategic alliances between Japanese and foreign TNCs -- aims to upgrade the country's industrial structure. Japanese firms have begun to engage in strategic alliances with foreign TNCs in research and development and product development, because the success of upgrading depends largely on new products and technologies. As research and development is very costly and risky, and competition in tier 4 industries (see figure V.1) is intense, joint efforts of TNCs from leading industrial countries in the form of strategic alliances have become necessary. Japanese TNCs have been active participants in these alliances.

Although manufacturing FDI expanded rapidly, the most dynamic and the largest component of Japanese outward FDI has been services FDI. The ascendancy of services FDI mirrors structural changes in the Japanese economy where services have become, as in other developed countries, the single largest sector. Foreign direct investment in services has enhanced overall competitiveness, in part because of the ability of trading and financial affiliates established abroad to cater to the needs of manufacturing exporters and manufacturing TNCs. Another part of services FDI has been in tourism and leisure industries (hotels, golf courses, vacation homes, restaurants, etc.), as Japanese foreign travel increased with the rapid rise of per capita income. Likewise, many retailers set up operations abroad to cater to local shoppers as well as to overseas Japanese residents. To date, however, little of the Japanese FDI in services has been based on exploiting the potential competitive advantages of Japanese services firms, in a wider sense than supplying Japanese customers overseas.

While, during the early postwar period, Japan emulated the United States as regards the pattern of development and relied on it for various inputs, the country's economic success and ability to restructure continuously its manufacturing sector soon permitted it to assume a leadership role, next to the United States, for its Asian neighbours. This role has manifested itself in the rise of competitive textile, apparel and electronics industries throughout Asia, to which TNCs from both the United States (generally in the form of majority-owned foreign affiliates) and Japan (more often in the form of joint ventures and non-equity arrangements) have made important contributions.

2. Transnational corporations and restructuring in Asia: the textile, apparel and electronics industries in Asian host countries

The textile and apparel and the electronics industries play an important role in the manufacturing sectors of many countries. Textiles and apparel are typically among the first to appear in a country's industrialization process. The electronics industry, on the other hand, is very new: it not only includes widely sought, technologically-advanced, highly income elastic consumer goods, but also a large number of intermediate goods, parts and components that are indispensable inputs for a variety of goods and service industries. While the former industry is thought to be an obsolete, declining industry, the latter one is a symbol of technological sophistication and progress. Yet, when both industries are disaggregated, they include sub-industries or operations that are quite similar. For example, while the textile and apparel industry is labour-intensive overall, and the electronics industry is capital-intensive, some products of the latter are so standardized that they can be easily produced with labour-intensive techniques relying on unskilled labour. On the other hand, the textile industry includes several capital and technology-intensive operations (e.g., the spinning of yarn) and high-value added products (fashion clothing) (World Bank, 1991, p. 7). As a result, the industrial restructuring process within the manufacturing sector involves two parallel processes: a structural change involving a relative decline in textiles and relative expansion in such industries as electronics; and, at the same time and within the same industry, moving out of labour-intensive operations and low-technology, low value-added products towards more capital-intensive, high-technology or high-value added products and services, or both. The two processes have been taking place

in Asian economies, with TNCs from Japan, the United States and, more recently, other Asian countries playing an increasingly important direct role.

(a) The textile and apparel industry

The textile and apparel industry existed in today's newly industrializing economies of Asia (Hong Kong, the Republic of Korea, Singapore and Taiwan Province of China) before Japanese and United States companies started looking towards Asia as a location for export-oriented production. But the industry was inward-looking. The involvement of TNCs helped to turn it into one of the first export-oriented industries of these economies, though the forms of this involvement varied by host country. For example, the Republic of Korea and Taiwan Province of China followed a Japanese pattern by relying on non-equity arrangements rather than FDI to access technology and other TNC-controlled assets: in the former, the share of FDI in the employment of the textile and apparel industry was only three per cent in 1986 (declining from close to seven per cent in 1975), while in the latter it was nearly 10 per cent in 1986 (declining from over 30 per cent in 1976) (see table V.1 and Ramstetter, 1991, pp. 121 and 152). But the involvement of TNCs is also reflected in the fact that about 60 per cent of textile exports were marketed by Japanese general trading companies (*sogo shosha*) during the early 1960s (the first phase of export-driven industrialization in Taiwan Province of China). ASEAN countries, which began industrialization after the newly industrializing countries, relied appreciably more on FDI in this industry: the shares of FDI were around 45 per cent in Malaysia (in 1990, based on fixed assets) and Thailand (in 1986, based on sales, see table V.1).⁵

The experiences of the Asian newly industrializing economies with TNCs went through four phases (figure V.2):

- In the initial, unskilled labour-driven phase of industrialization, the newly industrializing countries were apparel makers, capitalizing on an abundant low-wage labour force.⁶ The labour markets were largely left to market forces -- an additional attraction for TNCs (and, of course, domestic companies), keeping "wages below where workers believed they ought to be" (World Bank, 1993b, p. 266).

The implementation of an outward-oriented development strategy by these countries coincided with the need to restructure the textile and apparel industries in the developed countries (including those in the United States and Japan), as firms in these industries were losing competitiveness there. Firms in the developed countries diversified overseas and, in the process, provided local firms in Asia with operating capital, quality control and -- foremost -- access to foreign markets. Foreign markets included notably the United States, access to which was provided not only by United States TNCs, but also by Japanese TNCs that had already established textile and apparel ventures in the Asian developing countries in the 1960s (table V.3). The United States TNCs included retail trading companies (such as Sears Merchandise Group, J.C. Penney, Woolworth, Montgomery Ward and Macy's) and various manufacturing companies, many of which disappeared during the 1970s as a result of industrial restructuring in the United States.⁷

The Japanese TNCs included general trading companies (such as Mitsui Corporation, Tomen, Marubeni Corporation, C. Itoh & Company and Kanematsu-Gosho, which were especially active in textiles), and the textile companies proper, including small and medium-sized firms and large firms such as, for example, Teijin and Toray which started relocating their production bases to the developing countries of Asia in the 1960s (table V.4).

- As the local Asian apparel industry grew, based on exports, local firms began to reduce their marketing dependence on foreign TNCs. Backed by government, local firms set up their own trading companies to sustain their export drive (phase II in figure V.2). The Government of the Republic of Korea, for example, introduced the “general trading company” system for small and medium-sized enterprises in 1975, by designating the trading subsidiaries of large business groups (*chaebols*) to play this role. Partly to meet a minimum export volume and a minimum number of export products, general trading

synthetic fibre producers, usually by way of joint ventures or minority participation. For example, such TNCs as Toray, Teijin, Asahi Chemical Industry and Mitsubishi Rayon established a number of ventures in cooperation with local interests in the Republic of Korea and Taiwan Province of China.⁹

- Once both of these economies had succeeded in having foreign TNCs transplant synthetic fibre production (along with related spinning, weaving and dyeing operations), they started introducing further upstream operations, including the production of petrochemicals for synthetic fibres as well as for plastics (phase IV). Again, they relied on petrochemical TNCs mostly as technology licensors or as minority-equity participants in local ventures. For example, in 1980, the Republic of Korea set up Samsung Petrochemical Company with Mitsui Petrochemical Industries (with 15 per cent of equity) to produce stock for polyester fibre. Throughout the 1980s, Taiwan Province of China built up its petrochemical industry through tie-ups with Mitsubishi Chemical and other TNCs.

The structural changes in the textile and apparel industry became necessary because traditional apparel making is highly labour-intensive. A country can maintain a comparative advantage only for a limited period of time, during the earlier phase of development, when relatively unskilled labour is available at low wage rates, e.g., only as long as the supply of labour from rural areas into manufacturing can continue. Thus, the export competitiveness of a country in apparel is an evanescent phenomenon. That is what happened in the Asian newly

Table V.3. Japanese affiliates in the textile and apparel industry in Asia, 1950-1994
(Number of affiliates)^a

Host country	Before 1971	1971-1975	1976-1980	1981-1985	1986-1989	1994
Republic of Korea	5	19	2	1	3	17
Hong Kong	3	4	1	3	17 ^b	37 ^b
Taiwan Province of China	24	4	-	-	6	18
Singapore	2	1	1	1	-	4
Subtotal	34	28	4	5	26	76
Indonesia	1	16	2	-	-	41
Malaysia	1	7	2	1	2	14
Philippines	-	4	1	-	3	7
Thailand	18	4	2	3	9	50
Subtotal	20	31	7	4	14	112
China	-	-	-	2	15	168
Total	54	59	11	11	55	356

Source: Compiled from Toyo Keizai, *Kaigai shinshutsu Kigyo Soran*, 1990 and 1995, Tokyo.

^a Numbers refer to foreign affiliates established in each period except for 1994 numbers which refer to affiliates existing in October 1994.

^b Many of them actually manufacture in China with only marketing functions in Hong Kong.

industrializing economies, whose firms have been rapidly losing competitiveness in apparel, as local wages rose. Thereafter, in both the Republic of Korea and Taiwan Province of China, the garment industry declined. In the former, within a period of only four years (between 1987 and 1991), the number of factories and workers declined by more than 40 per cent (Lee and Song, 1994, p. 158). In the latter, the decline is reflected in falling exports of apparel and accessories, from some \$5 billion in 1987 to \$4.3 billion in 1991, or from over 53 per cent to 36 per cent of total Taiwanese textile and apparel exports (Gereffi and Pan, 1994).

As the attractiveness of a country as a host for apparel making declines, TNCs begin to look for other host countries for such operations. Once a host country has succeeded in developing its own local capabilities, local firms also start relocating part of their production to lower-wage locations, thus giving rise to outward FDI and, hence, TNCs based in those

Table V.4. Foreign affiliates of Toray Industry and Teijin Co. in Asia, type of activity or product and year of establishment

Host economy	1960-1969	1970-1979	1980-1989	1990-1995
Thailand	T1: rayon, 1964 T1: apparel, 1966 TC: staple yarn, filament yarn, 1967	TC: filament yarn, weaving, 1970 T1: weaving, 1974	T1: research, 1985 T1: film, 1988	T1: filament yarn, 1992
Taiwan, Province of China	T1: staple yarn, filament yarn, 1966	T1: staple yarn, filament yarn, 1970		
Hong Kong	T1: apparel, 1968	T1: apparel, 1971		T1: knitting, 1990
Republic of Korea		T1: spinning, 1971 T1: weaving, 1972		
Indonesia		T1: staple yarn, filament yarn, 1974 T1: weaving, 1972 T1: spinning, 1973 T1: spinning, 1975 TC: weaving, 1976		T1: yarn, 1991
Malaysia		T1: weaving, 1972 T1: staple yarn, 1974 T1: weaving, 1975	T1: engineering, 1981 T1: resin, 1989	T1: resin, 1992
Singapore		T1: weaving, 1979		T1: filament yarn, staple yarn, 1993
China				T1: filament yarn, 1994 TC: filament yarn, 1994

Source: UNCTAD, Division on Transnational Corporations and Investment, based on Toyo Keizai, 1990 and 1995.

Key: TI = Toray Industry; TC = Teijin Company.

countries. The search for cheap labour has been one major incentive to relocate production: in the early 1990s, the average wage rate in China was only one-tenth of that prevailing in Taiwan Province of China. When other production costs, such as raw materials, machinery, transportation charges and taxes are considered, a garment made in China costs about one-fourth as much as an equivalent item made in Taiwan Province of China (Gereffi and Pan, 1994, pp. 132-133). An additional incentive to relocate production from newly industrializing economies -- not only to Asian countries but also to Central American and, in some cases, African countries -- was the possibility to utilize unused quotas in major markets.

Thus, the restructuring of the textile and apparel industry in the newly industrializing economies led to FDI in lesser developed countries, especially the ASEAN countries and later in China, India and Viet Nam. For example, "Hong Kong, Singapore, and Southeast Asian nations such as the Philippines, Indonesia, Thailand, and Malaysia accounted for more than 80 percent of the cases of foreign direct investment by Taiwanese garment and footwear firms from 1959 to 1991" (Gereffi and Pan, 1994). China was the most popular host country for Hong Kong garment makers: in 1991, of 74 offshore factories of Hong Kong in the industry, 45 were in China (Lau and Chan, 1994, p.120).

In addition to undertaking outward FDI in production, firms in the newly industrializing economies began to develop their own export marketing channels by acquiring trading companies in the developed countries. For example, Hong Kong companies began purchasing United States companies, entering into direct competition with United States brands. They also acquired some retail specialty stores, such as Foxmore and Aca Joe. This was aided by the emergence, in the United States, of companies specializing in advising foreign importers and manufacturers on how to ship their products to the United States and market them under their own labels.¹⁰

Developments in Asia are typical of the apparel industry as a whole since labour-intensive operations have generally become highly sensitive to cost differentials; as a result, TNCs move their sourcing activities from one country to another in search of low-cost locations, while maintaining the supply bases of high value-added, short-cycle, fashion-oriented items close to their home markets. The Asian newly industrializing economies, in particular, have made the best use of these TNCs' sourcing activities as a point of entry into modern manufacturing, starting from the most labour-intensive segments of the textile and apparel industry and gradually moving both downstream and upstream along the value-added chain in a sequential fashion. Each step in this process was compatible with existing factor endowments and technological conditions; but new competencies were developed through technological absorption, domestic industrial upgrading and linkages with foreign TNCs (mainly joint ventures, minority participations and non-equity forms), as well as through the establishment of domestic apparel TNCs. The globalization of the textile and apparel industry has thus the potential to help developing countries build and restructure their manufacturing sectors, if countries are able to exploit contacts with TNCs to improve their own capabilities and to learn how to compete in international markets.

(b) The electronics industry

The newly industrializing economies of Asia owe much of their economic success to their ability to restructure their manufacturing from labour-intensive industries and activities towards capital- and technology-intensive ones. Nothing illustrates this better than the electronics industry. Today, electronics goods and services account for a substantial share of manufacturing output, employment and exports of these economies. The electronics industry is also rapidly spreading to ASEAN countries. Malaysia is the most advanced in this regard, with Thailand, Indonesia and the Philippines following suit. The Asian electronics industry is also highly competitive. Already in the late 1980s, the Asian newly industrializing economies ranked among the top ten electronics exporters in the world (after Japan, the United States, Germany and the United Kingdom), with the four ASEAN countries gaining shares in the world export markets more recently. Electronics exports have become one of the largest items in manufacturing exports from Asia, accounting (in 1988) for 45 per cent of manufacturing exports in Singapore, between one-fourth and one-fifth in other newly industrializing economies and as much as 50 per cent in Malaysia (Ernst and O'Connor, 1992, pp. 98-99).

The electronics industry uses rapidly progressing technology generated by expensive research and development. Consequently, the development of this industry in any developing country is today hardly possible without the involvement of TNCs as providers of technology and other assets (including market access). While these assets can be acquired in various forms -- ranging from licensing, original equipment-manufacturing export arrangements, subcontracting and FDI to strategic alliances -- the role of FDI in the electronics industry of host developing countries is typically more important than in many other industries (especially in the textile and apparel industry) because of the proprietary nature of the technology involved. If a developing

country is successful in developing technologies, and it eventually moves into design and development, it can gradually reduce its dependence on inward FDI and become an exporter in the industry, undertaking its own outward FDI, as is shown below by the experience of the Republic of Korea and Taiwan Province of China.

country is successful in developing technologies, and it eventually moves into design and development, it can gradually reduce its dependence on inward FDI and become an exporter in the industry, undertaking its own outward FDI, as is shown below by the experiences of

Experience of the Republic of Korea

Republic of Korea -- one of the most successful countries in building up an electronics industry capitalized on relations with TNCs for technology transfer, learning and access to export markets, combined with strong support by the Government in the development of the industry. While that country, as well as Taiwan Province of China, has relied on FDI only in part for its economic success, the electronics industry is an exception. Measured by employment, foreign affiliates accounted for some 40 per cent of the industry in 1974, rising to some 70 per cent in 1984 and falling to 57 per cent in 1986.¹² The share of foreign affiliates was even higher in exports, increasing from two-thirds in 1974 to almost three-quarters in 1986.

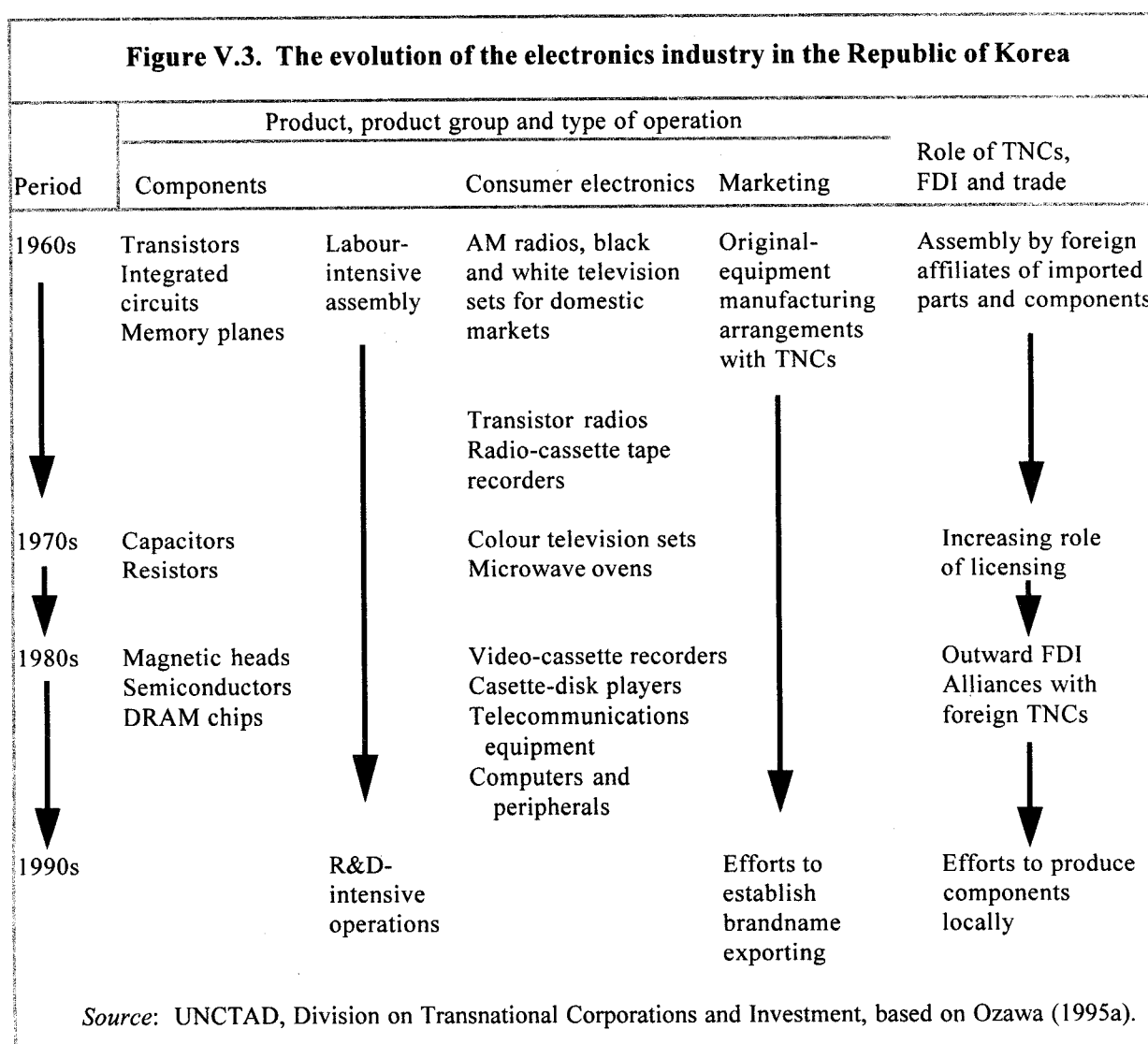
The development strategy somewhat similar to that in the textile and apparel industry, the Republic of Korea first concentrated on the labour-intensive segments of the

i. The electronics industry

The Republic of Korea's electronics industry -- capital-intensive and export-oriented -- has become a major industry.¹¹ While the industry started from a modest export base, it grew rapidly by employment, increasing the share of foreign affiliates to three-quarters

In a developing country, the electronics industry first concentrated on the labour-intensive segments of the

electronics industry (figure V.3), i.e., on assembly-type operations for low-end consumer products such as radios and black and white television sets initially produced for the domestic market and then gradually exported on the basis of price competitiveness. The industry was soon upgraded as a result of the entry of TNCs, first from the United States and Japan and later from Europe. By the mid-1960s, foreign affiliates were driving the industry. They assembled imported components for exports. In the case of United States TNCs, the Government of the Republic of Korea succeeded in persuading such companies as Motorola, Signetics, Fairchild and Control Data to move their majority-controlled assembly operations for integrated circuits and other electronic components to the Republic of Korea in order to reduce costs (Bloom, 1992). While these TNCs brought assembly operations for electronics components, Japanese TNCs were, at about the same time, engaged mostly (via joint ventures) in the assembly of standardized consumer electronics goods such as transistor radios and television sets. Their role in the industry has been described as follows:



"Japanese investment in Korea has been extremely significant for the initial development of the electronics industry. While relations between the two countries were only normalised in 1965, technical guidance from Matsushita and Sanyo in 1961 and 1962 helped in the establishment of two transistor radio plants. Toshiba was one of the first Japanese companies to set up operations in Korea, with one joint venture and two major technical agreements in the late 1960s. These were for the assembly of semiconductors, consumer electronics products, and CRTs [cassette recorder tapes] and CRT parts. NEC formed two joint ventures in 1970, Goldstar Electric and Samsung-NEC (later named Samsung Electron Devices). A 50:50 joint venture established in 1973 between Anam Industrial and Matsushita became one of the first colour television producers and exporters in Korea. Other technical agreements and joint ventures also occurred during this embryonic period" (Bloom, 1992, pp. 49-50).

Capitalizing on its contacts with TNCs, and especially on FDI and original equipment-manufacturing arrangements, the local industry acquired the basic skills and absorptive capacity to utilize successfully the imported technologies. Once the basic absorptive capacity was established, licensing agreements could be used more frequently to acquire and digest advanced technologies:

"The Korean electronics industry has been heavily dependent upon licensing from foreign firms. One constructive case study can be seen in the licensing agreements between Philips and several Korean companies to manufacture compact disk players. Since Korean electronics corporations possessed most of the technical background to produce such products [thanks to inward FDI and original equipment manufacturing experiences], and since Philips, itself, was a major producer of compact disk player deck mechanisms, Philips licensed the remaining technology to ten Korean corporations for unrestricted production of compact disk players. Likewise, when Hitachi wished to shift its own focus from 1-megabyte Dynamic Random Access Memory (DRAM) microprocessors to 4-megabyte DRAM chips, it licensed the technology and provided technical assistance to Goldstar to produce the 1-megabyte chips. This allowed such corporations to improve their technological base even further. Such technological transfers have proven to be mutually beneficial both for Korean companies and for Philips and Hitachi" (Hong, 1995, p. 46).

Thanks to its links with TNCs, the Republic of Korea was able to move up the product hierarchy of consumer electronics from radios, monochrome television sets and cassette-tape-recorders through colour television sets, microwave ovens and video-cassette recorders to computers and telecommunications equipment (figure V.3). In addition, more and more electronics components were produced domestically, as local companies acquired the necessary technologies and became more active in research and development. After reaching a certain level of sophistication, these companies -- such as Daewoo, Goldstar, Hyundai and Samsung -- started competing in global markets. Although they still depended on United States and Japanese TNCs for marketing, mainly through original equipment-manufacturing export arrangements, they have recently become successful in developing and selling their own brand-

name products (colour television sets, microwave ovens and personal computers) in the United States and Europe.¹³

Furthermore, to overcome cost pressures at home due to rising wages and an appreciating domestic currency, these companies began, in the early 1980s, to shift the production of colour television sets and microwave ovens to Indonesia, Malaysia, the Philippines and Thailand, as well as to China, India, Mexico, Portugal and Turkey (Bloom, 1992, p. 109-112). This wave of outward FDI in electronics joined the first wave of FDI in apparel -- the two major industries in which the Republic of Korea has emerged as a home country for FDI. Another motivation for outward FDI was the need to catch up technologically, taking the form of strategic alliances with TNCs from developed countries. Such alliances in semiconductors helped companies of the Republic of Korea close the technology gap *vis-à-vis* the developed world in, for example, DRAM chip production (tables V.5 and V.6). Finally, TNCs based in the Republic of Korea invested abroad to overcome problems of market access, especially in the United States and Europe (Bloom, 1992, pp. 101-102).

Table V.5. Samsung's technological alliances and acquisitions, July 1995

Company	Country and equity stake, percentage	Product or technology involved
A. Alliance partner		
General Instrument	United States	Development and marketing of digital television.
USA Video	United States	Development of set-top boxes, including video file servers.
NEC	Japan	Development of 256-megabit DRAM chips.
ISD	United States	Development of multilevel storage sound processing integrated circuits.
Toshiba	Japan	Development and production of 64-megabit flash memory chips.
Fujitsu	Japan	Sharing of TFT liquid-crystal displays technology.
AT&T	United States	Development and production of pen-based computers.
Motorola	United States	Development of the next-generation of personal digital assistants (based on Motorola's DragonBall microprocessors).
B. Acquisitions		
ARRAY	United States, 20 per cent	Digital processor chip technology used in multimedia products.
Harris Microwave Semiconductors	United States, 100 per cent	Optical semiconductors and gallium arsenide chips.
Lux	Japan, 51 per cent	CAD/CAM software.
Integrated Telecom Technologies	United States, 100 per cent	ATM technology.
AST Research	United States, 40 per cent	Personal computers.

Source: UNCTAD, Division on Transnational Corporations and Investment, based on "Look out, world -- Samsung is coming", *Business Week*, 10 July

ii. The experience of Taiwan Province of China

The experience of Taiwan Province of China with the development of its electronics industry is largely similar to that of the Republic of Korea. The electronics industry had been an extension of the electrical goods industry created under the import-substitution policy pursued until the end of the 1950s (table V.7). During the 1950s and 1960s, the industry was producing, mainly for the domestic market, standard electrical household goods (such as electric fans, fluorescent lights, electric bulbs and electric cookers) and some simple industrial electric goods (such as copper wire, electric meters and motors, batteries, telephones and condensers). Then, in the late 1960s, the electronics industry began to be built, based largely on technology imports and the inflow of FDI (especially from the United States, Japan and overseas Chinese) which were in part attracted by the country's export-processing zones. As one study noted: "Most of the items which commenced production in the 1960s were produced by 100 percent foreign equity companies or joint venture companies established along with the increase in the inflow of foreign capital" (Kajiwara, 1993).

Despite this initial dependence on TNCs, however, these firms never dominated the Taiwanese electric and electronics industry. On the contrary, encouraged by government policies, local suppliers of parts and components to foreign affiliates, as well as local firms, sprang up: "During the period from 1961 to 1970, 356 local companies were established in the electrical and electronics industry (2.6 times the number of foreign companies)... . In other words, the policies which promoted the FDI and technology imports contributed, along with

the enactment of the Investment Promotion Law, to the fostering of Taiwanese companies. This process continued and, eventually, the share of foreign affiliates of the electric and electronic machinery industry declined from 60 per cent in 1976 to 37 per cent in 1986, in spite of the fact that, in absolute terms, employment increased. Similarly, in exports, the share of foreign affiliates fell from 83 to 44 per cent (Schive and Tu, 1991, pp. 152-155).

enabling government policy and capable local entrepreneurs, TNCs in the industry, upgrading its product composition to increase sharply television sets, tape recorders and calculators throughout the 1970s. product-mix upgrading and structural transformation of the electronics

(Kajiwara, 1993, p. 170). in the total employment of the electronics industry fell from 60 per cent in 1976 to 37 per cent in 1986. The share of foreign affiliates increased from 83 per cent in 1976 to 44 per cent (Schive and Tu, 1991, pp. 152-155).

In the context of an export-led growth strategy, the government assisted the expansion of the electronics industry. During the 1980s, this pro-

Republic of Korea, technology gap in the DRAM chip production

	256K DRAM	1M DRAM	4M DRAM	16M DRAM	64M DRAM
1979	1982	1985	late 1987	early 1990	late 1992
1983	1984	1986	early 1988	middle 1990	late 1992
Years	2 years	1 year	6 months	3 months	none

Source: Ministry of Trade, Industry and Energy, as presented in Hong (1995), p. 47.

Table V.6. The Republic of Korea, technology gap in the DRAM chip production

	64M DRAM
Developed country	1990
Republic of Korea	1992
Gap	4 years

Source: Ministry of Trade, Industry and Energy, as presented in Hong (1995), p. 47.

industry continued (table V.7). The production of personal computers, printers, video recorders, microwave ovens, integrated circuits, monitors, and servo-motors began to grow rapidly, replacing the older generations of electric and electronics goods.

The expansion of electronics exports from Taiwan Province of China has led to trade frictions with developed countries and prompted Taiwanese electronics producers to invest overseas to circumvent protectionism, as well as to seek new technological linkages with TNCs in these countries. Simultaneously, Taiwanese firms began to produce low-end electric and electronic consumer goods (such as electric fans, cookers, refrigerators, colour television sets and microwave ovens) in low-wage yet rapidly growing markets, notably in the southern provinces of China. Taiwan Province of China soon became the second largest home country for FDI in China, next to Hong Kong, mostly in light industry manufacturing, including standard electric and electronics goods (JETRO, 1994).

* * *

Table V.7. Production ranking and new products in the electric and electronics industry of Taiwan Province of China, 1961-1988

1961	1970	1980	1988
1. Electric fans	1963-Black and white television sets	Sound recorders	1984-Microcomputers
2. Copper wire	Refrigerators	Colour television sets	1980-Monitors
3. Electric meters	Cables	Integrated circuits	Integrated circuits
4. Fluorescent lights	Transistor radios	Black and white television sets	Colour television sets
5. Motors	Motors	Transistor radios	Air conditioners
6. Electric bulbs	1965-Miniature bulbs	Refrigerators	Sound recorders
7. Enamelled wire	Copper wire	Air conditioners	Picture tubes
8. Dry battery boards	1962-Air conditioners	Telephone exchangers	Printed circuits
9. Telephones	Transformers	1972-Electronic calculators	Power wire and cables
10. Battery pieces	1966-Integrated circuits	Motors	1980-Computer terminals
11. Telephone exchangers	1963-Washing machines	Telephones	Electric condensers
12. Cables	Electric condensers	Washing machines	Electric fans
13. Electric cookers	Fluorescent lights	Electric fans	Copper wire
14. Storage batteries	Electric fans	Transformers	1982-Video
15. Electric condensers	1966-Sound recorders	Interphones	Miniature motors
Major new items which went into production not listed above:			
	1962-Irons, toasters	1971-Ventilators	1980-Computer systems
	1963-Fruit juice mixers	memorial boards	1981-Printers
	1964-Radiators	1975-Electric watches	1982-Magnetic disc devices
	1965-Interphone coils		water fountain machines
	1966-Dryer, massagers, transistors		1983-Keyboards
	1969-Colour television sets		1984-Servo-motors
			stepping motors
			1986-Microwave ovens

Source: Kajiwara, 1993, p. 169.

Note: Years represent the beginning of production.

In sum, both the Republic of Korea and Taiwan Province of China are telling examples of the remarkable birth and growth of a modern electronics industry, drawing on contributions of foreign TNCs as providers of capital, technology, management and access to markets. Official support to the industry -- based on clear government policies in terms of selective intervention (UNCTAD, 1994a, pp. 47-76) and targeting key TNC assets -- also played a role in both economies. At the same time, it needs to be emphasized that the establishment of the industry in both economies owed much to the entrepreneurship, knowledge and skills of their peoples, including expatriates returning from developed countries (especially the United States), where they were educated and trained while working in the world's leading TNCs (World Bank, 1993b, p. 320).

3. The role of transnational corporations in restructuring in Asia

The preceding analysis has dealt with the role of TNCs in the restructuring of certain industries in some East Asian economies. The emphasis was on the direct contribution of TNCs through the provision of tangible and intangible assets. It did not deal with indirect effects through competitive pressures. Nor did it deal with the services sector. Moreover, the analysis focused on positive contributions only, not possible negative ones, such as the displacement of local entrepreneurs, market domination and socio-cultural impacts. Nevertheless, a number of useful conclusions emerge regarding the role of TNCs in restructuring:

- Transnational corporations can facilitate the restructuring of a *home country's* economy by relocating abroad those industries and activities that lose comparative advantage, thus freeing assets needed by industries having or acquiring comparative advantage. They can also upgrade the latter industries by acquiring assets abroad that are lacking at home or lowering the cost of this upgrading by sharing it with foreign TNCs.
- Transnational corporations can assist in building, upgrading and/or turning around an industry in a *host country* by bringing assets that are lacking. In particular, TNCs can help turn inward-looking industries into export-oriented, internationally competitive ones, thus helping countries realize or enhance their comparative advantages.
- By shifting assets between home and host countries and by using their assets in multiple foreign locations, TNCs can link the processes of industrial restructuring in different countries. In the process, they are capable of enhancing the economic performance of the countries involved and smooth the adjustment process.
- The potential role of TNCs is greater in knowledge-intensive industries, such as electronics, and smaller in industries with standardized production technologies, such as the textile and apparel industry (see also Naya and Ramstetter, 1991; and Markusen, 1991). This distinction of industries also explains, broadly speaking, differences between the forms of TNC involvement in various industries and activities. In the former industries, forms allowing stricter control -- i.e., control through equity -- prevail, while in the latter control is often exercised through non-equity forms.

- Even economies like Japan, the Republic of Korea and Taiwan Province of China, known for their ability to acquire and absorb imported technology and to develop local innovative capabilities (UNCTAD-DTCI, 1994a, p. 76), at certain stages of building up their textile and apparel industry have relied on tangible and intangible assets provided by TNCs, which remained, however, under the control of TNCs. This reliance generally is higher in economies that have more limited capabilities; the reason is that an abundance of low-wage labour is a necessary but not sufficient condition to becoming a successful exporter of labour-intensive goods. Thus, such countries need to be capable of attracting foreign firms as providers of missing inputs, especially at an early stage of industrialization.¹⁴
- The experience of Asian economies shows that a developing country that successfully restructures will give rise to its own TNCs (and outward transfers of technology), which often initially undertake FDI in the developing countries of its region (see chapter I). This indicates a successful process in which countries skilfully take advantage of both inward and outward FDI to restructure.
- By increasing the number of home countries, FDI becomes progressively more important in the restructuring process of host countries. In addition, successful restructuring (including that of countries relying largely on their indigenous capabilities) also typically leads to a greater role of inward FDI because it involves a movement towards more knowledge-based industries usually dominated by TNCs (UNCTAD-DTCI, 1994a, p. 76). Furthermore, as more and more countries liberalize their FDI policies, this can become a self-reinforcing process, giving an increasing role to TNCs in industrial restructuring (table V.1).

There is one additional important aspect of TNC-assisted restructuring in Asia: as signalled earlier, this process has been interactive as far as inward and outward FDI is concerned, and has been mutually reinforcing among economies of the region, involving in fact a growing number of participating economies. As such, it has fed into, as well as benefited from, the broader economic development of these countries. Among the many explanations of the above-average economic growth in Asia, those that underline TNC activities as an important contributing factor deserve therefore special attention. An important part of the argument is that FDI has been pro-trade in its nature and has increased benefits (including income) above what they would have been under conditions of trade based merely on comparative advantage without FDI. As one study put it, “countries gain *even more* from an expanded trade when superior entrepreneurial endowments are transferred from the home countries’ comparatively disadvantaged industries ... to improve the efficiency of comparatively advantaged industries in the host countries” (Kojima and Ozawa, 1985, p. 136).

In fact, the interactive nature of this process and the impetus it gives to economic development has led some observers to conclude that the result is “tandem economic development” through interactive industrial restructuring. The dynamic growth of the region is thus depicted as a concatenated forward march that appears well coordinated and functionally arranged as seen in a formation of flying wild geese (box V.4), with Japan in the lead; the newly

industrializing economies of Hong Kong, the Republic of Korea, Singapore and Taiwan Province of China in the second rank; four countries of ASEAN -- Indonesia, Malaysia, the Philippines and Thailand -- in the third rank; and China, Viet Nam and, most recently, India and Pakistan as possible members of a fourth rank. According to this paradigm, a group of economies advances together because of mutual interactions between countries through demonstration effects, learning and emulation, with the transmission mechanism being flows of people, trade in goods and services, flows of FDI, technology and other TNC-related assets. A characteristic feature of the "flying-geese" pattern in Asia has been the increasing role of TNCs, initially through non-equity arrangements and joint ventures and, more recently, through FDI.

The relative importance of the various factors that made the "Asian miracle" possible are debatable (World Bank, 1993b). There is no doubt, however, that, apart from government and local private business, TNCs have been a factor among the forces that spurred restructuring and economic development. This is not to say, however, that restructuring can *only* occur with the assistance of TNCs -- but in the industries and economies examined here, it did.

Box V.4. The "flying-geese" paradigm

The "flying-geese" paradigm was originally conceptualized as a general theory of economic development by Kaname Akamatsu in the early 1930s.⁸ Akamatsu's original work explained the development of an industry, from the introduction of its products to an economy through imports through the establishment of local production facilities to the emergence and growth of exports. It was based on the experience of Japan (then a developing country) with its textile industry in the nineteenth and twentieth centuries. When a sequential appearance of imports, domestic production and exports is presented in a graphic form, it produces a pattern analogous to a flying formation of wild geese (figure 1). Akamatsu found these patterns in consumer goods industries (represented by cotton yarn and cotton fabrics) and, with a time-lag, producer goods industry (represented by cotton textile machinery), thus showing also the restructuring -- and changing competitiveness -- of the manufacturing sector (Akamatsu, 1935). The full cycle of the development of some of the industries he examined lasted longer than half a century.

In contrast to the well known product-cycle theory (Vernon, 1966 and 1979), which shows the strategic behaviour of an individual innovating firm in a developed (leader) country and the life-cycle of a product (and industry) introduced in an advanced economy through innovation, Akamatsu's model, is essentially a "catching-up cycle" model constructed from a latecomer's point of view (Kojima, 1978). It therefore better describes the situation of a developing country, where the cycle begins when the product is introduced through imports; the economic growth of the developing countries is explained through the mutual interaction between developing and developed countries based on leadership and emulation. The paradigm presupposes dynamic changes in economic relations among advanced (leading) and developing (catching-up) countries. In the analogy, the "lead goose" eventually tires out and falls back; its position is taken over by a more vigorous one which has moved up from behind in the flock.

Akamatsu centred his analysis on the structural catching-up mechanism of follower countries rather than the decline of a lead country. The basic idea of his version of the paradigm is that a

/...

(Box V.4, cont'd)

The flying-geese paradigm: an illustration

Figure 1. Akamatsu's "fundamental" model of industrial growth

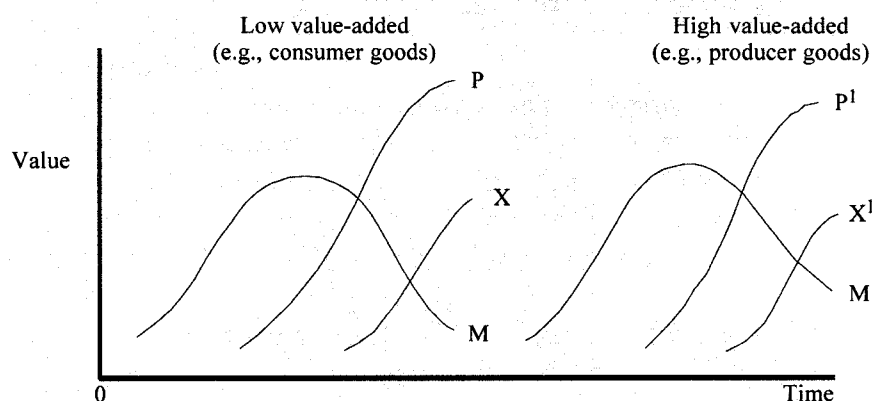
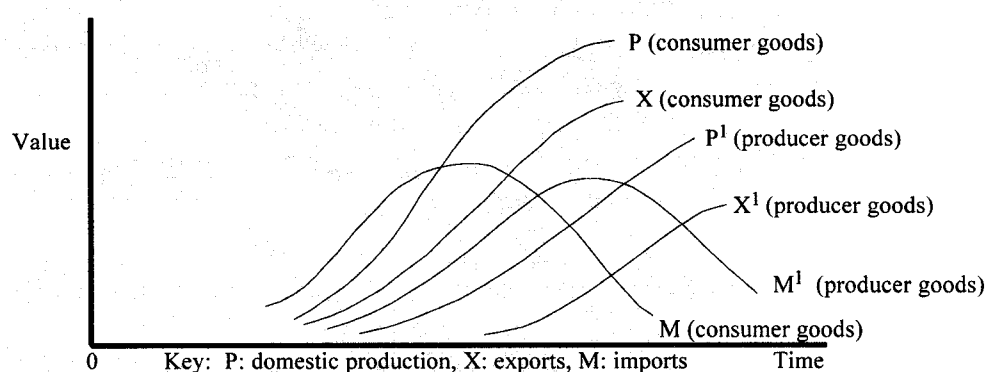


Figure 2. TNC-cum-home-government catapulted growth of a new industry (time-compressed growth)



Source: Ozawa, 1995a.

developing country, in an open-economy context, industrializes and goes through industrial upgrading, step by step, by capitalizing on the learning opportunities made available through its external relations with the more advanced world. A vision of the dynamic infant-industry approach based on the paradigm inspired Japan's strategic trade policy in the post-World War II period (Korhonen, 1994).

Although the role of foreign capital was tangentially mentioned in the original work and the studies that followed (e.g., Rapp, 1967, Shinohara, 1982, Chen and Wong, 1989 and Yamazawa 1990), no systematic analysis of the role of TNCs was initially made. The FDI dimension was brought into the paradigm by Kiyoshi Kojima (1958, 1973, 1975, 1990) who studied the interactive path of FDI-enhanced trade and economic growth involving both an advanced home country and the developing host countries. He made a distinction between pro-trade FDI and anti-trade FDI; pro-trade FDI moves from a home country's comparatively disadvantaged industry to

/...

4. Lessons of Asia: the defining characteristics of interactive restructuring assisted by transnational corporations

The case studies of Asian experiences and the conclusions they allow regarding the role of TNCs in restructuring suggest that a number of characteristics are central to interactive TNC-assisted restructuring:

- *Different levels of development.* The countries involved need to be at different levels of development and need to have corresponding structural characteristics and cost differentials. The more differentiated the structural characteristics, the larger the room for TNCs to take advantage of these differences by matching their own tangible and intangible assets with various levels of local capabilities and costs.
- *Ability to restructure.* Countries need to be able to restructure continuously. This requires especially that countries at a high level of development adjust by, *inter alia*, shifting responses to other industries in the home country or relocating them abroad. Firms in countries at a middle level of development have to be able to develop firm-specific advantages to absorb FDI and technology and, eventually, upgrade their activities, one day becoming TNCs themselves. The ability to restructure in a manner in which inward and outward FDI interact presumes also a desire, on the part of lower-income countries, to develop in an emulative manner, that is, to follow the example of higher-income countries and learn from their experience. This ability, under certain conditions, can be helped by selective industrial policies, though it is not clear whether these are a necessary condition of restructuring.

(Box V.4, cont'd)

a host country's comparatively advantaged industry, reinforcing the basis for, and benefits from, trade; anti-trade FDI flows from a home country's comparatively advantaged industry to a host country's comparatively disadvantaged industry (Kojima, 1973).

The introduction of a TNC dimension changes the shape of the flying-geese curves (figure 1). The conventional wisdom with respect to FDI, based on Raymond Vernon's product-cycle theory, holds that firms will start serving a foreign market with exports. Once a sufficient volume of sales through exports is reached, they will move to foreign production. Today, however, TNCs can -- and do -- set up foreign production at the very beginning of the product cycle without first exploring a host country market via exports. In such a case, foreign production makes import unnecessary for the host country. If a developing host country imposes both export and local content requirements, and if it is successful, both a production curve and an export curve for producer goods will occur almost simultaneously in the early stages of industrial growth without much time-lag after the appearance of a production curve for consumer goods. In this manner, TNCs help to compress the time needed to build up competitive consumer goods industries and move from it to higher-grade capital goods industries (figure 2). They become "inter-stage arbitrageurs of economic development" (Kojima and Ozawa, 1985; Ozawa 1990, 1992, and 1993).

^a See Akamatsu, 1935, 1937, in Japanese; and Akamatsu, 1961, 1962, in English.

- *Demand and markets.* There has to be demand for the goods and services produced by both the new and the old restructured industries. Such demand can be international, as in the case of Japan and some of the newly industrializing economies of East Asia, (where demand initially came largely from the United States). Demand can also be domestic, generated by successful development. The dynamic of development itself facilitates the restructuring process as it makes it easier to absorb the consequences of the decline of obsolete industries and is a powerful incentive attracting TNCs.
- *Market verification of restructuring.* Even in countries that select industries for restructuring in the framework of industrial policies, market verification needs to take place through internationally competitive exports. Even in the case of Asia, there have been, by and large, few attempts to replace the market through government policies; rather, governments aimed at helping the private sector to avoid market failures, to enhance existing or potential comparative advantage and to obtain key TNC assets on appropriate terms (UNCTAD, 1994a).
- *Enabling framework for the transmission of TNC assets.* Increasingly liberal policies regarding international economic transactions are needed to allow a better enabling framework for TNCs to deploy their assets internationally in a manner consistent with their own competitive needs and countries' comparative advantages.
- *A favourable investment climate.* For assets to be actually deployed internationally by TNCs, more is needed than merely the liberalization of international economic transactions, including FDI policies. A favourable investment climate has to be in place. This includes political and macroeconomic economic stability, appropriate commercial and corporate laws, good social and industrial infrastructure (e.g., a high literacy rate and reliable telecommunications, transportation and other public utilities, especially electric power) and an efficient administration.

As regards other government policies, there is a debate over the best approach to TNC-assisted restructuring. By and large, the approach in East and South-East Asia has been interventionist. Most of the Asian economies were engaged, at one time or another, in selective infant-industry protection policies, as part of broader industrial policies. While these more interventionist policies have helped restructuring in Asia, the room for such policies is today greatly limited by governments' own choices in favour of market-based policies bound in liberal multilateral and regional frameworks. These limit host country policy making in areas such as import protection, the use of subsidies, dumping, market access for services and use of performance requirements. At the same time, liberalization creates improved conditions for the

those policies that help to upgrade a country's resources (particularly human capital and technological resources).

Conclusions

To sum up, TNCs can, when seeking to improve their competitiveness, contribute to the restructuring of economies at different stages of development, including both home and host countries. But TNCs are, of course, only one part of the story -- a number of other factors need to be present as well for restructuring to occur. Where TNCs contribute, this occurs simultaneously at the firm, industry and sectoral levels. As a number of examples not only from Asia but also from Latin America and from developed countries show, TNCs can turn inward-oriented or inefficient firms or industries into export-oriented, internationally competitive ones.

As the experience of Asia shows, furthermore, TNC-assisted restructuring can occur simultaneously in a group of countries at different levels of development in an interactive, mutually supportive manner, with TNCs allocating an important part of the assets required for this process among countries, in a manner that can be further reinforced as corporate production systems become regionally or internationally integrated. This process -- together, of course, with other national and international factors -- can contribute to the initiation of a virtuous cycle of TNC-assisted restructuring. The Asian experience also shows that, as countries develop, their firms acquire competitive strength and become TNCs as well. Restructuring is then reinforced by an interaction between inward and outward FDI, i.e., by foreign and "domestic" TNCs. This process is still under way in Asia, with virtually all countries now far advanced in liberalizing their inward FDI policies and an increasing number liberalizing at least partly their outward FDI policies (chapter VII).

The question arises as to whether the Asian experience with TNC-assisted restructuring can be repeated elsewhere. Of course, it is neither possible (based on the Asian experience) to provide a single recipe for the development of countries (UNCTAD, 1994a, pp. 74-75), nor is it possible to give a precise prescription under which TNCs will assist restructuring as they did in Asia. One reason is that restructuring is a dynamic process in which its basic components, especially government policies, interact in a complex manner and undergo a continuous change under the influence of the process itself and other factors exogenous to the process; for example, the policies of the Republic of Korea are today different from those that characterized the early stage of that country's development. Another reason is that, as seen in Asia, different countries adopt different strategies regarding the degree of government intervention in their economies, ranging from laissez-faire policies to industrial policies based on selective interventions; such differences also characterize FDI policies and, as a result, the role of TNCs (UNCTAD-DTCI, 1994a), especially during the early stages of industrialization. As the Asian experience suggests, however, similar results can be obtained with different policies once certain basic conditions are met. At the same time, if interactive TNC-assisted restructuring is to take place in other regions, it will most likely have to do so under market-driven conditions

rather than within the framework of a guided approach. This is because, as mentioned, countries in all regions now accord a greater role to markets (including through the liberalization of trade and FDI) and private enterprises (including TNCs), and a lesser role to governments, in advancing their development.

A number of the general conditions identified from the Asian experience, indeed, exist or are being established in other regions as well, especially in Europe (between Western Europe and Eastern Europe) and the Western hemisphere (between North America and Latin America and the Caribbean):

- Both regions include countries at different levels of development and corresponding factor-price differentials and structural differences. Both have large groups of middle-income countries that need to restructure. For the countries of Latin America and the Caribbean that already have a large stock of FDI in manufacturing, part of the challenge is how to make this stock more dynamic, i.e., how to make their foreign affiliates internationally competitive. The countries of Central and Eastern Europe "are all confronted with essentially the same task of a massive reconstruction of their productive capacities, a task which includes a substantial reallocation of resources and probably the closing down of many inefficient enterprises" (ECE, 1995, p.14). The challenge for these countries is how to attract FDI that contributes to restructuring. Since the high-income countries in both regions -- Western European countries and the United States and Canada, respectively -- are homes to a large number of mature TNCs, they could, in principle, provide the required assets, including markets.
- But for the process to work, these high-income countries need to permit their own restructuring to go forward. While this is generally the case, some of them have slowed down the restructuring process of certain industries, including those in which middle-income countries of the regions have or could have a comparative advantage. To some extent, this is due to their difficulties in maintaining domestic demand at a sufficiently high level to ease adjustment problems related to such restructuring. Therefore, whether the potential for TNC-assisted restructuring in the manufacturing sector can be realized depends also to a large extent on the trade policy of high-income countries, especially in Western Europe. The restructuring of the services sector does not pose similar problems because most services are not tradable.
- What is helpful, of course, is that the enabling framework for the transmission of TNC assets and a favourable investment climate are being created in both regions. Unilateral liberalization, as well as the liberalization of trade and investment regimes embodied in a number of regional and multilateral agreements, are particularly important here. Since virtually all countries expect FDI to play an important role in their economic growth, considerable attention has been paid to these matters, and considerable progress has been made (UNCTAD-DTCI, 1994a). Apart from liberalizing policies, most countries in Latin America and the Caribbean, and some countries in Central and Eastern Europe, have also established a reasonable degree of macroeconomic stability, although much

more still needs to be done to make this stability and economic growth sustainable (UNCTAD, 1995a, pp. 73-96) -- an important factor in a good investment climate.

- This opening in both regions exposes the restructuring process to market verification in line with the countries' comparative advantage. Furthermore, to the extent that regional liberalization agreements lead to the creation of larger markets, this facilitates TNC-assisted interactive restructuring. In fact, the liberalization of imports and inward FDI challenges TNCs servicing increasingly contested national markets via stand-alone foreign affiliates to increase their competitiveness by restructuring their activities; initially focusing on a reduction of labour and other costs, and then undertaking new investments and redefining the role of affiliates within regional and global corporate production networks.

While the existing or emerging conditions discussed so far are similar to those in Asia, one basic difference is the lack of, or decline in the use of, effective industrial policies. The dominating driving mechanism for industrial restructuring is now the market. If the liberalization of international transactions, combined with differences in relative factor costs among countries, is allowed to work out its logic, TNCs would presumably deploy their proprietary assets in a manner that contributes to TNC-assisted restructuring in Europe and the Western hemisphere as well.

In fact, the beginnings of such a process may already be taking place on a limited scale in both regions. Reference has already been made to the automobile industry in Mexico (see box V.1). The same can be said for the automobile industries in several Central European countries which are being restructured by TNCs. Noteworthy are also the *maquiladora* operations in Mexico, as well as outsourcing and assembly-type activities involving mostly textile and apparel and electronics industries in the export-processing zones in Central America and the Caribbean (Mortimore et al., 1995; and Mortimore and Zamora, forthcoming). Moreover, firms in a number of middle-income countries are in the process of developing firm-specific advantages allowing them to undertake outward FDI in other countries of the region or elsewhere. Mexican and Chilean firms, for example, are increasingly venturing out, as are Polish and Hungarian firms. In 1994, for instance, there were 4,000 firms with Polish capital participation established in the Commonwealth of Independent States, while 304 Hungarian firms invested there a total of \$35 million during 1991-1993.¹⁵ While such outward FDI is still quite small, it may yet herald the beginning of interactive TNC-assisted restructuring.

Notes

- ¹ See, e.g., Brash (1966) on Australia; Safarian (1985) on Canada; Deane (1970) on New Zealand; and Stubenitsky (1970) on the Netherlands; see also Newfarmer, 1994, and for a more recent review, Dunning, 1993, ch. XIII.
- ² The text below deals with the impact that the tangible and intangible assets brought by TNCs to a country have on its restructuring process. It does not examine the implications of different forms of control by TNCs over these assets for the *nature* of the restructuring process. In order to pursue

the latter question, one would perhaps distinguish between “TNC-centred” and “TNC-associated” restructuring (Mortimore, 1994). The former involves a high degree of dependence on TNCs, usually in the form of FDI in majority-owned foreign affiliates, and includes the complete array of assets provided by TNCs. The latter involves a more nationally-based industrialization process in which the assets are unbundled, with the transfer of foreign technology to national firms being particularly important, usually in the form of licences, subcontracting, original equipment manufacture or joint ventures. The latter is generally more learning-intensive than the former. It should be noted, however, that the latter process may become less and less available as TNC proprietary assets, and especially technology, become more important.

- ³ As TNCs, together with large state-owned local companies, are major actors in these countries’ manufacturing, the Latin American case is sometimes considered as an example of a negative impact of TNCs on industrial restructuring (Mortimore, 1993, p. 15). While there is agreement that this impact can not be considered positive, there is no agreement on its underlying reasons. One view is that the nature of TNCs matters for the kind of impact TNCs have on local industry. Specifically, the less dynamic (than Japanese) United States FDI and technology is seen not only to have had a negative impact but, in addition, “has tended to reinforce the bias towards inward-looking industrialization by import substitution” (ibid., p. 15). Another view holds that there is nothing in the nature of TNCs that would destine them to make any particular type of contribution to industrial restructuring: “... economically powerful TNCs, under the right conditions, can be induced to contribute to either ISI [import-substituting industrialization] or EOI [export-oriented industrialization] development objectives” (Gereffi, 1990, p. 26).

- ⁴ The approved ventures were: the Nissan Austin (United Kingdom) tie-up in 1952; the Japan

Mitsubishi Rayon (13.6 per cent) and Mitsubishi Corporation (12.5 per cent) set up a joint venture with local interests (73.9 per cent) to produce acrylic staple. (Toyo Keizai, 1995). Because of their geographical constraints, Hong Kong and Singapore did not develop any extensive import substitution of upstream synthetic textiles, as did the Republic of Korea and Taiwan Province of China.

- ¹⁰ One such company is California Mart which has a special programme for foreign firms to help them access the United States market and deal with United States customs regulations; see Bonacich and Waller, 1994b, p. 85.
- ¹¹ The Government of the Republic of Korea specifically provides a number of incentives for the growth of the electronics industry. They include an exemption of income and corporate taxes for a certain period after the start of production, the deduction of research-and-development expenditures from taxes, the requirement that commercial banks give a certain percentage of their loans for investment in research and development, the establishment of the Electronic Industry Promotion Fund to provide low-cost funds, and the organization of joint research-and-development projects for VCR components, semiconductors, related parts, computers and other strategic products (Kohama and Urata, 1993, p. 157).
- ¹² The figures relate to "electric machinery" industry comprising both electric and electronics industries; see Lee and Ramstetter, 1991, p. 121.
- ¹³ For example, "While Samsung has 20 per cent of the microwave market in the United States, less than a third were sold under its own brand in 1988. The remainder are sold on an original equipment manufacturing basis mostly to General Electric, as well as to J.C. Penney, Sears and Amana, and it will be difficult to change this rapidly. Samsung's goal is to reduce OEM for the US market to 55 per cent of sales, while that for Goldstar is 50 per cent. This contrasts with the almost 60 per cent of Goldstar's direct export sales and 50 per cent of its sales by overseas subsidiaries that were sold on an OEM basis in 1986. It is almost certain that OEM will remain an important feature for Korean sales" (Bloom, 1992, p. 100).
- ¹⁴ As noted in one study, "even in apparel ... labour intensity is not the sole explanation of rising exports from developing countries. If it were, the dominant suppliers would be low-income countries such as India. ... The development of high quality control and arrangements with multinational corporations appear to explain the dominance of the East Asian exporters despite the availability of much lower labour cost in other developing countries" (Cline, 1987, pp. 56 - 57).
- ¹⁵ Information provided by the Hungarian Ministry of Industry and Trade, Investment and Trade Development Department.

PART THREE

POLICY IMPLICATIONS

INTRODUCTION

Appropriate policies can enhance the contributions that transnational corporations can make to the economic performance of countries. This Part examines what governments can do in this respect within an overall liberal framework, from two perspectives:

- *The host country perspective.* Beyond providing an enabling framework and the general policy conditions that influence investors' locational choices, governments may need to make additional and more concrete efforts to attract the type of foreign direct investment that is particularly conducive to enhancing competitiveness and improving their countries' economic performance, as identified in Part Two. In this respect, chapter VI looks first at specific policy measures whose purpose is to facilitate access to key resources and markets associated with inward foreign direct investment and then focuses on the role of incentives in attracting it.
- *The home country perspective.* In a liberalizing and globalizing world economy, governments may also need to consider that their firms' competitiveness may depend on allowing them to exploit opportunities worldwide through outward investment. Chapter VII looks at what governments have done in this respect and, in particular, examines policy options for countries with foreign exchange constraints.

These two policy perspectives can interact, of course. An increasing number of countries that are both host and home countries to foreign direct investment seek ways to reap the benefits of a positive interaction of their inward and outward foreign-direct-investment policies, with a view towards exploiting fully the potential of such investment to enhance their economic performance and global welfare.

CHAPTER VI

POLICIES ON INWARD FOREIGN DIRECT INVESTMENT

Introduction

Many countries turn to foreign direct investment (FDI) simply because local savings are inadequate to support increased investment. Governments also expect FDI to provide skills, technology, organizational and managerial practices and access to markets -- in short, they are interested in the package of tangible and intangible assets embodied in FDI. The less developed a country is, the more severe are the domestic resource and capability constraints, and usually the greater are the expectations from FDI to alleviate them. But foreign investors are not attracted to locations with few advantages: they prefer to invest in expanding economies with built-up infrastructure and a thriving local business sector. Inevitably, the investor response falls short of expectations, even when governments appear to adopt all the right policies. Can governments do more? Yes, and perhaps also less (e.g., when excessive financial or fiscal incentives are offered). But before considering what additional efforts governments might make, it is worth underlining that FDI is not a panacea to break out from the vicious circle of underdevelopment. Only when development is positively underway do investment opportunities really emerge; FDI can then be a catalyst to support the development process.

A. Fine-tuning policies

The mid-1990s are characterized by a general movement towards the liberalization and facilitation of FDI (box VI.1). Today, inward FDI policy regimes of quite diverse countries around the world are broadly liberal in character (UNCTAD-DTCI, 1994a, chapter VII). With policy regimes becoming increasingly open and similar, governments are making extra efforts to attract competitiveness-enhancing FDI (see Part Two) and to strengthen linkages between foreign affiliates and domestic enterprises, with a view towards enhancing their countries' economic performance. They are fine-tuning their policies to attract capital, technology and skills, and to facilitate access to markets with the help of FDI.

Box VI.1. Further steps towards the liberalization of national FDI regimes

The trend towards the liberalization of national laws and policies regarding FDI (which began in the early 1980s) has continued and deepened during the early and mid-1990s. Of 102 new legislative measures adopted in 57 countries during 1993, 101 were in the direction of either liberalization or the promotion of FDI; during 1994, 108 out of 110 new norms adopted in 49 countries moved in the same direction (see accompanying table; for a description of these changes, by country, see UNCTAD-DTCI, forthcoming). These legislative measures included a number of new or expanded incentives programmes. The following were among the most significant changes in FDI regimes during 1993-1994 (see accompanying figure):

- **In Africa**, Angola, Ghana, Eritrea and Mozambique each adopted a major FDI law setting out a new, more liberal general legal framework for FDI, as part of broader liberalization reforms taking place in these countries. Algeria eliminated FDI restrictions while strengthening legal protection and guarantees. Foreign exchange controls were lifted in Zambia and Zimbabwe to allow foreign investors repatriate freely profits and capital. Authorization procedures were relaxed in Algeria, Ethiopia and Tunisia, with some of these countries setting up, instead, investment-promotion agencies to facilitate FDI undertakings. Incentives programmes were also adopted in Algeria, Cameroon, Eritrea, Ethiopia, Ghana, Mozambique and Tunisia, mainly to attract FDI to certain industries and regions.

Liberalization measures, 1991-1994

(Number)

Item	1991	1992	1993	1994
Number of countries that introduced changes in their investment regimes	35	43	57	49
Number of changes	82	79	102	110
Of which:				
In the direction of liberalization or promotion	80	79	101	108
In the direction of control	2	-	1	2

Source: UNCTAD, Division on Transnational Corporations and Investment, based on various sources.

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(Box VI.1, cont'd)



- In Asia**, countries also adopted major general FDI laws (notably Cambodia and Mongolia) and regulations (Viet Nam) to give effect to their new liberalizing policies. Limited FDI access was also allowed in the Democratic People's Republic of Korea through the creation and regulation of free economic and trade zones. Additional new industries and activities were opened to FDI in India (mining, oil fields, merchant shipping, certain infrastructure projects, telephone services), China (aspects of aviation, mining and oil), Republic of Korea (removed prior authorization requirements in manufacturing and services industries), Indonesia (which reduced the list of activities in which FDI is restricted or prohibited), the Philippines (infrastructure projects and liberalized ownership restrictions to FDI participation in domestic banks), and Taiwan Province of China (major infrastructure projects and raising of the threshold for FDI in securities, banking and insurance). A number of steps were also taken to remove some of the remaining general restrictions in several countries: Indonesia removed minimum FDI threshold requirements and partially reduced its previous fade-out requirements; Bangladesh liberalized some of its exchange-control restrictions; India removed previous restrictions on FDI with over 40 per cent holdings to borrow from local sources, to repatriate profits and to expand into other business activities; the Republic of Korea further simplified its notification procedures and made them more transparent; Taiwan Province of China abolished all prohibitions on FDI, except those intended for public safety and security reasons; and Viet Nam increased the range of projects falling under the competence of the Prime Minister (infrastructure, publishing and cultural sectors, national security), thus making approval requirements more flexible. New incentives programmes were offered for certain activities and on a non-discriminatory basis in Cambodia, Indonesia, Malaysia (research and development, high technology, training), Pakistan, Sri Lanka, Thailand and Viet Nam (on a case-by-case basis).
- In Latin America and the Caribbean**, most of the remaining general restrictions on FDI virtually disappeared during this period in Argentina, including authorization requirements, restrictions on the repatriation of profits and dividends, as well as the payment of special taxes on repatriation, and restriction of access to domestic credit. *Ex post facto* registration was allowed in Colombia, while several industries remained closed to FDI or required previous authorization. Ecuador eliminated previous ownership restrictions. Mexico also allowed unlimited FDI, but fourteen activities were reserved to the State and six to Mexican nationals. Sectoral restrictions to FDI were lifted in Argentina (local branches of foreign banks), Ecuador (public services, banking, insurance and hydrocarbons), Peru (banking, financial, insurance and hydrocarbons), Uruguay (financial intermediation) and Venezuela (banking).

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(Box VI.1, cont'd)

Restrictions on participation in privatization programmes, public tenders for public works concessions or in state-owned companies were lifted in Bolivia, Brazil, Costa Rica and Venezuela. Additional exchange restrictions were reduced in Chile. Panama, Peru and Uruguay adopted new simplified regimes for export processing zones.

- **In West Asia**, free trade and industrial zones were created in Iran, allowing 100 per cent FDI and the repatriation of profits subject to authorization. Oman allowed majority foreign ownership in local companies (including 100 per cent under certain conditions), while the Republic of Yemen provided various lists of activities in which FDI might be restricted, allowed limited participation or encouraged. Egypt allowed free transfer of foreign currency in and out of the country. Lebanon lifted some sectoral restrictions (branches of foreign banks). Israel organized the development of free zones with incentives for local and foreign companies investing there.
- **In Central and Eastern Europe**, major new general investment laws and implementing regulations were adopted in Albania, Macedonia and Turkmenistan, respectively, setting out the basic conditions for FDI activity in these countries, while a number of second generation general FDI statutes further improved FDI conditions in Kazakhstan, Slovenia and Uzbekistan. A process of gradual liberalization of certain specific industries also began during this period in Azerbaijan (allowing limited FDI participation in insurance companies) and the Russian Federation (allowing limited number of foreign banks to operate with resident accounts). Privatization programmes were also introduced or modified during this period in Belarus, and Bulgaria and Ukraine allowed FDI participation. Exchange regulations were reduced in Romania. Property rights were expanded in Estonia (land use allowed to FDI) and the Russian Federation (limited acquisition of local companies, including state companies, and securities), but Hungary limited purchase of agricultural land by foreigners. New registration procedures and conditions were introduced in the Russian Federation while granting temporal immunity from legislative changes with worse conditions for FDI. Certain types of tax incentives were repealed or reduced in Bulgaria, Czech Republic, Estonia, Hungary, Poland and Ukraine while, on the other hand, the corporate tax laws were amended to lower the standard tax burden in Hungary, Poland and Romania (with higher taxes for FDI than for local companies). At the same time, new incentives measures were introduced or expanded in Hungary, Latvia, Moldova, Poland and Slovak Republic for enterprises meeting certain conditions which apply to both local and foreign enterprises. Poland also created special economic areas to give preferential treatment (including tax exemptions) to trade and manufacturing industries operating in these areas.
- **In the developed countries**, Canada raised the review threshold for direct acquisition of a Canadian business for all NAFTA and WTO investors, except for a number of industries in which the previous thresholds continued to apply. Greece substituted an *a posteriori* review of FDI projects for authorization requirements, Italy abolished prior approval of major industrial investments (including FDI), while Japan created the Foreign Investment in Japan Corporation and the Japan Investment Council to promote FDI in Japan. Further steps were taken to liberalize remaining sectoral restrictions to FDI in Australia (newspapers and non-
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Governments adopt various approaches in this regard. While, as shown in Part Two, the different components of the FDI package are competitiveness enhancing for firms, the extent to which this is beneficial to countries depends largely on the latter's particular circumstances and priorities. At the same time, the way in which any single component of the FDI package is targeted most effectively depends on the stage in the development process that a country has reached. This section cannot cover the whole gambit of policy options available for attracting competitiveness-enhancing FDI. Rather, a few policy instruments are selected to illustrate that policies can, indeed, be fine-tuned to focus on specific components of the FDI package, as particular country conditions and objectives warrant.

1. Attracting and retaining capital

When governments liberalize their economies, there is often less response from investors than would be expected by a hard-nosed business calculation of available profitable opportunities. This is because foreign investors cannot always easily spot opportunities on their own. However, when Myanmar and Viet Nam liberalized their investment regimes, this was not the case as indigenous investors residing in neighbouring countries were able to identify opportunities with ease. But when many of the economies of Africa opened up, there were no equivalent investor groups to seize immediately the available opportunities, and the investment potential remains partly under-tapped (UNCTAD-DTCI, 1995a). In such cases, a strong promotion programme may be crucial to attract foreign investors, especially in those countries that are small or that suffer from an unpopular image due to a history of, for example, famine or civil war; or because FDI has been discouraged so much in the past that the country is now largely unknown in the investment community -- or worse, still thought of as being unwelcoming.

(a) The importance of targeted promotion

Countries that are proactive in promoting investment are better able to target the kind of investment that is most appropriate to their longer-term development objectives as opposed to those countries that are inactive and may receive a large proportion of disparate, non-complementary and unnetworkable kinds of investment. Thus, where a government has, within

(Box VI.1, cont'd)

residential real estate), Portugal (banks and travel agencies within the European Union, water production and distribution, basic sanitation services), Turkey (insurance and reinsurance and branches of foreign banks) and the United States (acquisition of local banks). In France initial limitations on acquisitions by non-European Union investors in privatized companies were maintained, but unlimited subsequent non-European Union holdings were allowed after the first placement was completed. Residual restrictions in the exchange control system were lifted in Greece. Spain completed a new status for special zones to promote local and foreign investments, and increased some tax incentives for local and foreign companies. Turkey amended its incentives regime to give priority status to certain regions.

Source: UNCTAD, Division on Transnational Corporations and Investment, based on various sources.

a liberal framework, priorities and special goals in terms of attracting those components of the FDI package that most positively affect the country's performance, then a well targeted promotion programme can help to achieve those goals.

Investment-promotion activities fall within three main categories:

- improving a country's image within the investment community as a favourable location for investment (image-building activities);
- attracting investment directly (investment-generating activities); and
- providing services to prospective and current investors (investment-service activities).

Governments engage in all three categories of promotional activities to varying degrees, depending on the special circumstances and requirements of each country. However, in almost all cases, it is in relation to investment-generating activities that the role of targeting is most relevant in an investment promotion strategy. This is because investment-generating activities are the ones that most directly affect the decision-making process of foreign investors. An investor develops a favourable image of a country as a prospective investment site, is then directly persuaded to consider investing in that country, and is finally assisted by the government to bring the investment project into operation: investment-generating activities thus consist of those direct attempts to persuade the prospective investor (Wells and Wint, 1990).

For investment-generating activities, three of the most important determinants for designing an effective targeted promotion programme are the following:

- Investment promotion is most successful in situations where a firm is already considering making an investment in a particular region of the world to produce for regional or global export markets (Wint, 1992). It is much easier to influence such a firm to invest in a country that has a competitive investment climate and is located in that particular region. Since successful investment promotion is only likely to influence investment within these broad parameters, it should be targeted at those firms currently seeking to move abroad, and which are likely to find the country's investment climate attractive and competitive.
- Beyond determining which firms are likely to be influenced by a promotional programme, selecting target firms involves a number of choices: which industries are good candidates and, within those industries, which kinds of firms and activities correspond to country goals, and which countries are likely sources. Therefore, successfully targeted investment promotion requires extensive research to determine which firms are likely candidates not only to invest in the country but also what kind of investment they would bring. Malaysia's experience provides an example. During the early 1970s, the principal investment-generating technique used by Malaysia's Industrial Development Authority (MIDA) consisted of specific investment missions to capital-exporting countries,

particularly focussing on the electronics sector of the United States. Specific companies in the then fast-growing semiconductor industry were identified through extensive research and during investment promotion missions by MIDA; these companies were targeted for discussions between senior government officials and executives of the companies. By 1987, Malaysia was the world's largest exporter and third largest producer of semiconductors. MIDA officials take credit for significantly influencing the first semiconductor firms, such as National Semiconductor, that set up operations in Malaysia through their targeted promotion missions of the early 1970s.¹

- Targeted investment promotion relies heavily on personal selling and direct contact with the prospective investor. As a consequence, successful investment promoters need to have distinctive skills in marketing and in understanding the needs of diverse business operations. Many governments underestimate the importance of such skills for their investment-promotion agencies. This is in part a consequence of the history of many of these agencies as offshoots of government departments staffed by persons with an administrative rather than a specialist background and training. Some governments have, indeed, made recruitment a priority. During its formative years, Costa Rica's CINDE, for example, hired a major international firm to assist it in recruiting bilingual Costa Ricans with prior business experience. The academic qualifications required were quite high: most of the recruits had MBA degrees, often from United States business schools. Salaries offered ranged from \$20,000 to \$30,000 per year, compared with typical civil service salaries of \$3,000 per year (Wint, 1992).

While targeted promotion is perhaps most relevant to investment-generating activities, it can also be an important consideration for image-building activities, especially in developing countries. An image-building programme involves activities such as:

- advertising in general media;
- advertising in industry- or sector-specific media;
- conducting general information seminars on investment opportunities; and
- conducting general investment missions and participating in exhibitions.

Such activities, especially advertising in international media, can be very expensive. A programme that attempts to build an image indiscriminately across industries can be prohibitive. Thus, even during a stage when a government is still focused on image-building, a promotion programme may, of necessity, target a selected number of industries that have a high priority within the government's goals.

Governments often give inadequate attention to investment-service activities (Wells and Wint, 1990). Yet, investment-facilitation services -- including servicing current investors -- can be crucial. Investment-facilitation services consist of:

- providing counselling services;
- hosting prospective investors;
- accelerating the various stages of the approval process;

- assistance in obtaining all the needed permits; and
- helping existing investors.

The provision of servicing activities is based on the fact that bureaucratic barriers turn away would-be investors. Satisfied investors also attract other investors. An important part of effective after-investment services aims at reducing the “hassle costs of doing business” for established investors. In any economy there is, of course, a need to regulate private business in the public interest (concerning such matters as public health, safety, the environment, exclusive rights to natural resources, payment of taxes etc.). There should, however, be a clear philosophy as to the scope of public interest regulation. The less are, the hassle costs, the higher are the chances that established investors will reinvest.

(b) Encouraging sequential investment

Governments can also stimulate sequential investment (see chapter III) by encouraging established foreign affiliates to expand after the initial investment has been made. Foreign affiliates are not only natural candidates as sources of additional FDI, they also provide a positive demonstration effect for potential new investors.

Commitments relating to sequential investment are frequently tied to the grant of optional incentives. Although some countries may establish a relatively open regime for FDI generally, they may create a special regime of incentives. To qualify for these, investors could accept certain obligations, including commitments to sequential investment in the form of additional production capacity, modernization, upgrading or diversification into related products.

Namibia’s investment code illustrates this approach. Where an activity is open to Namibian private sector investment, it is also open to FDI. However, foreign investors may also apply for a special status which entitles them to special guarantees and incentives. Beneficiaries must meet two conditions to qualify for an approval certificate:

- Every investor is required to make specific proposals for training and localization. Once they have been agreed with the Government, they are incorporated into the certificate. Implementation is a condition of its continued validity.
- The investment proposals are also incorporated into the certificate. Accordingly, where an investor has undertaken to invest a specified sum, including through sequential investment, the continued validity of the certificate will depend on the investor honouring that commitment in accordance with an agreed timetable.

Malaysia’s policies are also instructive. To support reinvestment activities in Malaysia, the Government grants a reinvestment allowance of 50 per cent on capital expenditure incurred.² The allowance is tax exempt. Dividends paid out of the tax-exempt income are also exempted from tax. To further encourage reinvestments, a “second-round” of pioneer status/ investment tax allowance is granted to companies setting up separate expansion projects to

produce similar products or undertake similar activities. A company granted pioneer status is exempted from paying corporate tax on 70 per cent of statutory income for five years. (The Malaysian corporate tax is 30 per cent; the effect of this incentive is that companies will pay only a nine per cent corporate tax for five years.) The investment tax allowance is an alternative incentive to pioneer status. A company granted an investment tax allowance is given an allowance of 60 per cent in respect of qualifying capital expenditure incurred within five years from the effective date of the incentive. The allowance can be used to set off against 70 per cent of the statutory taxable income in the year of assessment. Expansion projects set up in the promoted areas of the Eastern Corridor of Peninsular Malaysia, Sabah and Sarawak, are eligible for even better treatment.³

There are variants on this approach, as between "front-loaded" or "back-loaded" incentive systems. Front-loaded incentive systems reward projects with incentives for sequential investment in the very early years of an investment; back-loaded incentives at the end. One danger of front-loaded systems is that many firms that do not need incentives receive them nevertheless, which makes the overall system costly. With back-loaded systems, the productivity of the incentive system is greater; only successful firms are rewarded.

Governments can in some special cases, such as privatizations, influence sequential investment through specific commitments from TNCs during the investment-approval process. This is particularly important in cases of the privatization of enterprises in near monopolistic markets. In such cases, host countries have sought firm commitments from TNCs relating primarily to expansion and modernization (see chapter II).

(c) Retaining existing foreign direct investment

Policy makers should not only be concerned with encouraging sequential investment but also with how to retain existing investors. As a first step, governments can monitor any relocations and establish the reasons. These may be due to external determinants, but they may also be due to deteriorating local conditions, which can be improved. Investment-facilitation services are important here. A survey carried out by the Jamaica National Investment Promotion Agency in 1985 illustrates this point (Wells and Wint, 1990). The principal finding of the study was that, while the agency successfully promoted the country as an investment site, other Government agencies integral to the investment process did not. Thereafter, a subcommittee of the Cabinet was set up to deal with problems identified.

Another measure could involve the creation of joint committees consisting of representatives of government, foreign affiliates and local employees to try to resolve problems that could lead to relocations. Alternatively, a business ombudsman could be appointed with a small staff that could handle complaints about unreasonable delays and demands by government officials, and the ombudsperson could be given authority to report publicly and periodically on the business climate.

2. Facilitating the transfer and diffusion of technology

As discussed in Part Two, FDI brings with it research and development (R&D) and technology. The strategies of many governments in this respect have changed over time. It used to be common, especially in developing countries, for governments to pass laws and regulations to control the terms of technology transfers. While the screening process of contractual mechanisms may have improved licensing terms, too much focus on control sometimes led to less attention being given to other crucial aspects, such as technology assimilation by local firms and the need for upgrading of the overall technological capabilities in the country.

Today, policies in most countries focus on increasing the effective attainment of real technology transfer, rather than control of contractual aspects of transactions. Consequently, a number of countries have now focused more on improving the capacity to absorb and use new technologies. (In many developing countries there has been a growing belief, in any case, that the increased negotiating capabilities of national enterprises may have lessened the need for government intervention.)

However, while FDI is clearly a powerful and important mode of technology transfer, its relationship with domestic technological development is not always linear and straightforward.⁴ There are several stages between the transfer of a technology and its effective absorption, deployment and subsequent upgrading. The same technology may be used at widely differing levels of efficiency in various countries, because of differing levels of technological capabilities.

Thus, while the focus on technology diffusion and absorptive capacity may be common to many governments, policy instruments can vary widely. What is desirable for the Republic of Korea or Mexico may be out of the question for a least developed country. Bearing that in mind, there are two major types of policy instruments to facilitate technology diffusion.

The first type are general policy instruments that create an attractive environment for FDI and technology transfer:

- An institutional base for building local technical skills. As pointed out in Part Two, TNCs tend to locate their R&D facilities close to manufacturing sites; where technically excellent local universities and good professional staff are available; where there is potentially a critical mass of local researchers; and where communication systems are efficient.
- A general economic environment that rewards risk taking and innovation. An environment favourable to the commercialization of research results can be supported by institutions for financing, marketing and regulatory procedures for testing new products, sophisticated testing of manufacturing facilities, and strong linkages between universities and enterprises. At the same time, government policies can facilitate affiliates' access to government sponsored R&D programmes and other services.

- A dependable and predictable legal system including, especially, intellectual property protection. A number of developing countries have modified their intellectual property legislation to strengthen protection or introduce new enforcement measures. In Mexico, for example, new legislation on intellectual property came into effect in June 1991, designed to provide more legal certainty for investment in Mexico. In 1992, Chile also adopted a new law on industrial property which grants protection to pharmaceutical patents. Similar changes have been adopted in Indonesia, Republic of Korea, Singapore and Thailand, all aimed at extending the scope of protection of intellectual property rights.⁵ Possibilities also exist for regional cooperation, building on the expertise in intellectual property rights that exists in countries of the region, and efforts in this direction have already been made in the Andean Group, in MERCOSUR and the Latin American Economic System.

The second set of policy instruments is directed more at technology diffusion *per se* and focuses on the promotion of linkages between foreign affiliates and local firms, as well as local science-and-technology institutions such as laboratories and research centres. Among the most common factors affecting linkages are:

- work force mobility;
- subcontracting and other sourcing mechanisms;
- equipment suppliers systems;
- user-producer relationships;
- consultancy services;
- informal linkages; and
- strategic alliances involving linkages with government, university, local firms and R&D institutions.

Beyond these factors, governments in a number of countries that are sufficiently developed already, can play a key role in the establishment of infrastructural facilities such as science parks to foster technology partnerships and linkages between firms. The main purpose of science parks is to provide links between public research centres and private firms and to foster synergies between local firms and foreign affiliates.⁶ The renowned examples of Silicon Valley and Route 128 in the United States owed their emergence to the high-technology company start-ups in those areas by graduates of local academic and research institutes. However, there are also examples of cases where strong government or quasi-government initiatives have played a crucial role. The concentration of electronics firms in central Scotland, which earned it the name "Silicon Glen", was the result both of conscious policy by the Scottish Development Corporation, and of financial incentives (OECD, 1987). Other examples include Tsukuba in Japan, Sophia-Antipolis in France, Cambridge Science Park in the United Kingdom, Technology Park Malaysia in Malaysia, Taedok Science Town in the Republic of Korea and Singapore Science Park in Singapore.

Apart from incentives, there are other ways for governments to promote science parks, e.g., by making land available and by installing basic site infrastructure. Moreover, the creation of a successful science park also requires other specialized agencies: regional or local governments, educational and scientific institutions, and industrial and commercial private-sector companies. Since a teaching or research organization is essential, at least one such institution is usually brought into the planning and decision-making process at an early stage, to serve as an anchor for the park.

A number of developing countries, especially in the Asia-Pacific region, have strongly promoted the establishment of science parks since the 1980's,⁷ although the number of foreign investors they have attracted has not always been very significant. The Technology Park Malaysia housed 16 tenants after three years of establishment and the Taedok Science Town had 19 tenants (16 of which were government-supported) after sixteen years of operations. On the other hand, Singapore Science Park managed to attract 78 tenants within eight years after opening, the majority of which were non-government-related enterprises (UNCTAD, 1995d, p. 21). Among the factors involved may be the quality of facilities and services that were provided.

There are several basic preconditions for the establishment of a successful science park (OECD, 1987):

- There should be a university department or technological institute, undertaking both research and teaching in at least one branch of technology, to which enterprises in the park have easy physical and intellectual access. It would be preferable for such an institute to exist already and, indeed, to be of renown in its own sphere. Otherwise, there have to be good prospects that such a centre of learning can be created or raised to the necessary standard. Not only is an existing university an asset, but its research strength can also be reinforced by decentralizing to it some public sector research. For example, in France the Toulouse Technopole benefited from the relocation of the Ecole Nationale d'Aviation Civile; the decision to locate the Eurobus consortium in Toulouse further supported this Technopole.
- The area under consideration should be made attractive to highly qualified research personnel, in terms of its environment, social infrastructure etc. If competitive standards cannot be offered in these respects, the whole concept may have to be downgraded (e.g., initial premises might be provided, but with no special effort made to link them to an institute or campus).
- An extensive collective site is an important requirement to accommodate future growth.

A government that is formulating a policy towards science parks could well approach its task by first collecting and organizing information about the technology/R&D facilities existing in the country, especially those provided by universities and other institutions of higher scientific or technological learning. There are also specialized government laboratories and private facilities conducting proprietary research, which might be induced to provide common services.

Not all countries have the resources necessary to develop science parks. Thus, regional initiatives may be instrumental in pooling scarce resources. An example is the Bolivar Programme for Industrial Technological Integration, Innovation and Industrial Competitiveness, financed by the Inter-American Development Bank. The European experience with such innovative programmes as EUREKA and ESPRIT is also an example of successful regional cooperation.

3. Encouraging the acquisition of skills

Policies for education and training are central to creating the human resource base which is necessary for managing technological change. As technologies become more complex and fast moving, the role of TNCs in employee training (UNCTAD-DTCI, 1994a) and retraining becomes progressively more important. In order to derive the greatest human resource development benefits from the activities of TNCs, governments of host countries require policies that encourage a nexus between pre-work education and on-the-job training.

First, public education has to be flexible so as to bring it closer to, and make it responsive to enterprises. This may involve abandoning traditional methods that give priority to public sector training services, in favour of a more flexible approach, including encouragement of private sector training. This change of focus requires the establishment of new norms for the provision of training services and the regulation of the training market, through -- for example -- certification for private sector training.

Such a change would be helped by cooperation between TNCs and local learning institutions. In Malaysia, for example, staff of Renault-Safar sat on examination boards and on commissions for the reform of technical education. In Côte d'Ivoire, the Péchiney Ugine Kuhlman subsidiary, PUK-Ivorial, not only provided training assistance but also delegated its training staff to sit on examination boards. Siemens-India provided practical training for students of engineering colleges and institutions of technology during their vacations (Chen, 1994). Transnational corporations can also be encouraged to contribute to the development of human skills beyond their standard operating procedures. In Indonesia, the Esso-Exxon subsidiary Stanvac, made financial contributions to three universities and institutions, and awarded numerous scholarship grants without requiring the holders to work for the company after graduation. In Singapore, the Esso Refinery cooperated with universities and the Science Council in developing curricula, and sponsored scholarships, again without requiring the recipients to work for the company (Chen, 1994).

If fiscal incentives or public subsidies are to be granted to TNCs, they can be differentiated on the basis of their training activities. For example, more general training (rather than the specific training that the TNC would usually carry out) or the training of staff with lower educational levels or the training of trainers would qualify for larger support.

Formal pre-work education and on-the-job training are, however, only part of the story. One of the most important determinants of a foreign affiliates' effect on the technology and

skills in a host country is the formation of forward and backward linkages with local firms. This process of integration can take a long time. A proactive policy on the part of host country governments may be able to speed it up. One policy approach adopted by a number of countries is to encourage industries that lend themselves well to local subcontracting because they tend to purchase large amounts of parts and components from outside suppliers.

In order to gain maximum impact from linkages, it is important that policy makers design programmes to build up the capabilities of small and medium-sized local firms. Numerous and geographically dispersed small and medium-sized firms are more difficult to reach than the large (often state-owned) enterprises typically based in industrial centres which are the conventional targets for policy makers promoting linkages. These small firms often need help with quality control, cost-accounting, market information and cash-flow management. Such help entails costs which TNCs might not always be willing to incur. Government support could be given by establishing an "open school" for small and medium-size businesses, with seminars in various cities, lectures by TNC specialists, case illustrations, plant visits, etc., or by creating centres that provide information and advice on training techniques and materials. Small business centres might offer complementary services such as technological information, market studies, management techniques, and industrial extension services.

Incentives can also be offered to TNCs that have their own training centres to share their training facilities and expertise with small and medium-sized enterprises. Another idea is the co-financing of visits to "best practice" plants abroad by owners and employees of small and medium-sized enterprises. Co-financing might mean, for example, that enterprises would continue to pay the salaries of those of their workers who participate in the visits, while the government would finance the travel, subsistence and administrative costs.

4. Accessing world markets

In recent years many countries have adopted export-oriented strategies to promote their economic development. In pursuing such strategies, governments typically focus on trade and exchange-rate policies, but neglect the FDI dimension, failing to recognize that inward (and outward) FDI can be an important means of accessing world markets.

Governments, of course, do target export-oriented FDI, most notably through the establishment of export processing zones. However, such zones often compete with the rest of the country for FDI. In addition, investment there tends to take the form of low-skilled, assembly-based, export-platform activities, which increase exports in the short-run but have a limited long-term potential for upgrading local value added. Linkages with the wider economy are not easily established, with the consequence that processing in the zones remains footloose, subject to relocation to other zones.

Despite the less than satisfactory experience of export-processing zones, market expansion can be one of the most important contributions that FDI can make towards the performance of host economies, especially developing ones, since foreign affiliates provide privileged access

to large markets within TNC systems and advantageous access to other markets due to linkages with TNCs (chapter IV). This can be true even when FDI is initially import-substituting or market-seeking, as TNCs tend over time to shift some of their production to foreign affiliates, be it to export from abroad rather than from the home country or because affiliates become parts of integrated production networks.

The implication for policy makers is straightforward: integrated investment and trade policies can facilitate access to established international markets. Foreign-direct-investment policy should have a trade component as TNCs are interested in whether a country is suitable for inclusion in their networks. At the same time, trade policy should have a FDI component. Indeed, without foreign affiliates as entry points, aspiring new entrants miss out on opportunities to get advantageous access to the worldwide internal TNC markets. For developing countries, especially those that have relied on trade preferences as an avenue for market access in the past, and now face the prospect of fewer such preferences in the future, the possibility of attaining market access through FDI is particularly relevant (not least because TNCs often lobby home country governments to maintain trade preferences -- see box VI.2).

Box VI.2. Extending trade preferences to FDI

Under the Generalized System of Preferences (GSP), industrial countries offer more favourable treatment to the import of manufactures and semi-manufactures from developing countries, particularly the least developed, thereby providing them a competitive edge in the industrial market (i.e., in terms of a price advantage relative to imports from non-beneficiary countries). The GSP is an agreed departure from the most-favoured nation principle of the GATT. The GSP arrangements are drawn up by individual preference-giving countries, who specify beneficiaries, product coverage and other requirements, principally relating to rules of origin.

In an effort to extend GSP schemes to FDI, industrial countries have begun to apply the “donor country content” rule under which the preference-giving country allows inputs (materials, parts and components) of its manufacture, when supplied to a preference-receiving country and used there in a production process, to be regarded as originating in the preference-receiving country for the purpose of determining whether the finished products qualify for GSP treatment. This facility is granted by Australia, Canada, Japan, New Zealand, several Central and Eastern European countries and, as of 1 January 1995, the European Union. Norway and Switzerland are in the process of introducing the facility. Although the United States does not provide it, TNCs have voiced strong support for it to be included in the new United States GSP scheme.

A number of home countries offer incentives to their firms to invest in the least developed countries. Although these schemes have had only limited impact, they could be coupled with trade preferences through the FDI facility of the GSP to reinforce each other, and constitute a more comprehensive system of investment-trade preferences offered by developed countries to the least developed countries. With business as a new home country constituency, the erosion of support for trade preferences could also be counteracted. Supportive measures of this type are a necessary complement to the liberalization measures enacted by most least developed countries to attract FDI, which still amounts to less than 1 per cent of the total flow to developing countries.

Source: UNCTAD, 1995.

Policies vary from country to country but the more successful have usually embodied several common elements:

- *Policy coherence.* While many countries have liberalized their trade and investment policy frameworks, the processes have tended to proceed at a different pace. This can happen when the focus of trade policy is placed more on promoting exports, than on opening-up *per se*. The differing emphasis can, at times, lead to policy trade-offs, e.g., when tariff protection serves as an incentive for attracting FDI. However, while many TNCs seek tariff incentives when investing in developing countries and in economies in transition, the type of investment that takes place in protected markets tends to take the form of stand-alone production units geared to the domestic market: such affiliates are often not competitive in an unprotected environment and have a limited capacity: to import from, and not export to, the global corporate network.

The experience of the dynamic Asian economies and, more recently, of Latin America, underlines the importance of policy coherence, especially between FDI, trade and technology-flow policies (chapter V). In the Asian context, the relatively open trade regimes in several of the smaller economies encouraged export-oriented FDI, with participation in corporate networks based on traditional sources of comparative advantage, namely, resources and cheap labour. In contrast, in Latin America, where trade regimes have until recently been relatively closed, FDI was initially market-seeking (and import-substituting). But after the 1982 debt crisis, when local demand fell dramatically, foreign affiliates were forced to switch production to the international market in order to maintain operations. Switching markets is by no means easy: firms had to adopt new management strategies and make major new investments, such as opening new plants, starting new lines of production and effecting improvements in quality. Nevertheless, as the Mexican response to the debt crisis especially shows, foreign affiliates can adapt where necessary.

Trade policy does not usually figure among the common characteristics of a liberal FDI regime. Yet, the ability to import and export freely is an essential requirement for effective participation in intra-firm trade. Import restrictions are a frequent handicap. In countries in which imports are made conditional upon export sales, foreign affiliates are tempted to engage in reverse transfer pricing (i.e., over-invoicing exports and under-invoicing imports) in order to ensure the adequate availability of essential inputs. Even where there are no restrictions on profit repatriation, transfer pricing can become a convenient subterfuge of a different kind. In these circumstances, a simplification and liberalization of import procedures may well be the most prudent option. Tariff-drawback schemes for foreign inputs entering into production for export, are one compromise device for partially liberalized systems.

- *Local linkages.* The market access afforded by TNC systems need not be confined just to their affiliates, but can also be spread through linkages (supplier and subcontracting arrangements) between affiliates and other local firms. In network terminology,

affiliates can act as local “server” nodes for distributed processing of international production. In this way, small and medium-sized enterprises in developing countries, which may not be competitive in world markets, may nonetheless be competitive enough to enter into supplier arrangements with foreign affiliates and, through them, be original equipment manufacturers or original component manufacturers for world markets. The internationalization of domestic firms is an important feature of TNC systems.

A policy helpful to the successful establishment of linkages is the availability of local support services to potential small and medium-sized domestic subcontractors. Support services can take various forms, ranging from training to assistance in design, quality testing, and selective assistance for start-up companies. Supportive macroeconomic policies are also important, particularly a stable exchange rate that is favourable to the production of tradables, thereby encouraging the local sourcing of value-added activities oriented to the larger TNC systems.

- *Services.* The availability of modern services is important to the competitiveness of the manufacturing sector and for attracting export-oriented FDI. This is often achieved through FDI itself, for example, by allowing FDI in telecommunications and by opening up financial services and the insurance and banking industries. Developed and developing countries are increasingly receptive to opening these traditionally restricted industries for competitiveness reasons.

At the same time, technological changes are increasing the tradability of many services and opening up new opportunities for developing countries to participate in world markets for services. Such participation may involve arm's-length trade along telecommunication networks as well as intrafirm transactions arising from FDI in service activities located in host developing countries as part of TNCs' integrated international production systems. In order to exploit these opportunities fully, countries need to focus on building up competencies in the data technologies that play a crucial role in making services tradable, strengthening the telecommunications infrastructure (often, as pointed out above, with TNC-participation). They also need to obtain access for their firms to the electronic networks along which services trade takes place. Given that many networks are privately built precisely with the intention of providing a firm or group of firms with a competitive advantage (Sauvant, 1990, p. 121), often FDI, or linkages with it, may be the only way to obtain such access. Ensuring equitable access for service providers to networks remains, nevertheless, an important task for policy makers.

Countries are also increasingly inclined to allow FDI into activities traditionally dominated by local firms in order to stimulate process and product innovation. A strategy to enhance access to textile markets by attracting foreign designer firms has been pursued with some success by several Asian countries.⁸ Foreign direct investment can facilitate the introduction of modern practices that lower production costs and raise quality and tradability. It can also establish supplier arrangements, and provide remote marketing information on the latest trends in home country markets.

- *Regional integration.* Finally, regional integration efforts can yield dividends, particularly for schemes which are not only trade but also investment agreements (e.g., NAFTA, MERCOSUR and the Chile-Mexico agreement signed in 1991). Their main attraction for TNCs is not just the impact of tariff removal on mutual trade, but the dynamic externalities arising from an enlarged economic space and a growing regional market for trade and investment. The larger economies of a region can take a lead role by providing development assistance for regional projects (such as roads) that serve to expand markets and attract FDI. Japan, for example, has helped to finance infrastructure projects in Asian developing countries in order to facilitate activities of Japanese TNCs in the region.

* * *

For analytical purposes, policies regarding the different components of the FDI package have been considered separately. In reality, what a country targets with its policies is, of course, the entire package. And the composition of the package that can be attracted very much depends on the country's characteristics, including its level of development. In each case, though, the important factor is that FDI can be made to contribute to upgrading efficiency and productivity, facilitate economic restructuring and help a country to improve its economic performance.

Restructuring is an ongoing process. While TNCs can speed up this process, they at the same time need governments to provide the right kinds of restructuring assets to make their investments worthwhile. Government action may also be necessary to deal with issues such as retraining, encouraging seedbed firms/industries, providing incentives for relocation and providing incentives to firms to take more responsibility for structural unemployment. At the same time, policy needs to be oriented towards creating an environment that stimulates and facilitates the early adoption by domestic firms of measures aimed at improving their lagging competitiveness, and at ensuring fair competition.

B. The role of incentives⁹

In addition to the measures considered in the previous section, many countries are offering incentives to attract FDI. As international competition for FDI intensifies, governments are offering more and higher incentives. This section examines the role that incentives play in attracting TNCs. Evidence suggests that this role is, in fact, quite limited and certainly considerably less than governments seem to believe. The section concludes with a number of options to curtail excessive incentive competition for FDI.

1. The rationale for foreign-direct-investment incentives¹⁰

The incentives used by governments to attract or retain FDI consist essentially of measures specifically designed either to increase the rate of return of a particular FDI

undertaking, or to reduce (or redistribute) its costs or risks; the general policies and non-policy factors of a country that determine a country's attractiveness for foreign investors are not categorized as incentives.¹¹

The rationale for investment incentives (first argued in welfare economics by A. Pigou, 1920) is to correct for the failure of markets to reflect the wider benefits arising from externalities in production. Positive externalities--or spillovers--can result from such factors as economies of scale (resulting in economies of agglomeration), the creation of new knowledge, or the upgrading of skills of mobile workers. Because externalities create benefits that cannot be fully captured by the producers that generate them, they create a "wedge" between the private and the social rates of return. It can be argued that an incentive to private investors up to the amount of this wedge might be warranted to optimize the total net benefits to society.¹² However, the calculation of this wedge is not a straightforward matter, and error could distort the production structure, rather than correct it. Apart from possible policy errors, there are administrative costs.

The rationale for incentives can also be presented in the more dynamic context of growth and development, correcting for the failure of markets to reflect the gains that can accrue over time from declining unit costs and learning-by-doing. This is the classic argument for protecting infant industries. As investment proceeds and unit costs decline with increased output, a country could acquire a comparative advantage in an expanding industry. Indeed, the experiences of industrial policies in the newly industrializing economies of East Asia and in Japan (of which incentives are only a component) illustrates the dynamic benefits to be derived from helping domestic firms become more efficient and competitive by strengthening their entrepreneurial, managerial and technological capabilities (UNCTAD, 1994a). At the same time, the experience of other countries has been mixed.

The above arguments apply to incentives in general, irrespective of the ownership of capital, whether domestic or foreign. Here, the focus is on FDI. In considering when there may be a case to offer incentives to attract TNCs, it is useful to recall that FDI involves not only a flow of capital, but also the transfer of technology, managerial know-how, skills, network access and other intangible assets from one country to another. To the extent that these intangibles are completely internalized, the rate of return will fully capture the net benefits of an investment, and incentives are not required. However, to the extent that they generate major beneficial external effects for the rest of the host economy, which are not internalized by the TNC, FDI may not take place at the socially optimal level. In such cases, FDI may generate sufficient positive externalities to justify incentives.

The diffusion of technology is one of the principal spillovers associated with FDI (chapter III.B). What evidence exists, suggests that the benefits are considerable. Skills imparted to workers in the new jobs might also be transferable to other activities when they change jobs. In the case of export promotion, there are spillovers from information, quality standards and reputation. Similarly, the promotion of investments with backward linkages or high domestic value added can yield externalities through economies of scale and agglomeration and technology spillovers.

Finally, mention should also be made of two other arguments sometimes advanced in favour of incentives for FDI:

- The first is to compensate investors for lost return due to other government interventions. For example, duty remissions on imports of capital equipment, raw materials and intermediate inputs are often used as incentives in developing countries to attract FDI. It goes without saying that, if government policies do have the effect of suppressing rates of return on particular activities relative to others, these policies warrant rethinking. Clearly, the first-best solution to the problem would be to correct it at source. That solution, however, may not be feasible due to the different policy objectives and constraints that governments face, in particular in developing countries. Thus, incentives could well provide a second-best solution for attaining certain objectives with respect to FDI.
- A government may find it desirable to encourage TNCs to carry certain public costs (e.g., for vocational training) because it lacks the institutional capacity to bear them itself. Here also, the first-best solution to the problem would be to address it directly.

In sum, investment incentives involve gains as well as losses for the country that offers them. Although intended to further development and correct for market failures, incentives can cause distortions in production structures like those caused by restrictions on trade. They can also favour larger over small TNCs, especially where incentives have to be negotiated. The costs for the community offering incentives should, of course, be kept smaller than the benefits; that is, the costs should not be greater than the value of the wedge between private and social benefits. Possible redundancies (i.e., whether the investment would have taken place without the incentive, rendering the cost unnecessary) would also need to be considered. The costs and benefits are difficult to measure with any precision. Apart from analytical difficulties, experience also suggests that the capacity to apply incentives effectively varies widely among countries; where institutions are weak, political pressures can force incentives to be higher than warranted and administrative capacities may not be sufficient to implement and monitor incentive schemes.

Finally, to the extent that incentives can divert investments from one country to another, incentives competition can result. Therefore, the analysis of benefits and costs of FDI incentives must take into account that other countries might respond with their own incentives. When governments compete to attract FDI, incentives cancel each other out, and there will be a tendency to overbid in the sense that every bidder may offer more than is justified by its particular national wedge. The effects can be both distorting and inequitable because the costs of incentives are ultimately borne by the public and, hence, represent transfers from the local community to the ultimate owners of a foreign investment. In addition, in an incentives competition for FDI, it is the poorer countries that are relatively disadvantaged.

2. Incentives competition among countries¹³

The range of incentives available to TNCs, and the number of countries, provincial and local authorities that offer them, have increased considerably since the mid-1980s. Furthermore,

incentives are also increasingly contingent upon conditions being met by investors. As a result, a variety of incentives is linked to different objectives, thus further multiplying the number of incentives available to TNCs.

To summarize the position at the beginning of the 1990s, the general pattern was not to differentiate in principle between domestic and foreign-controlled firms, either in the design or in the implementation of incentives programmes, although exceptions existed. Furthermore, no clear pattern appears to exist across countries and regions on the type of industries favoured by incentives programmes, although an increasing number of countries target investment activity in industries involving technology and high value-added. As to the type of incentives offered, developed countries tend to make more use of financial than fiscal incentives. However, fiscal incentives are more prevalent in developing countries and economies in transition, presumably because these countries lack the budgetary resources to provide financial incentives. Unfortunately, however, the total levels of government expenditure on incentives for FDI are not known.

(a) Fiscal incentives

Fiscal incentives continue to be the most widely used type of FDI incentive. Of 103 countries reviewed, only four did not appear to offer any kind of fiscal incentive to foreign investors during the early 1990s. Moreover, between the mid-1980s and the early 1990s, the range of fiscal incentives programmes offered to foreign investors seems to have increased in all regions, if data for 93 countries are indicative (table VI.1). At the same time, little has changed in the type of fiscal incentives measures available. A reduction of the standard corporate income-tax rate continues to be the fiscal incentive most widely used, followed, in declining order of importance, by tax holidays, exemptions from import duties, duty drawbacks, accelerated depreciation, specific deductions from gross earnings for income tax purposes, reinvestment allowances and deductions from social security contributions (table VI.2).

There were, however, significant country and regional variations:

- While a reduction of the standard corporate income tax rate was the most frequently used type of fiscal incentive for TNCs in most regions, the levels of reduction varied considerably, even within the same country.
- Among developed countries, accelerated depreciation and specific deductions for corporate income tax purposes or reductions in other taxes were more prominent than exemptions from import duties and duty drawbacks, the latter incentives often being limited to special zones or regions.
- In developing countries, by contrast, tax holidays, the exemption from import duties and duty drawbacks were the main types of tax incentives available to TNCs (after the reduction of the standard corporate income tax rate). Tax holidays were typically available for up to five years after an investment, but they could be extended to 10 years and, occasionally, to 25 years. Tariff concessions were granted for periods usually lasting 5 to 10 years, but sometimes for as long as 15 to 25 years for major projects.

Table VI.1. Fiscal incentives for foreign investors: changes in 93 countries between the mid-1980s and the early 1990s

	Developing countries												Developed countries								Central and Eastern Europe (25 countries)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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Source: UNCTAD, Division on Transnational Corporations and Investment, based on various sources.

Note: x indicates that either more incentives of a given type were offered (first column) or more countries offered the incentive (second column) at the end of the period. = indicates that there were no changes.

- In Central and Eastern Europe, nearly 80 per cent of all countries offered reductions of the standard income tax rate and tax holidays to TNCs. Exemptions from import duties were also important. In addition, tax-stabilization schemes have been offered by some countries as a guarantee against fluctuations in their fiscal regimes.

Over the years -- and, of course, with regional variations -- fiscal incentives schemes for TNCs appear to have become increasingly specific, both in terms of the qualifying conditions attached to them and the variety of options they provide. The FDI activities most frequently favoured with incentives were (UNCTAD-DTCI, 1995c):

- Priority industries.
- Regional development (especially in developed countries).
- Exporting -- the most frequent objective of incentive measures in developing countries (often in the context of special export processing zones).

Table VI.2. Fiscal incentives for foreign investors, early 1990s
(Number of countries that offer a type of incentive)

Incentives	Developing countries			Developed countries				Total
	Africa	Asia	Latin America and the Caribbean	North America	Western Europe	Other developed countries	Central and Eastern Europe	
Number of countries	23	17	12	2	20	4	25	103
Reduction of standard income tax rate	18	13	12	2	16	2	20	83
Tax holidays	16	13	8	2	7	2	19	67
Accelerated depreciation	12	8	6	2	10	3	6	47
Investment/Reinvestment allowance	4	5	9	-	5	-	3	26
Deductions from social security contributions	2	1	2	-	5	-	2	12
Specific deductions on gross earnings for income tax purposes or reductions in other taxes (e.g., VAT, sales)	14	12	6	2	9	-	2	45
Exemption from import duties	15	13	11	2	7	2	13	63
Duty drawback	10	8	10	1	6	2	12	49

Source: UNCTAD, Division on Transnational Corporations and Investment, based on various sources.

- Innovation and research and development, training, employment and environmental protection; but they featured less prominently.

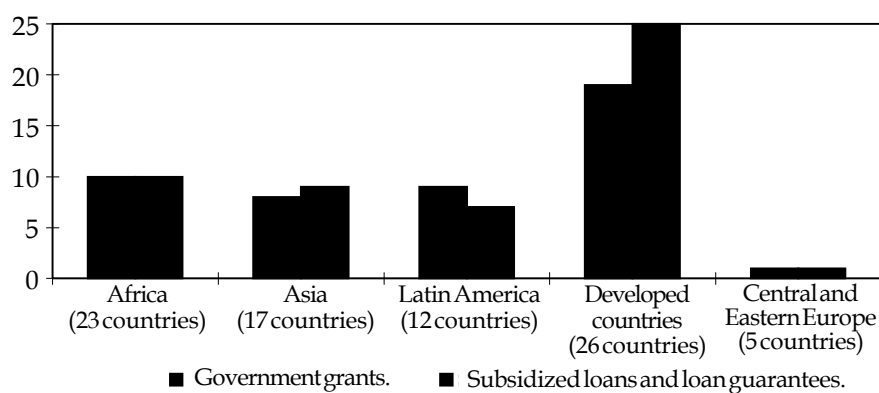
There are indications that some efforts have been made to curtail fiscal incentives, especially by reducing selective corporate income tax reductions and credits. Thus, for example, Indonesia abolished tax holidays in 1984; the Republic of Korea reduced barriers to inward FDI and simultaneously reduced incentives; and the Philippines is currently considering the removal of tax holidays from its investment-incentives system. Some countries (e.g., Malaysia) have reduced their standard tax rate for all firms, making special incentives for TNCs less relevant (Lecraw and Conklin, forthcoming).

(b) Financial incentives

At the beginning of the 1990s, financial incentives were available to TNCs in at least 59 countries of the 83 reviewed. The range of financial incentives appears to have increased since the mid-1980s, but some types of financial incentives were reduced in some regions (UNCTAD-DTCI, 1995c). Thus, government grants decreased in Africa, Central and Eastern Europe and in the developed countries, both in absolute terms and in terms of the number of countries that offered them. Subsidized loans (which are generally more important) decreased also in developed countries (figure VI.1).

Financial incentives continue to be particularly important in developed countries, with the bulk of these being aimed at industrial and regional development. In some developed countries (e.g., the United States), most financial incentives are granted by state, province or city authorities, and the amounts involved, if standardized by number of employees, are very high indeed (table VI.3). Grants are frequently used (box VI.3). They have the attraction of being visible measures that are relatively easy to administer. In a number of countries, grants might have to be repaid if certain conditions are not met. This feature, known as the "claw-back" provision, is usually applied to high risk investments, such as research and development. Governments tend to be more generous with financial incentives if they expect to get most of the funds back if circumstances warrant it. Aid in the form of equity participation is offered in some cases; loans at reduced interest rates and loan guarantees being used less frequently. Financial incentives appeared to be less prominent in developing countries and the countries of Central and Eastern Europe,

Figure VI.1. Financial incentives for foreign investors, frequency by region, early 1990s



Source: UNCTAD, Division on Transnational Corporations and Investment, based on various sources.

but they have increased in recent years, mainly as subsidized loans and loan guarantees and government grants.

Box VI.3. Korean TNC investment in an electronic plant in North-East England

Company

- A major electronics group (fifth largest in the world).
- Already had investment outside the Republic of Korea, e.g., Mexico (serving the North American market).
- Strategy is to establish regional manufacturing centres around the world.

Project

- Investment \$700m.
- Production targets will be in the following areas: computer monitors; microwave ovens; facsimile machines; personal computers; monitor tubes; and facilities for semi-conductor wafers and colour televisions.
- Turnover will eventually reach \$2 billion per annum.
- Direct employment 3,000.

Location choice

- Original search included Portugal, Germany and France as well as Spain and the United Kingdom.
- Final choice was between the United Kingdom and Spain. The company already had plants in both countries, i.e., in Barcelona and North-East England.
- European market of prime importance. The company already manufactures 700,000 television sets a year in North-East England for export to Europe.

Key factors influencing decision

- The European single market.
- Transport infrastructure to markets: good in North-East England.
- High labour productivity (already experienced in the United Kingdom).
- Competitive wage rates.
- Attractive site/area: well packaged by regional authorities.

The importance of grants

- Grant provided by the Government of the United Kingdom amounted to £58 million for a project costing £450 million (with perhaps a further local contribution of up to £20 million).
- However, grant per job created is almost £20,000: which is very high by United Kingdom standards, almost reaching the upper limit.
- The grant package in Spain, the main competitor, would probably have been higher.

In this case, grants were only a part of the total package of influences affecting the investor.

Impact on United Kingdom and North-East Region

- Employment growth and exports.
- There should be a substantial multiplier effect.

Source: Arthur Andersen & Co., SC.

Table VI.3. The cost of attracting investment: examples of incentives given to investors in selected countries

City, State	Year	Plant	Other locations considered	State investment on behalf of company (Millions of dollars)	Company's investment (Millions of dollars)	Number of employees per plant at the time the investment was made ^a	State's financial incentive per employee (Dollars)
Smyrna, Tenn., United States	1983	Nissan Motor Manufacturing	Georgia, Tennessee	22 Road access 7.3 Workers' training 33 Total	745-848	1 300	25 384
Flat Rock, Mich., United States	1984	Mazda Motor Manufacturing USA	Alabama, Iowa, Kansas, Missouri, Nebraska, North Carolina, Oklahoma, South Carolina, Tennessee	19 Workers' training 5 Road improvement 3 On-site improvement 21 Economic development grant loan 5 Water system improvement 48.5 Total	745-750	3 500	13 857
Spring Hill, Tenn., United States	1985	Saturn	Illinois, Indiana, Kentucky, Michigan, Montana, Minnesota, New York, Ohio	30 Workers' training 50 Road improvement 80 Total	3 500-4 790	3 000	26 667
Georgetown, Ky., United States	1985	Toyota Manufacturing USA Inc.	Georgia, Indiana, Kansas, Missouri, Tennessee	12.5 Land purchase 20 Site preparation 47 Road improvement 65 Workers' training 5.2 Toyota families' education 149.7 Total	823.9	3 000	49 900
Bloomington-Normal, Ill., United States	1985	Diamond Star Motors, Chrysler, Mitsubishi	Indiana, Michigan, Ohio	17.8 Road improvement 11 Site acquisition 14.5 Water system improvement 40 Workers' training 83.3 Total	500-700	2 900	28 724

/...

(Table VI.3, cont'd)

City, State	Year	Plant	Other locations considered	State investment on behalf of company (Millions of dollars)	Company's investment (Millions of dollars)	Number of employees per plant at the time the investment was made ^a	State's financial incentive per employee (Dollars)
Lafayette, Ind., United States	1986	Fuji-Isuzu	Illinois, Kentucky	55 State funds 26 Federal subsidies 3 Water system improvement 2 Road improvement 86 Total	480-500	1 700	50 588
Setubal, Portugal	1991	Auto Europa Ford Volkswagen	United Kingdom Spain	483.5	2 603	1 900	254 451
Tuscaloosa, Alabama, United States	1993	Mercedes-Benz	Alabama Georgia, Nebraska North Carolina, South Carolina, Tennessee	68 Site development 77 Infrastructure 15 Private sector/goodwill 90 Workers training 250 Total	300	1 500	166 667
North-East England	1994/95	Samsung	France, Germany, Portugal, Spain	89	690.3	3 000	29 675
Spartenburg, South Carolina, United States	1994	BMW	Oklahoma Nebraska	130	450	1 200 by 1996	108 333
Castle Bromwich, Birmingham, Whitley, United Kingdom	1995	Jaguar	Detroit, United States	128.72	767	1000	128 720
Hambach, Lorraine, France	1995	Mercedes-Benz, Swatch	Belgium, Germany	111	370	1 950	56 923

Source: UNCTAD, Division on Transnational Corporations and Investment, based on Milward and Hosbach Newman (1989), p. 212; Arthur Andersen & Co.; *Financial Times*, 1 October 1993, 19 October 1994, 3 March 1995 and various sources.

^a The number of jobs created by these investments is expected to increase considerably over the years.

(c) Other incentives

Of 67 countries reviewed, 59 offered various types of incentives not included in the previous categories, such as subsidized infrastructure and services and technical support. Among the countries surveyed, the overall number and range of these incentives also increased considerably between the mid-1980s and the early 1990s. Subsidized, dedicated, infrastructure and services were often provided as part of a package of measures available for enterprises investing in export-processing zones, enterprise zones or science parks. In addition, institutional arrangements for the provision of information, consultancy and management services, as well as training and other technical assistance at subsidized prices or zero cost were increasingly becoming a common form of incentive in many countries, often focused on small firms, technology transfer and regional problem areas.

In a number of developing countries and in Central and Eastern Europe, protection from import competition and preferential allocation of foreign exchange has also played an important role. For example, some countries have allowed investors to maintain offshore accounts in which they could hold foreign exchange proceeds from export sales, insurance contracts and other authorized items. This makes it easier to secure investment insurance, and offers protection against the risks of local currency devaluation, non-convertibility and unfavourable exchange rates.

Although market reforms are narrowing the scope for discretionary incentives, they remain important. But they are difficult to capture in general surveys since they do not appear in budget allocations or fiscal statements. All indications are, however, that they are among the more significant incentives.

* * *

All this suggests that competition for FDI with incentives is pervasive, and is even more so now than it was some ten years ago. Many countries have increased their incentives in order to divert investment away from competing host countries. Competition has been strong not only among countries, but also among sub-national authorities within states, including competition among individual cities. This has been so regardless of whether the countries involved were large or small, rich or poor, developed or developing. As countries have been orienting their development towards exports, technology intensive industries and higher value-added activities, there has also been more competitions in selective, targeted incentives.

3. Effects of incentives on foreign investors' locational decisions

Given all the factors that can impinge on TNC locational decisions, it is difficult at best to isolate the effects of just one factor, such as incentives. The impact of these factors on investment decisions will also differ among TNCs. In spite of these differences, there is overwhelming evidence that, relative to other factors, incentives are only a minor element in the locational decisions of TNCs. Factors such as market size and growth, production costs,

skill levels, political and economic stability and the regulatory framework remain the most important (UNCTAD-DTCI, 1995c). However, the impact of incentives is not entirely negligible: if one country offers incentives and another does not, then, other things being equal, foreign investors could be influenced in their locational choices between countries.

As already noted, an increasing number of incentive packages has been designed to induce TNCs to profile their investment projects so as to contribute to the host country's goals in terms of export promotion, employment creation and worker training, domestic value added and technology transfer and innovation. In practice, the most success has been achieved with incentives to export. Success in the other dimensions has been more difficult to achieve, often with different incentives packages working at cross purposes.

The experience with incentive packages suggests that, to be effective, the design of incentive programmes aimed at attracting FDI with specific characteristics not only involves careful specifications of those elements that are thought to be desirable but, in addition, policy coordination at various levels of government is necessary to ensure that the incentives do not cause damaging side effects. There is also often a conflict between the goals that governments want to achieve, the incentives systems through which these goals can be achieved and the capacity of the institutions charged with implementing the incentives systems. At the same time, there is often a trade-off between incentives that are targeted to achieve specific policy goals and more general investment incentives. The more targeted an incentive, the greater its impact -- but also the greater the chance that it leads to biases and distortions that impose economic costs on the economy.

* * *

In summary, incentives are not among the main determinants of FDI locational decisions. Nevertheless, competition among countries to attract and keep investment through incentives is strong and pervasive. This is partly so because, other things being equal, incentives can induce foreign investors towards making a particular locational decision by sweetening the overall package of benefits and hence tilting the balance in investors' locational choices. Incentives can be justified if they are intended to cover the wedge between the social and private rates of return for FDI undertakings that create positive spillovers. However, incentives also have the potential to introduce economic distortions (especially when they are more than marginal) that are analogous to restrictions on trade. It is not in the public interest that the cost of incentives granted exceeds the value of the benefits to the public. But, as governments compete to attract FDI, they may be tempted to offer more and larger incentives than would be justified, sometimes under pressure from firms that demand incentives to remain in a country.

How to measure the costs and benefits of incentives is complex and problematic; even when this can be done, the implementation and administration of a calibrated incentives programme is often very difficult and can be distorted by political objectives. There is also the larger question as to whether national welfare gains enhance world welfare or are at the expense of other countries.

Conclusions

As countries increasingly recognize the importance of inward FDI for their development, they compete more and more to attract such investment. This competition takes many forms. Most countries are liberalizing their FDI frameworks, are pursuing more fine-tuned policies designed specifically to attract competitiveness-enhancing FDI and, more generally, are attempting to create a favourable investment climate. Countries, furthermore, are using various types of incentives to attract FDI.

To a degree, competition for FDI is not undesirable. It can lead governments, for example, to refine their approach to investment promotion, selecting the most efficient instruments. Yet, unbridled competition among governments in this area can lead to abuses, as the world experienced in the inter-war period with successive rounds of currency devaluations in a beggar-thy-neighbour attempt to boost exports and more recently in export-credit competitions. Competing for FDI with incentives can lead to waste, especially when governments offer more and higher incentives than those justified to cover the wedge between the social and private rates of return on an investment, and when distortions in the international allocation of investment are introduced.

Table VI.4. Menu of policy options for government action on incentives

Level of approach	Voluntary ^a	Non-binding ^a	Binding
Unilateral	National FDI incentives reviews, including the balance between incentives and promotion measures.		
Bilateral		Incorporate language on ceilings and limits into model bilateral treaties on investment and double taxation.	Eliminate or reduce certain incentives conditional on same action by certain other countries.
Regional		Regional FDI incentive reviews.	Agree on ceilings and discontinuation of certain incentives; approval system; review system.
Multilateral		Eminent Persons Group; negative list; check list of points; "challenge" round pledging reductions.	Strengthen and expand WTO instruments.

Source: UNCTAD, Division on Transnational Corporations and Investment.

^a While voluntary initiatives are unilateral actions that can be reversed easily, a non-binding understanding, being the result of negotiations, would presumably exercise at least a certain amount of restraint.

Competition for FDI with incentives is unlikely to be eliminated altogether, and some of it may even lead to positive results for countries. But excessive incentives can be contained and channelled into more effective areas such as investment in public infrastructure which has the potential to raise economic productivity in general, as well as to enhance the climate for investment. While the improvement of the investment climate is mostly a national matter, containing excesses in competition with incentives also requires an international approach, at bilateral, regional and multilateral levels (table VI.4), which can be pursued simultaneously.

1. National initiatives

Unilateral action can check the competitive behaviour of other countries. Countries have now had several decades of experience in granting competitive incentives. This often frustrating experience is beginning to lead them to a better understanding that their long-term interests do not lie in short-term advantages gained through incentives, as demonstrated by their efforts to discourage incentive competition in regional integration agreements. In the absence of any international action to limit incentives, some governments are searching for ways to curtail their own excessive granting of incentives.

In an effort to rationalize the use of incentives governments could undertake a national FDI incentive review, with the following (and other) questions in mind:

- What is the complete array of incentive instruments used at all government levels -- including discretionary incentives -- to attract and channel FDI activities?
- Has there been a proliferation of incentives?
- Are any incentives redundant? For example, countries offering tax holidays sometimes also have in place programmes for accelerated depreciation, which are ineffective when applied during the tax-holiday period.
- What have been the results obtained from the use of incentives and at what cost for the country. Using analytical techniques that are now available in the form of computer-based models, the average value of an incentive package for the typical FDI project (or for several archetypes stratified by industry, size, region etc.) can be measured. More refined techniques are needed, however, to assess the value of incentives when externalities and scale economies are present.
- Are incentives superfluous in the sense that they are being offered to foreign investors that would have made the investment without them?
- Are the various incentive instruments coordinated to achieve the desired impact at the least financial and administrative cost? What are the administrative and other problems in implementing incentives programmes?
- Are the incentives designed to work in harmony with market possibilities, both in a static and dynamic sense?
- Can some instruments be eliminated, or a ceiling be placed on them, with no overall loss in the effectiveness of the incentives programme?

- Is a proper balance being maintained between investment incentives and investment-promotion activities? Investment promotion competes for the same scarce budget resources as FDI incentives. Both incentives and promotion activities are meant to attract FDI, and the marginal gain from a dollar spent on each should be compared. In general, investment-promotion activity is more valuable and does not lead to cutthroat competition among countries, as incentives sometimes do.
- Have countries that are viewed as direct competitors for FDI been increasing or reducing their incentive levels?
- What kind of incentives competition is taking place among various levels of government?

It may be difficult to answer all or most of these questions in the framework of a national FDI incentive review, but they indicate the type of issues that need to be addressed. A more detailed and systematic format could be elaborated, and a manual prepared for use by governments, to be revised in light of experience gained. The purpose of the review would be to streamline incentive programmes, with international agencies providing technical assistance where desired.

2. Bilateral initiatives

Bilateral investment treaties have generally had little to say about investment incentives. However, some countries, notably the United States, have used bilateral investment treaties to curtail the use of performance requirements in host countries. Since governments often use incentives to induce investors to accept performance requirements, a reduction of the latter could moderate the incidence of the former.

Governments could add investment-incentive issues to their model bilateral treaties on investment and double taxation. In the absence of a regional or multilateral approach, adding an incentives-limitation clause to a model bilateral treaty would at least put the issue up for discussion, even though this would not necessarily mean that it would be incorporated immediately in treaties that are under negotiation. For example, host governments could agree to limit their investment incentives to a small range of instruments, rather than the large (and often confusing) array currently developed. In fact, it might be possible to negotiate a conditional incentive-limitation clause in a bilateral agreement that would only become operative if a specified number or set of countries adopted the same clause. For example, a developing country facing its stiffest competition from, say, four neighbouring countries, could be reluctant to accept a bilateral discipline on incentives on its own, but might be willing to abide by such a discipline if its competitors had also agreed to such a clause. In this example, bilateral treaties would not have to be negotiated simultaneously; clauses would be activated only upon the signing of the required minimum number of treaties. Such an approach might be more promising if the principal home countries were to agree on a common incentive-limitation clause that each would insert into its model treaty.

3. Regional initiatives

Many regional integration efforts have recognized the importance of adopting rules to limit their members' ability to redirect FDI flows from other member countries. Notably, the European Union sets limits on the value of the total package of incentives that any government can use to promote investment. While other regional groups do not have the same degree of integration as the European Union, they could still strengthen their efforts to curtail excessive incentive granting in a number of ways, on the basis of FDI incentive reviews that could ask the same or similar questions as proposed for the national level. In addition, governments could agree on overall ceilings on investment-incentive packages; they could agree on criteria to discontinue gradually some of the most distorting incentives; and, based on the agreed-upon criteria, they could make the granting of incentives subject to approval by the regional organization. A review system could be established to allow other governments and affected private parties to challenge the granting of incentives that do not meet the agreed-upon criteria.

Of course, the modalities for reducing incentive levels at the regional level are no different from those suggested at the national level. What is different, is the way in which reductions are initiated. At the regional level, cooperation can be secured via formal agreements rather than by hoping for informal cooperation through imitative behaviour. Naturally, a regional approach needs to take into account intraregional differences.

4. Multilateral initiatives

At present, several avenues exist to strengthen a multilateral approach to limit incentives competition (UNCTAD-DTCI, 1995c). To assist this process, an international Eminent Persons Group on Incentives could be established to recommend actions to be taken. The Group could hold international hearings on FDI incentives, focusing on experiences with the effectiveness of incentives, with the participation of various groups, including government investment agencies, TNCs, independent research organizations and private consulting firms. It could explore a wide range of issues, including:

- *Improving transparency.* The Eminent Persons Group could examine ways of collecting systematically and making available comparable information on the type, number and value of incentives offered and given at all levels of government. This would require improved national and international reporting systems. Special efforts would be required to obtain information on the use of discretionary and *ad hoc* incentives. In doing so, it may be advisable to distinguish between groups of incentives, to make the universe of incentives more manageable. For instance, it may be possible to take a sectoral approach or one based on types of objectives pursued.
- *Clarifying and documenting the cost and benefits of FDI incentives.* Although there is evidence that competition through incentives is imposing high costs on countries that use them, there is a need for standardized methods to measure the many different elements that enter a cost-benefit analysis of such incentives. The Group could examine

the various methods available and set out and test them, and also set out classifications of different types of incentives based on, for example, the distortive effects of these measures or other criteria. Based on these analyses, it may be possible to identify a limited number of particularly objectionable incentives, with a view towards dealing with them first (as a preliminary step towards a system resembling the classification of subsidies for trade). In creating such a "negative list", the approach taken in the Uruguay Round agreement on trade-related investment measures could serve as an example.

- *Check-list.* Drawing from the best experiences, the Group could elaborate a check-list of points that governments should take into account in their incentives policies and practices.

The Group could conclude its work with a "challenge" round of pledges by countries to reduce the level of incentives. In much the same way in which GATT members that participated in the various liberalization rounds established quantitative goals for tariff reductions, the Group could explore the feasibility of participating countries pledging to reduce certain incentives by some fixed amount (say, 25 per cent) over a given time period (say, five years). The important point is that a demonstration that such a pledge might be feasible could enhance the willingness on the part of all countries to seek an international agreement on incentives.

An important lesson from experiences with earlier efforts to limit incentives competition is the need to take a step-by-step approach to international cooperation on incentives. The international community has begun to deal successfully with subsidies that distort trade. It may be possible to make similar progress towards dealing with incentives that distort FDI flows - a task that is not made simpler by the fact that, in many instances, incentives competition is particularly fierce at the sub-national level.

Notes

- ¹ Malaysian Industrial Development Authority, *20th Anniversary*, October 1987, pp. 1-20.
- ² Capital expenditure is defined as expenditures on factory, plant and machinery.
- ³ Those granted pioneer status are given income tax exemptions on 85 per cent of their statutory income for five years; for companies granted an investment tax allowance, the rate of allowance is 80 per cent and the amount of allowance to be exempted for each assessment year is subject to 85 per cent of statutory income for that assessment year (information supplied by the Planning and Research Division of the Malaysian Industrial Development Authority).
- ⁴ For a full discussion of the interrelationship between investment and technology transfer, see UNCTAD, 1995d.
- ⁵ Paper presented at the third session of the UNCTAD, Trade and Development Board Working Group on the Interrelationship between Investment and Technology Transfer, item 2, March 1994; see UNCTAD, 1995d.
- ⁶ The term "science park" is to some extent used interchangeably with terms like "science centres", "technology poles" or "technopoles". This is partly because science parks actually vary from a few buildings to some thousand square kilometres. Where, for example, the word "park" is substituted

by “centre”, this tends to refer to small and rather specified developments, and the word “centre” is often qualified by phrases such as “innovation”, “incubator” or “business creation”. At the other end of the scale, terms such as “technopoles” normally signify an area of upwards of a thousand square kilometres -- certainly in the Japanese context where it finds its most frequent and probably original use.

- 7 It is reported that, of the more than 400 science and technology parks established around the world, at least 60 per cent are located in the Asia-Pacific region (ESCAP/UNCTAD-DTCI, 1994).
- 8 There are also examples of successful ties between traditional exporters and trading and retailing TNCs, provided in chapter IV. This approach is in marked contrast to the intuitive response of policy makers to subsidize and protect “sunset” industries.
- 9 For a full discussion, see UNCTAD-DTCI, 1995c.
- 10 For more detailed analyses of the effects of incentives in theory and practice, see Graham, 1994; Guisinger, 1992 and 1989; and Lecraw, 1990.
- 11 A similar definition can be found in OECD, 1989a, section 1, p. 9.
- 12 Investment undertakings can also generate negative externalities (e.g., air pollution) that create a negative wedge between private and social rates of return, a case examined by Pigou, 1920.
- 13 The cooperation of Arthur Andersen & Co., SC. in the preparation of this section is gratefully acknowledged.

CHAPTER VII

POLICIES ON OUTWARD FOREIGN DIRECT INVESTMENT

Introduction

Government policies towards outward foreign direct investment (FDI) have received little attention compared to many analyses of policies towards inward FDI. In an increasingly globalized economy, however, outward FDI emerges as a critical option for corporate strategies to enhance enterprise competitiveness and national performance. A number of governments now recognize this. Consequently, they have liberalized -- or are liberalizing -- outward FDI restrictions. This chapter examines the recent liberalization of policies regulating outward FDI, as well as initiatives to promote it. These changes introduce new elements in an evolving international framework for FDI, suggesting a possible expansion of common interests and perspectives among all groups of countries.

Historically, outward FDI was mostly undertaken by firms in a small number of developed countries. Most other firms lacked the ownership advantages needed to engage profitably in external investment. Debates therefore centred on *inward* FDI policies, with capital exporting countries seeking for their transnational corporations (TNCs) open access, non-discriminatory treatment and investment protection in host countries. Promotional policies for outward FDI were usually downplayed, consciously or unconsciously, especially after criticism arose in the early 1970s that TNCs exported jobs. By contrast, for most developing countries and countries in transition -- which typically faced shortfalls in domestic savings as well as balance-of-payments deficits -- outward FDI appeared generally irrelevant, and policy consisted of capital

export restrictions to keep investment at home. Government controls also aimed at preventing local capital flight and discouraging the repatriation of foreign-owned capital. As a result, outward FDI was restricted in the great majority of developing countries and economies in transition (figure VII.1; see also the section in chapter II dealing with Central and Eastern Europe).

Over the past decade, changes in global economic conditions and TNC activities have begun to change the parameters of government policies and interests regarding outward FDI. The liberalization of international economic transactions, including the lifting of capital controls, have combined with rapid technological advances (especially in the application of information technology) to create a global economy, especially in financial markets and increasingly in production (UNCTAD-DTCI, 1994a). As part of this process, more and more firms have established themselves abroad, including firms from small countries and an increasing number of relatively small firms. Consequently, there are now fewer market niches protected against foreign competition, and it is more difficult for governments to sponsor

- Most developed countries have removed their foreign exchange and capital control restrictions. Most of them go even further and also promote outward FDI, mainly in the framework of their development assistance programmes, with some measures reflecting a corollary goal of enhancing national performance. With domestic policy efforts to liberalize outward FDI largely complete, the emphasis among developed countries has turned to promoting international instruments meant to facilitate and protect outward FDI.
- By contrast, such domestic policy reforms have only recently begun in the economies in transition and in developing countries, with most changes being made by developing countries located in Asia. There, liberalized foreign exchange policies are being matched by reforms in regulations governing outward FDI. A number of these developing countries, in fact, have moved on to the promotion of outward FDI.

The experience of developed and developing countries suggests several approaches but no single model for selecting and implementing more liberal outward FDI policies. From restrictive to permissive to proactive promotion measures, many options are available. After examining recent trends and individual country experiences, this chapter discusses various options regarding outward FDI policies, to match particular conditions and objectives.

A. Policies of developed countries

Developed countries historically have permitted or supported outward FDI when such capital flows did not contravene other priorities and appeared to further national economic objectives or served development assistance goals regarding developing countries. Where capital flows were restricted, countries used foreign exchange or capital movement control systems with accompanying licensing or project approval requirements. Through progressive reforms that accelerated in the mid-1980s, virtually all these restrictions had been eliminated by the early 1990s.

1. National policies

(a) *Regulatory policies*

Developed countries now maintain few regulatory measures that restrict outward FDI. The few remaining controls exist primarily to deal with extraordinary political or economic circumstances. This situation contrasts with earlier decades, particularly the 1970s, when many developed countries restricted FDI through exchange controls designed to address balance-of-payments problems.

During the 1980s, the usefulness and effectiveness of such controls was undermined by expanding trade in goods and services, finance requirements of external trade, greater global capital mobility and the development of new international financial instruments. At the same time, changes in exchange rate policies -- notably the adoption of floating exchange rates -- and improved monetary management techniques reduced potential problems that could arise from

lifting capital control restrictions (OECD, 1992). Indeed, most restrictions were eliminated in line with the OECD liberalization codes and the deregulations agreed within an expanding and deepening European Community. More specifically Belgium, Canada, Germany, the Netherlands, Switzerland, the United Kingdom and the United States have a relatively long tradition of liberal outward FDI policies; the United Kingdom, for example, abolished foreign exchange controls in 1979.² A Directive on the liberalization of capital movements among European Community members took effect in mid-1990 (Commission of the European Communities, 1992), reinforcing these policies for Community members, as well as stimulating regulatory changes in some countries such as France. Early in the 1990s, outward FDI restrictions had effectively disappeared in Finland (box VII.1), Germany, Italy, Norway and Sweden. Australia and New Zealand had already liberalized restrictions in conjunction with exchange control reforms in the mid- to late-1980s. Other countries that substantially eased restrictions included Iceland, Ireland and Turkey³ (box VII.2) (OECD, 1992; UNCTC, 1990b).

By the end of 1994, only three OECD members maintained particular requirements on outward FDI. Portugal required authorization for the establishment of branches of credit institutions in a non-European Union member country, and for the establishment in a European Union member country of branches of financial companies that were not subsidiaries of credit institutions. Japan required financial institutions to obtain authorization for foreign investments to safeguard these institutions' financial soundness; it also restricted outward FDI in fishing, pearl culture and leather industries if such investments could harm domestic enterprises. Turkey made prior authorization for outward FDI beyond certain minimum threshold amounts conditional upon a determination of an investment's contribution to the home economy (OECD, 1995).

Box VII.1. Finland's experience

Until the mid-1970s, applications to undertake outward FDI were *approved* (based on the Foreign Exchange Act) by the Bank of Finland only on special grounds, with effects on the balance-of-payments being a major consideration. From the late 1970s onwards, applications were only *rejected* on special grounds.

After the mid-1970s, the Central Bank carried out profitability analyses for industrial investment projects abroad that were considered large in terms of the size and financial resources of the Finnish investment company. Applications were normally approved. The Bank allowed a maximum of 75 per cent of the estimated cost of a project to be financed with funds raised abroad, because of its intention to limit the economy's external indebtedness and to secure sufficient foreign funding for domestic projects.

Since 1988, outward FDI no longer needed the Bank's authorization, with the exception of FDI by firms in the financial sector and private persons. Investment in the financial sector was exempted from authorization the following year, and that by private persons in 1990.

Source: Information provided by the Bank of Finland.

(b) Promotional policies

Beyond these liberalization steps, virtually all developed countries have created a variety of programmes to promote outward FDI (table VII.1). Activities that focus on promoting FDI to developing countries aim at assisting the host countries' economic development as well as

Box VII.2. Turkey's outward FDI policy

Although Turkey does not consider itself a capital exporting country, it does not restrict, in principle, outward FDI. All restrictions on foreign currency movements were lifted with Decree No. 32 concerning the "Protection of the Value of Turkish Currency" in 1985. According to provisions of this Decree, all residents are at liberty to export, through banks and private finance houses, foreign currency cash capital of up to \$5 million (or the equivalent thereof) in order to invest it outside the country or to establish companies, participate in companies or open branches in order to engage in commercial activities. Capital in kind equal to the same amount can also be exported for the same purposes in accordance with the provisions of customs regulations. If such persons wish to export capital for the same purposes in amounts \$5-150 million, the permission of the Ministry must be received. Proposals concerning amounts in excess of \$150 million need to be submitted by the Ministry to the Council of Ministers for approval.

In order to monitor outward capital movements, Turkish banks, private financial institutions and customs administrations notify the activities of Turkish capital exporters to the Ministry within 30 days after the activity date.

In addition, the following information and documents need to be provided to the Ministry within one year after the date of exportation:

- the permission certificate granted by the competent authority in the host country;
- the date the business started;
- the address of the business;
- annual financial reports;
- the profits transferred to Turkey, modifications in capital structure and/or in the amounts of capital.

This information is collected for statistical and monitoring purposes only.

Outward FDI benefited until the end of 1994 from credit in the case of investment proposals with an "Outward Investment Incentive Certificate", issued by the General Directorate of Foreign

Investment. (The investment incentive certificate contains the amount of the incentive, the incentives granted and the conditions for the incentives.) The minimum participation amount for Turkish investors was \$250,000; the maximum credit amount was 25 billion Turkish lira. The credit was repayable over five years in seven equal instalments with a two year grace period. The interest rate charged on these credits was 30 per cent. In order to obtain this incentive, apart from the relevant under-secretary's approval, the investor needed to win the support of the bank which would extend this credit.

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improving national competitiveness and other self-interest motivations, although this varies among countries and programmes. Some countries also have sought to support outward FDI to enhance their TNCs' competitiveness, as part of an overall effort to enhance national economic performance. Generally, these policies seek to reduce the risk associated with such investment. While it is recognized that such fundamental factors as the host country's market size and growth, infrastructure and economic and political stability are more important for the locational decisions of TNCs, appropriate outward FDI policies can encourage investment by helping to overcome market failures and risks that could inhibit outward FDI, such as incomplete or inaccurate information about potential host countries and investment risks.

(Box VII.2, cont'd)

This incentive is not available to outward investors in 1995, except in the case of outward construction projects. For these projects, the following incentives and facilities are also available:

- the 10 per cent withholding tax rate is reduced to zero if the corporate tax rate of the country in which construction takes place is above 40 per cent;
- spare parts of up to 10 per cent of the value of the machinery and equipment within the scope of an Export Incentive Certificate can be imported without paying customs duties;
- construction firms can be exempted from tax, duties and charges accrued in export transactions, including banking transactions and temporary and definite letters of guarantee relating to outward construction services.

Credit facilities are available through the Türk Eximbank to Turkish nationals who undertake investments and construction projects abroad. The following credit schemes are available:

- Country credits insurance scheme / financing investment. The purpose of this facility is to encourage Turkish residents with insufficient capital and foreign exchange to undertake FDI in the Commonwealth of Independent States.
- Outward investment insurance. This insurance scheme is designed to protect Turkish investors abroad against commercial and political risks. Turkish natural persons and firms established according to Turkish laws can benefit from this insurance if their investment would increase foreign exchange inflows. The premium depends on the risk category of the country where an investment is made and whether there is an agreement between Turkey and that country about guaranteeing such investments. The compensation rate is 90 per cent of the insurance amount.

Turkey has signed bilateral agreements to avoid double taxation with 42 countries, with 20 of these being in effect. It is party to the Multilateral Investment Guarantee Agency (MIGA).

Source: Information provided by the General Directorate of Foreign Investment of the Government of Turkey.

Promotional policies for outward FDI can be grouped into three broad categories: information and technical assistance; direct financial support and fiscal incentives; and investment insurance. However, the lines between these functions may not be clearly drawn in the context of particular national programmes, e.g., technical assistance can involve moderate financial support for feasibility studies. At times, this is also the result of the fact that a single agency is responsible for several of these functions. For example, the United States Overseas Private Investment Corporation organizes investment missions for the United States private sector, offers project loans or loan guarantees for FDI in developing countries and economies in transition and insures FDI against non-commercial risks (box VII.3). In other cases, FDI promotional services are carried out within the context of broader development assistance or foreign aid programmes, as exemplified by the United States Agency for International Development.

Table VII.1. Outward FDI promotion programmes of OECD member countries, early 1990s

Country	Information and technical assistance					Financing		Insurance
	Information	Matchmaking	Missions	Feasibility studies ^a	Project development and start-up ^a	Equity	Loans	Guarantees
Australia	•	•	•	•				
Austria	•					•	•	•
Belgium	•	•				•	•	•
Canada	•	•	•	•	•	•		
Denmark						•	•	•
Finland	•		•	•	•	•	•	•
France	•			•	•	•	•	
Germany	•	•	•	•	•	•	•	•
Italy	•	•	•	•	•	•	•	•
Japan	•	•	•	•	•	•	•	•
Netherlands	•	•	•	•		•	•	•
New Zealand	•	•		•		•		
Norway	•	•	•	•	•		•	•
Portugal	•	•	•				•	
Spain	•	•	•			•	•	•
Sweden	•	•		•		•	•	
Switzerland	•	•	•	•	•	•	•	•
United Kingdom						•	•	•
United States	•	•	•	•	•		•	•

Source: OECD, 1993c, pp. 14-17.

^a May include some financial support.

i. Information and technical assistance

Government agencies or government-owned special banks in virtually all developed countries offer information and technical assistance programmes for nationals that intend to invest in other countries. At a minimum, these services include basic information on macroeconomic and business cost factors as well as the legal framework and administrative processes relevant to potential foreign investors in developing and other host countries. This type of service can be particularly important and cost-effective for smaller prospective investors. At the same time, many national programmes appear to lag in assuring the accuracy and timeliness of available information (OECD, 1993c). In a few cases, an information database on home country enterprises interested in investing abroad is available to developing country firms looking for partners (OECD, 1993c). OPIC in the United States, Mondimpresa in Italy, JETRO in Japan, Finnfund in Finland and IFU in Denmark are among the agencies providing this service (Bélot and Weigel, 1992).

Box VII.3. The Overseas Private Investment Corporation

The Overseas Private Investment Corporation (OPIC) has been the key agency of the Government of the United States encouraging private business investment in developing countries and economies in transition. OPIC assists firms that are owned for more than 50 per cent by United States citizens through three principal activities: financing of businesses through loans and loan guarantees; insuring investments against a broad range of political risks; and providing a variety of investor services. All of these activities are designed to reduce the risks associated with FDI.

Investments by OPIC clients may take many forms including conventional equity investments and loans; construction and service contracts; production sharing agreements; leases; various contractual arrangements such as consigned inventory, licensing, franchising, and technical assistance agreements; and other special agreements that investors may devise.

OPIC supports, finances and insures projects that have a positive effect on United States employment, are financially sound, and promise significant benefits to the social and economic development of the host countries. OPIC does not support projects that could result in the loss of United States jobs, adversely affect the United States economy or the host country's development of environment, or contribute to violations of internationally recognized workers' rights.

The agency's assistance is available for new investments, privatizations and for the expansion and modernization of existing plants controlled by United States TNCs. Acquisitions of existing operations are eligible if the investor contributes additional capital for modernization and/or expansion.

There is no requirement that the foreign enterprise be wholly owned or controlled by United States investors. However, in the case of a joint venture, only the portion of the investment made by the United States investor is insurable by OPIC. Neither financing nor insurance will normally be available for investments in enterprises majority owned and controlled by a foreign government. Financing is not available for projects that can secure adequate financing from commercial sources.

Source: Information provided by OPIC.

Proactive FDI promotional programmes disseminate information through publications, seminars, teleconferences, trade fairs and investment missions that involve travel by business executives -- and government officials -- to other countries or the hosting of foreign delegations from prospective investment sites. Matchmaking activities represent more direct interventions that seek to match a particular investor with an identified FDI opportunity. A broader approach highlights potential sectoral investments in a country, relying on the investors to explore specific projects.

Beyond that, most developed countries provide some support for feasibility studies, generally funding about one-half of the costs of this step towards a final investment decision (OECD, 1993c). Some programmes also supply start-up support, particularly for smaller or less experienced investors; this can include assistance in finding financing for a project, preparing legal documents, adapting technology to country conditions and training local personnel. For example, the Netherlands Development Finance Corporation created an FDI promotion service in 1989 that finances feasibility studies and pilot projects, trains managers and employees and funds targeted FDI promotion seminars and missions (OECD, 1993c; UNCTC, 1990b).

ii. Direct financial support and fiscal incentives

Financial support is provided in about a half of the OECD countries through some type of development finance institution that combines assistance to developing countries with support for private FDI projects (OECD, 1993c). Fiscal incentives generally do not differentiate in their application between FDI in developing or developed countries; however, certain incentives may be offered in conjunction with regionally oriented development assistance programmes, such as the United States Caribbean Basin Initiative.

Japan ranks as perhaps the most active developed country promoter of outward FDI in support of both development and national performance goals. At least eight Japanese agencies sponsor programmes that promote outward FDI, with most offering services in conjunction with development assistance activities. The Export-Import Bank of Japan, however, stands out as a unique institution (box VII.4). Created in 1950, the Bank began operations to provide trade finance for exports from Japan's industrialization efforts. Import credits were also offered, particularly for raw materials required by the country's resource-scarce domestic economy. These trade functions quickly led the Bank into investment-related financing that reflected the close relationships that exist between trade and FDI (Ozawa, 1986). As a result, the Bank's charter was specifically revised in 1957 to permit overseas investment loans. Over the next decade, the Bank supported 143 ventures, representing nearly one-fifth of the value of Japanese FDI in manufacturing and non-mineral/energy resource industries. More recently, in the fiscal years 1992 and 1993, the Bank devoted nearly 40 per cent of its financing to overseas loans, over twice as much as export or import loans (some of which would also relate to FDI), and more than all untied development loans (Export-Import Bank of Japan, 1994).

Development finance corporations can provide both loan and equity financing for FDI projects in developing countries, usually taking minority positions that are offered for sale to

the other partners once an operation is profitable. Participation of these corporations lowers the risk and assists in project financing; moreover, both home and host country parties tend to trust the technical expertise and development orientation of the corporations. Many programmes aim at assisting small and medium-sized enterprises, but not all are limited by this restriction. Among the relevant institutions are France's Caisse Centrale de Cooperation Economique, the United Kingdom's Commonwealth Development Corporation, the Swedish Fund for Industrial Co-operation with Developing Countries, and the Société Belge d'Investissement International (UNCTC, 1990b; OECD, 1989a). On a broader scale, the International Finance Corporation, a member of the World Bank Group, also promotes FDI in developing countries through equity, loans, co-financing and organizing commercial bank participation in investment projects.

More specifically, for example, Germany provides loans for the establishment, expansion or buy-out of companies in developing countries. The German Finance Company for Investment in Developing Countries is unusual in that it can provide risk capital as well as long-term loans. The Federal Ministry for Economic Co-operation also grants special loans to small and mid-sized German firms to reduce the risk of using new production technologies for joint ventures in developing countries. Furthermore, FDI in developing countries and economies in transition is supported by governmental capital investment guarantees and by other financial measures such as low interest rates from the German Reconstruction Loan Corporation or consulting and financial contributions by the German Development Corporation (Germany, Ministry of Economics, 1995). Australia and New Zealand both target FDI in the South Pacific, with the latter's Pacific Islands Industrial Development Scheme providing grants and loans to New Zealand enterprises investing in manufacturing or processing operations in the region (UNCTC, 1990b).

Government policy in Canada emphasizes the link between FDI and exports in the operations of the Canadian Export Development Corporation, which offers FDI insurance along with subsidized export financing support to Canadian firms. More generally, Canada confines its general promotion assistance for outward FDI, coordinated through the Canadian International Development Agency, to TNC projects that will benefit Canada by expanding or protecting foreign markets for Canadian goods or services, thus preserving or creating jobs at home (Labbe, 1992; Bélot and Weigel, 1992).

The European Union offers a regional approach to FDI-related development assistance. A European Community Investment Partners programme, created on an experimental basis in 1988, was extended in 1992 and is expected to be further reinforced in late 1995 to provide financial assistance aimed at increasing FDI in Latin America, Asia and the Mediterranean. By end-1994, over 1,000 companies and business associations had used the programme to support joint ventures and long-term licensing agreements (Commission of the European Communities, 1995). The programme helps to finance all stages of a project, including grants for the preliminary identification of interested companies, interest-free loans for the study of the creation of a joint venture, co-financing of an investment itself, and interest-free loans for subsequent expenditures on human resource and technical development. Large TNCs are not eligible for this assistance which focuses primarily on small and medium-sized enterprises. A similar scheme, called Joint Operations Phare Programme, began for Eastern Europe in 1990.

Box VII.4. Japan's Export-Import Bank

High domestic savings and a large, positive trade balance have enabled Japan to become a major supplier of FDI. But this was not always the case. For many years after World War II, balance-of-payments considerations led the Government to permit outward FDI only if an investment promoted Japanese exports or led to resource inputs needed by Japan's domestic industries. These regulations were finally eased in 1969 and eliminated in 1972. Nevertheless, the policy objectives that motivated these regulations shaped Japan's distinctive promotion of outward FDI. The central institution in the design and implementation of Japan's support for outward FDI has been the country's Export-Import Bank.

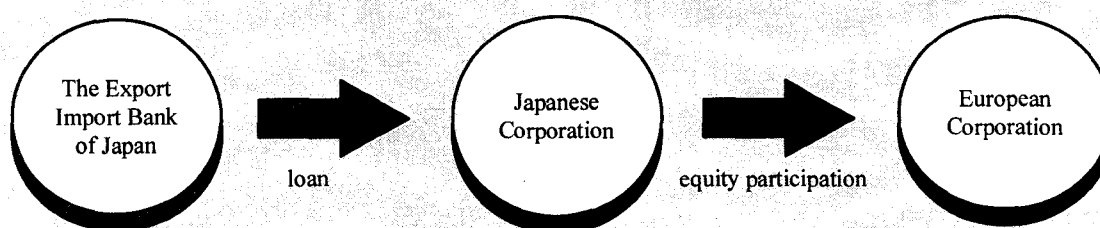
Compared to similar institutions in other countries, the Export-Import Bank of Japan "is unique for its wide range of operations, which includes financing for imports and Japan's overseas investments, untied loans, guarantee for untied loans by private financiers, and equity investment, in addition to that for exports" (Export-Import Bank of Japan, 1994, p.2). The Bank extends overseas investment loans to Japanese firms for investment activities or for operating overseas projects. Loans may also be made directly to foreign joint ventures or to foreign governments or banks to fund equity investments and loans to joint ventures with Japanese enterprises. The Bank may engage in co-financing and guarantees with Japanese financial firms and can take equity in companies conducting business outside Japan provided that the project is of a public nature.

In addition to financing, the Bank helps promote outward FDI through the Research Institute for International Investment and Development whose research helps guide Bank policies, the results of which are made available through external publications. An Overseas Investment Consulting Office also draws on Bank experience to advise Japanese firms considering FDI. (The Bank does not offer investment insurance, but the Ministry of International Trade and Industry does operate such a scheme for risks not covered by private insurers.) (Export-Import Bank of Japan, 1994).

The Bank describes its services available to domestic corporations as follows: (Export-Import Bank of Japan, 1994, pp. 14-15):

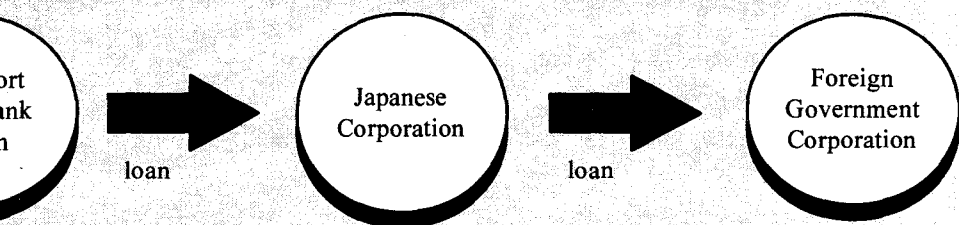
"The Bank extends overseas investment loans to Japanese corporations to provide them with funds for the overseas investments described below. Projects eligible for these loans are mainly those in the fields of natural resource development or manufacturing.

(a) Loans to Japanese corporations for their equity participation in foreign corporations.

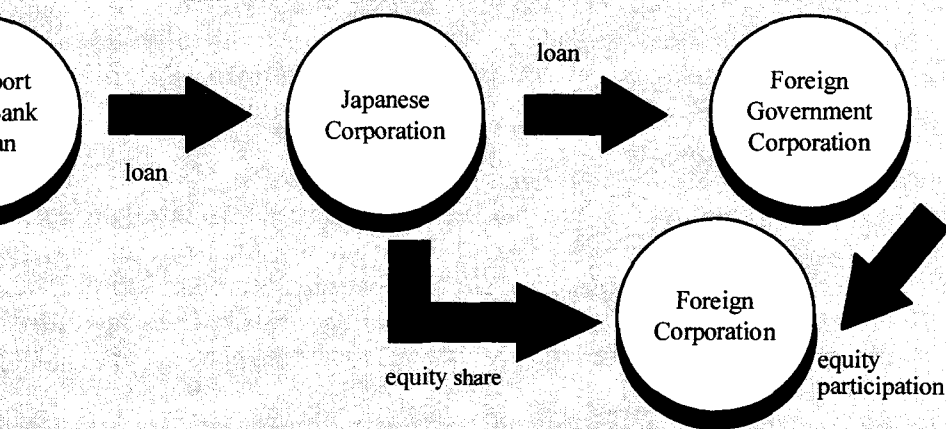


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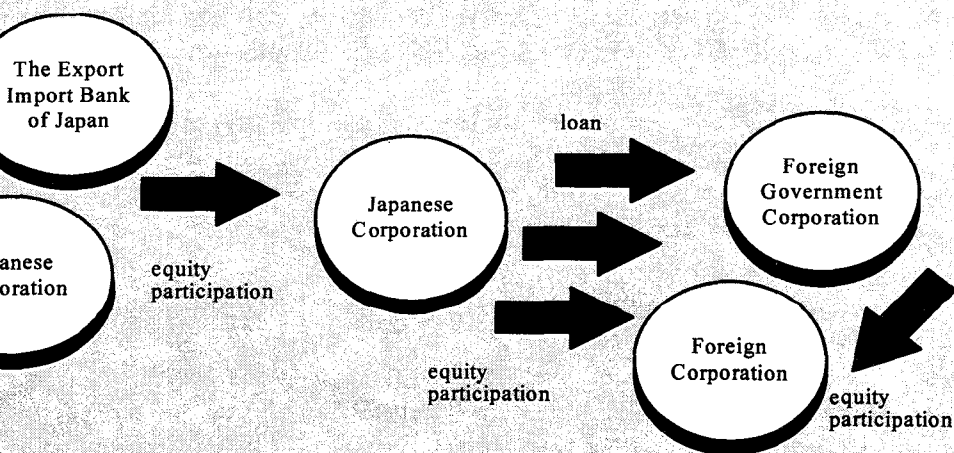
Japanese corporations for their loans to foreign governments or corporations to provide term funds for ventures operating outside Japan. A condition for these loans is that corporations have business relations with the Japanese corporations.



Japanese corporations to be on-lent as loans to foreign governments or corporations participation in foreign corporations in which the Japanese corporations have equity



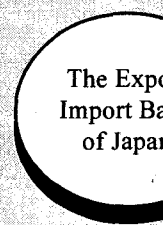
ese corporations for their equity participation in corporations established in Japan pose of making overseas investments in the first three forms (a, b and c).



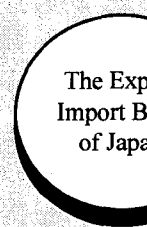
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(Box VII.4, con

(b) Loans to Japan for their equity participation in foreign corporations.



(c) Loans to Japan for their equity participation in foreign corporations.



(d) Loans to Japan for the sole purpose of making overseas investments in the first three forms (a, b and c).



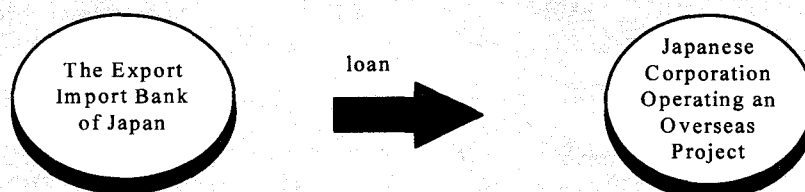
The European Investment Bank, established by the Treaty of Rome in 1958, has also extended its financing activities (loans, grants and risk capital) from Europe into assisting FDI projects in the developing countries of Africa, the Caribbean, the Pacific and Mediterranean regions (Commission of the European Communities, 1992).

iii. Investment insurance

National investment insurance programmes exist in most developed countries to provide coverage for expropriation, war and repatriation risks. The programmes of Finland, the Netherlands, Switzerland and the United States are designed to cover FDI only in developing countries. Countries such as Austria, Sweden and the United Kingdom extend this type of FDI assistance to virtually any country. Many investment insurance programmes require that the FDI being protected generates economic benefits such as increased jobs or revenue for the home country or serves other national interests. Australia, Belgium, France, Germany, Japan and the United States have this type of requirement (OECD, 1993c).

(Box VII.4, cont'd)

(e) Loans to Japanese corporations to provide them with funds required for projects operating abroad. These are also classified as overseas investment loans. The conditions are as follows:



Borrower: (a) Japanese corporations which make capital subscription to and/or acquire shares of foreign corporations as well as make long-term (longer than one year) loans to foreign corporations; (b) Japanese corporations which conduct investment projects outside Japan.

Currency: These loans are principally extended in Japanese yen, but those in foreign currencies are also available where the Bank recognizes a need to provide them.

Interest Rate: The interest rate shall be determined with due consideration for such factors as the type of investment project and market interest rates.

Repayment Term: In most cases from seven to fifteen years, depending on the profitability and the cash flow of the project.

Security: In principle, a bank guarantee or a pledge or mortgage upon the borrower's assets in Japan."

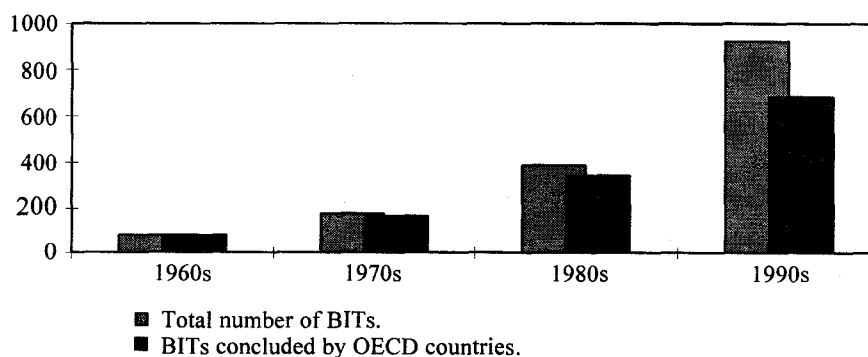
In the United States, for example, the Overseas Private Investment Corporation has provided financing and political risk insurance since 1971 to support United States investment overseas. Operating in more than 140 countries worldwide, OPIC has supported more than \$73 billion in United States investment overseas, generated \$40 billion in exports, and supported more than 100,000 jobs in the United States.⁴ In 1993, the Government of the United States added further foreign policy objectives to the Corporation's mandate, seeking to promote economic growth through FDI in high priority areas such as Russia, South Africa, and the West Bank and Gaza strip in Western Asia. Even in these areas, however, economic benefits are still expected, and a single supported United States-Russian motor vehicle joint venture was backed on the basis that it would provide a net surplus of \$180 million for the United States balance of payments. Increased support for FDI in the former Soviet Union is projected to yield \$5 billion in United States exports and 20,000 domestic jobs (Madeo, 1994).

2. International policies

For the past four decades, developed countries have sought to supplement their domestic policies with international policies aimed at protecting and facilitating outward FDI. An expanding network of bilateral, regional and multilateral agreements has been the result (Sauvant and Aranda, 1994; the principal texts are reprinted in UNCTAD-DTCI, 1995b). Provisions of bilateral investment treaties typically apply to investors from both treaty countries, but most FDI, until recently, has flowed only in the direction of developing countries. Bilateral investment-treaty guarantees provide for non-discriminatory policy conditions for foreign affiliates (i.e., national treatment) and for investment protection. Over 900 such treaties existed as of July 1995, of which 674 had been concluded by OECD countries (figure VII.2). For a listing of the bilateral investment agreements concluded in 1994, see UNCTAD-DTCI, forthcoming.)

In the area of tax policy, most developed countries conclude bilateral agreements to avoid double taxation on TNC operations that would serve as a disincentive to FDI. The number of these agreements now exceeds 1,200 and the network among OECD countries is almost complete. Australia, Belgium, Canada, France and Germany all provide tax-sparing credits as a fiscal incentive for FDI in countries with whom they have a bilateral tax treaty. This approach prevents home country taxation from nul-

Figure VII.2. Growth of bilateral investment treaties, 1959-1995
(Number)



Source: UNCTAD, Division on Transnational Corporations and Investment, based on national sources.

lifying the impact of tax reductions or exemptions granted by developing countries to help attract FDI. Finland, Japan, the Netherlands, Sweden and the United Kingdom also provide various types of tax-sparing incentives (UNCTC, 1990b).

On the regional level, the Treaty of Rome extends equal treatment to foreign investors within the European Union, and all member states encourage outward FDI through policies to promote and protect investment and in the provision of information services. The Asia Pacific Economic Cooperation forum has adopted a set of non-binding FDI principles (Graham, 1994). The North American Free Trade Agreement linked, for the first time, developed and developing countries in a free trade and investment agreement by extending the investment principles developed in the United States-Canada Free Trade Agreement (Gestrin and Rugman, 1994).

The Uruguay Round of Multilateral Trade Negotiations resulted in a number of agreements relevant to FDI (UNCTAD, 1994a; UNCTAD-DTCI, 1994a). The agreement on trade-related investment measures (TRIMs) prohibits local content and trade-balancing requirements imposed on FDI projects, thus facilitating outward FDI by gradually eliminating obstacles to foreign investors. Foreign direct investment is also addressed in the General Agreement on Trade in Services, which, for the first time, provides a framework for outward (and inward) FDI in a sector that now accounts for more than a half of investment flows. The new World Trade Organization is still to decide if complementary provisions on investment should be negotiated (Brittan, 1995). Accords in the OECD provide for establishment rights, freedom of capital movements and related transactions and national treatment. Negotiations on a Multilateral Agreement on Investment -- which were launched in May 1995 -- could draw together and strengthen these intergovernmental commitments on FDI liberalization, protection and facilitation (Witherell, 1995). Furthermore, various TNC-related instruments in the United Nations system -- particularly the World Bank's Convention on the Settlement of Investment Disputes and the Multilateral Investment Guarantee Agreement -- provide the elements of an international enabling framework for FDI which, by its very nature, would cover both inward and outward investment flows.

B. Policies of developing countries and economies in transition

Few developing countries and economies in transition have singled out for attention their outward FDI policies; typically, these are subsumed under general capital-control policies which, in turn, are normally quite restrictive. The reasons appear self-evident. For most of these countries, the potential for outward FDI has been very low to begin with, especially for low-income countries. However, there are possible TNCs in developing countries (see chapter I), and even in low-income countries, however few in number. Moreover, at the macroeconomic level, developing countries and economies in transition were seen to need more, not less, capital and, in any event, saw themselves as having a foreign exchange constraint on development. In addition, capital flight was seen as a major problem for many of these countries, leading to capital controls even though restrictions have often not been particularly effective. Lacking clear positive reasons why outward FDI would benefit the local economy, policy makers have put in place restrictive regulatory policies that aim at keeping investment funds at home.⁵

In recent years, however, this policy stance has been re-evaluated in a number of developing countries. For many of the more advanced developing countries, widespread access to international capital markets by both public and private borrowers has muted concerns of a savings or foreign exchange shortage. In addition, competing considerations have been given more attention. In particular, three primary objectives explain why a number of developing countries and economies in transition have begun to permit or even encourage outward FDI:

- *Retaining or improving market access.* This objective depends to a certain extent on a country's development strategy and its success in creating and nurturing globally competitive firms. Countries following internally-directed, import-substitution strategies generally lagged in giving rise to national firms able to compete in foreign markets. Countries (particularly in Asia) that moved early to an export-oriented development path are, not surprisingly, among the leaders in outward FDI. Their firms followed export channels into foreign markets, often establishing a local presence in order to expand market penetration and avoid actual or anticipated trade barriers. Such trade-supporting FDI was also typical for the former socialist countries, with over 90 per cent of their outward FDI being of this type in 1990 (UN-TCMD, 1992c).
- *Resource access.* This objective encompasses both material and labour inputs. A lack of natural resources or their depletion under industrialization pressures is a persuasive argument for permitting or even encouraging outward FDI. This rationale stimulated promotion of outward FDI from Taiwan Province of China even before its payments position became strong, and explains much of Brazil's FDI in oil exploration. Access to lower-cost labour becomes a similar motivating factor when costs rise in the growing economies of more advanced developing countries, forcing enterprises to search elsewhere for competitive production efficiencies. More recently, access to technology has become a motivating factor, another type of resource often associated with domestic economic restructuring.
- *Economic restructuring.* In some countries, e.g., the Republic of Korea, outward FDI is designed to provide access to new technologies and is expected to aid the economy to restructure and to adapt more closely to the globalizing world economy. In other countries, outward FDI is part of the process of recycling comparative advantage in an interaction between inward and outward FDI (chapter V).

These competing policy considerations have led a number of governments in developing countries and economies in transition to re-evaluate their erstwhile restrictive outward FDI policies and to introduce more liberal and even promotional policies. These have often been associated with balance-of-payments surpluses. For example, when such developing economies as Taiwan Province of China and the Republic of Korea moved into a balance-of-payments surplus, they relaxed regulatory controls, prompting an expansion of outward FDI by national enterprises. However, a sustained balance-of-payments surplus position constitutes a permissive but not a necessary condition for greater outward FDI: recent spurts of outward investment from China and India demonstrate this, as does the fact that the Republic of Korea further

liberalized and even promoted outward FDI after it returned into a balance-of-payments deficit. Decisions on how to liberalize restrictions on outward FDI are influenced by a country's balance-of-payments position, but the process of regulatory liberalization is occurring both in countries with surpluses and substantial foreign exchange reserves and in countries without.

1. National policies

(a) Regulatory policies

The dynamics of liberalization of international transactions in a globalizing economy have set the stage for specific regulatory reforms to liberalize country restrictions on outward FDI. As one expert noted:

“The more extensive are trade links, the greater is the need to provide trade credit and to create foreign subsidiaries to support export sales, while the more difficult and therefore costly controlling the capital account becomes because of the multiplication in the number of arbitrage possibilities that arise in the course of normal business. ... It is only realistic to recognize that the ability to impose effective capital outflow controls must be expected to erode progressively, just as it has been decreasing in past decades (Mathieson and Rojas-Suarez, 1992). Thus the question is not whether to liberalize outflows, but when.” (Williamson, 1993, p. 30).

Liberalization steps are often encouraged in negotiations with trading partners and recognized to be a necessary step for any country that seeks to become an OECD member, which includes becoming subject to that Organization's liberalization codes (Fischer and Reisen, 1993). For example, Hungary is contemplating a new Act on Foreign Exchange that seeks to abolish differential treatment of inward and outward FDI and liberalizes regulations as much as possible, to accompany its application for European Union and OECD membership.⁶ Similarly, the Republic of Korea has applied to join the OECD, an action preceded by its liberalization of international economic transactions.

As regards FDI policies in particular, a general consensus has emerged that inward FDI can contribute to development and is unlikely to cause financial management difficulties in most cases. The improvement in some countries' debt-servicing position has also helped to induce a relaxation in outward FDI restrictions. The fundamental conditions required to relax regulations on outward FDI and to avoid precipitating capital flight may be somewhat more demanding, accounting for the generally slower pace among developing countries in liberalizing outward FDI controls compared to inward FDI restrictions (Williamson, 1993; Fischer and Reisen, 1993). Also of relevance was the experience of several Southern Cone countries (including Argentina and Chile), which undertook rapid internal and external financial liberalization in the late 1970s. Capital controls were then reintroduced following the financial crisis and capital flight associated with external debt problems in the early 1980s. This experience undoubtedly influenced the more gradual financial opening pursued by countries such as the Republic of Korea and Taiwan Province of China (Fischer and Reisen, 1993).

- The authorities of the *Republic of Korea* had maintained an extensive capital control system until the mid-1980s, tightening the controls earlier in that decade in response to a deteriorating current account and a large foreign debt. However, the country achieved a balance-of-payments surplus in 1986. At the same time, wages began to rise (by more than productivity increases and by more than the depreciation of the won), affecting the international competitiveness of Korean firms. Taking advantage of its improved foreign exchange position, the Government relaxed regulatory controls on outward (and inward) FDI as part of an overall economic liberalization plan (Park and Park, 1993). Regulatory reforms simplified application procedures, expedited the approval process and employed both value thresholds and sectoral designations to delimit government screening. One mechanism was to specify minimum project values, requiring only certification from foreign exchange banks for small investments, a notification procedure for mid-range projects, while reserving screening and approval for large foreign investments. By progressively raising the threshold values, the government gradually liberalized its control procedures. Now small projects (under \$300,000) need only obtain validation from foreign exchange banks, while outward FDI valued at up to \$10 million (roughly 99 per cent of all projects) requires notification only. A different approach restricts outward FDI screening by industry rather than (or together with) project value. In 1994, the Republic of Korea adopted a “negative list” system, permitting outward FDI in all but a few business areas specifically listed by the Government (Republic of Korea, Ministry of Finance, 1994).

Outward FDI by Korean firms exceeded inward FDI for the first time in 1990-1991. Despite the return of balance-of-payments difficulties, the country's 1993-1997 Economic Plan, entitled “Shifting towards the new economy”, calls for further “relaxing existing regulations on overseas investments to promote investment abroad, and encouraging joint ventures with foreign firms” abroad (Korea Institute for International Economic Policy, 1993, pp. 22-24).

- Large foreign exchange reserves allowed *Taiwan Province of China* to lift most restrictions in 1987 and to announce an extensive plan to encourage outward FDI. However, this liberalization and the subsequent promotion of outward FDI was preceded by a gradual relaxation of the highly restrictive policies on outward capital flows adopted in the early 1960s. The 1962 “Regulations governing the screening and handling of outward investment and outward technical cooperation projects” set strict and rigid financial requirements for proposed outward investments to be approved. In 1979 and 1984, the 1962 regulations were relaxed, mainly with a view to facilitating the sourcing of raw material inputs by Taiwanese TNCs. Therefore, while the 1987 reforms of the outward FDI regime represented a significant liberalization, these were preceded by a long process during which initially severe controls were gradually relaxed (figure VII.3). At present, approval is subject only to a broad list of national interest criteria. This list includes criteria such as the acquisition of required natural resources or component parts for domestic industries, the improvement of regional trade imbalances, the encouragement of technical know-how imports, and assistance in domestic industrial restructuring, among others. Prospective investors are required to meet at least one of

Figure VII.3. The evolution of the outward FDI regime of Taiwan Province of China

	1962	1979	1984	1987
<i>Financial requirements</i>	<ul style="list-style-type: none"> • Minimum paid in capital NT \$100 million • Debt/equity ratio lower than 200 per cent • Maximum total capital contribution 30 per cent of parent firm's capital • Average net profits to paid-in capital (3 years) higher than 10 per cent • Average net profits in sales (3 years) over 5 per cent • Current assets/current debt ratio lower than 100 per cent 	<ul style="list-style-type: none"> • Minimum paid-in capital NT \$50 million • Debt/equity ratio lower than 300 per cent • Maximum total capital contribution 40 per cent of parent firm's capital 	<ul style="list-style-type: none"> • Minimum paid-in capital NT \$20 million 	<ul style="list-style-type: none"> • Relaxed exchange controls, lifted maximum capital contribution
		<p><i>Incentives</i></p> <ul style="list-style-type: none"> • 5 year income tax exemption <p><i>to</i> <i>type of outward FDI</i></p> <ul style="list-style-type: none"> • Extractive industries • Exploitation of natural resources 	<p><i>Incentives</i></p> <ul style="list-style-type: none"> • 5 year income tax exemption • Financial assistance • Outward investment insurance • Government services <ul style="list-style-type: none"> • Information • Seminars • Business missions • Data bank on business opportunities <p><i>to</i> <i>type of outward FDI</i></p> <ul style="list-style-type: none"> • Extractive industries • Exploitation of natural resources • Production and processing of agricultural products or raw materials for industry • Transfer of technology • Selected enterprises selling to domestic or foreign markets 	<p><i>Incentives</i></p> <ul style="list-style-type: none"> • Reservation for loss in outward investment • Financial assistance • Outward investment insurance • Government support to outward investment to Latin America and the Caribbean <ul style="list-style-type: none"> • Travel expenses • Preferential loans • Preferential insurance • Government services <ul style="list-style-type: none"> • Overseas Taiwan Investment Centre • Overseas Industrial Estates • Investment missions • Information • Seminars • Data on business opportunities • Negotiating agreements with host countries <p><i>to</i> <i>type of outward FDI</i></p> <ul style="list-style-type: none"> • Acquisition of natural resources • Expansion of exports/securing markets • Acquisition of technology • Promotion of exports of technical know-how • Promotion of international economic cooperation • Helping adjustment of industrial structure • Indirect transfer of technology through capital operations
<i>Incentives</i>	None			

Source: Taiwan Province of China, economic affairs authorities (1993).

the conditions set out in the government's list of criteria in order to have an outward investment approved (box VII.5).

- For *Singapore*, the country's small size, labour shortage and lack of natural resources mandated an open economy. Moreover, its goal of developing into a financial centre early on dictated liberal policies towards capital controls. The country's history of liberal trade and investment policies made it one of the few developing countries in the late 1960s not only to welcome but actively to promote inward FDI. This strategy helped create a successful, high-income economy with strong participation by foreign TNCs. Following the 1986 recession, the Government crafted a new initiative conceptualized in a policy document titled "The Singapore economy: new directions". This initiative emphasized the need to seek overseas opportunities, including a more

Box VII.5. The experience of Taiwan Province of China

Four stages mark the development of the outward FDI policy of Taiwan Province of China. Although the first recorded case of outward FDI (for a cement plant in Malaysia) occurred in 1959, the first official policy statement was promulgated in 1962 as "Regulations governing the screening and handling of outward investment and outward technical cooperation projects." Subsequently revised four times, this regulation remains the main policy instrument governing outward FDI. Its initial content and application was strict, setting rigid financial requirements for approval, including specified paid-in capital levels, low debt/equity ratios, and substantial recent net profit performance. These criteria essentially aimed at keeping most investment capital at home to develop the island's economy. In fact, only 123 outward FDI projects valued at under a total \$50 million occurred between 1962-1978 (Taiwan Province of China, economic affairs authorities, 1993).

A second stage, from 1979-1984, was characterized by active promotion of outward FDI, motivated by a desire to secure natural resources for industrial use in the face of the energy crisis and global recession. The paid-in capital and debt/equity ratio requirements were relaxed and reinvestment restrictions were loosened. A 1979 "Statute for encouragement of investment" authorized a five-year tax-exemption for outward FDI solely in extractive industries involved in shipping natural resource products back to Taiwan Province of China. Fifty outward FDI projects worth a total of \$84 million materialized during this period (Taiwan Province of China, economic affairs authorities, 1993).

The third stage, from mid-1984-1986, expanded promotional efforts, particularly to take advantage of the Caribbean Basin Initiative. The paid-in capital requirement was again cut, and the extractive industry tax incentive was broadened to incorporate similar projects by non-extractive firms. The same tax incentive was now also offered to FDI projects engaged in processing and selling agricultural or industrial raw materials products; transferring specifically identified technologies, and other identified product sales by enterprises. In addition, the Export-Import Bank initiated outward investment insurance and provided loans up to 70 per cent of the firm's approved outward investment. Foreign direct investment facilitation services were also begun by an Industrial Development and Investment Center to organize and provide information and seminars for and about Taiwanese manufacturers interested in FDI. This three-year period recorded 77

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active support of outward FDI. An important facilitating factor in the new strategy was the fact that Singapore was in an enviable balance-of-payments position (Capien and Ng, 1990).

- *Malaysia* also maintains liberal exchange controls. Capital export controls have been employed at times but were relaxed in the late 1980s in response to current account conditions which recorded a surplus between 1987 and 1989, before turning negative in 1990 (Fischer and Reisen, 1993). Significant outward FDI began in the 1990s when Malaysian companies responded to rising domestic labour and resource costs by combining their managerial experience with currently plentiful capital to establish foreign operations.
- *Thailand*, up to February 1994, required approval for outward FDI of more than \$5 million; since then that level has been increased to \$10 million per year (for each type of transaction), with no restrictions on industry. In addition, residents are permitted to use foreign exchange that originates from abroad to service external obligations without surrendering or depositing it in domestic bank accounts.
- *India* has used regulatory controls to minimize cash outflows, preferring outward FDI in the form of equipment and machinery. Nevertheless, very much encouraged by the private sector, India liberalized its outward FDI policy in 1992. In parallel fashion, Indian business is being encouraged to explore overseas investments that improve

(Box VII.5, cont'd)

outward investments totaling over \$137 million (Taiwan Province of China, economic affairs authorities, 1993).

Finally, the fourth stage began in mid-1987 when the administration relaxed its foreign exchange controls and further revised the outward FDI regulations. Total capital stock requirements were eased and applications for most outward FDI projects under \$5 million were simplified and accelerated. Approved projects are required to meet one of the following conditions considered to meet national interest criteria:

- acquiring needed natural resources or component parts for domestic industries;
- improving regional trade imbalances or maintain markets for domestic products;
- inducing imports of technical management or production know-how;
- supporting technical cooperation without harming national security or domestic industries;
- promoting international economic cooperation;
- assisting domestic industrial restructuring and product-quality upgrading; and
- indirectly transferring technology to the island through venture-capital operations.

These changes have sparked a record outflow of FDI, with more than 2,000 approved projects valued at close to \$8.9 billion by 1994 (Taiwan Province of China, Investment Commission, 1995).

Source: UNCTAD, Division on Transnational Corporations and Investment.

international trade competitiveness. Requirements for prior approval have been substantially relaxed and automatic approval within 30 days is provided for many outward FDI projects (India, Ministry of External Affairs, undated).

- *China*, since the early 1990s, has embarked on a course to create “world class transnational corporations”, as part of a broader quest for deeper integration into the world economy. As a result, outward FDI policies have evolved (box VII.6). The country’s priorities are reflected in the review criteria of the Ministry of Foreign Trade and Economic Cooperation for granting outward FDI approval, as established in the 1985 Procedures for Examination and Approval for the Management of Non-Trade Joint Ventures Set Up Abroad. They revolve around securing access to markets, acquiring new technology and management skills and securing flows of key natural resources needed to sustain China’s rapid economic expansion, particularly metals and forestry products. However, the People’s Bank of China regulates all outward exchange remittances through its State Foreign Exchange Administration (Wu and Adams, 1993). China limits capital export by encouraging Chinese investors to share fixed investment

Box VII.6. The experience of China

In spite of a number of concerns with respect to outward investment -- especially concerning excessive capital outflows at the expense of domestic investment; the perception that outward FDI did not contribute as much to national development as domestic investment; and the perception that Chinese companies lacked the experience necessary to operate effectively in international markets -- the Government of China began to allow outward FDI in 1979, as part of its broader "open policy." Outward investment was viewed as an important means of integrating China into the world economy, securing a stable supply of raw materials, improving export opportunities and strengthening economic relations with neighbouring countries. But because of its concerns, the Government's approach towards outward FDI was cautious. Specifically, it favoured investments in kind (equipment, know-how and manufacturing materials) to avoid excessive capital outflows. It also encouraged outward investments that would generate benefits for the domestic economy, such as resource and market seeking FDI.

Since the initial reforms were implemented in 1979, the approval process has been gradually liberalized. Prior to 1983, when the Ministry of Foreign Trade and Economic Cooperation (MOFTEC) became the focal point for the screening of outward FDI, the authority for approval of all outward FDI projects was highly centralized. After 1983, all projects remained subject to screening, but smaller projects and projects with Chinese equity in kind were subjected to less strenuous screening procedures. In addition, many investment projects simply escaped the screening process. Finally, the screening process is largely limited to original investments and, therefore, reinvested earnings by Chinese foreign affiliates that have passed the original screening process are usually not subject to subsequent further screening. Liberalization measures were codified in the "Provisional regulation for approval procedures and administration of non-trade related outward FDI" of 1985, the "Administration of foreign exchange for outward investment" of 1989 and the "Approval procedures and administration of overseas investment" adopted in 1993.

The regulatory regime and approval process governing outward FDI involves different levels of government, depending upon the type, scale and location of investments being proposed. These included local authorities, MOFTEC, the State Planning Commission, the State Council, the Ministry of Finance, the Administration of State Assets and the State Foreign Exchange Administration. Projects worth more than \$30 million are still subject to approval by the State Council. Projects valued between \$1 million and \$30 million, as well as projects involving government loans, or guarantees for foreign loans require the submission of a feasibility study to the State Planning Commission and the details of the project to MOFTEC. Projects valued under \$1 million are approved by the Commission of Foreign Trade and Economic Cooperation or by the ministries responsible for the prospective investor.

In addition to this gradual liberalization of China's outward FDI regime, the Government started to promote some types of outward FDI beginning in the late 1980s. In general, all foreign affiliates have been exempted from taxes for the first five years of their existence. After this period, foreign affiliates pay taxes on earnings of 20 per cent. In addition to these general incentives, the Government also started to promote outward FDI projects that could serve specific objectives. These included:

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The experience of these countries suggests that a comfortable balance-of-payments situation facilitates the liberalization of outward FDI policies. But it suggests also that balance-of-payments concerns do not preclude liberalization, particularly in the face of competitive pressures which drive firms to wish to exercise the strategic option for such investment. From a firm's perspective, what matters is not the payments position of the country but the financial position of the enterprise and the competitive pressures under which it has to operate. Enterprises in a number of developing countries have encouraged their governments to liberalize outward FDI policies to help them face these pressures.

(Box VII.6, cont'd)

- channelling advanced technology and equipment back to China;
- securing stable sources of raw materials that cannot be sourced or are scarce in China;
- contributing to foreign exchange earnings and generating export opportunities;
- contributing to stronger economic ties with neighbouring countries and countries included in China's development assistance programmes.

The methods by which the Government has promoted the above-mentioned types of outward FDI have included tax incentives, subsidies, national bank loans with preferential terms, and better access to the domestic market for goods produced by Chinese foreign affiliates.

The Government has also sought to link official development assistance (ODA) to FDI. It has done so by encouraging recipient governments to use ODA loans to attract Chinese investment in existing projects and by using ODA funds to establish joint ventures involving Chinese companies. Since 1991, ODA-related outward FDI projects have been established in a number of developing countries, especially in Africa. If prospective investors in the electronics and machinery industries plan to make their investments in kind, they are exempted from paying a "security deposit" (5 per cent of the value of the proposed investment) to the Government, and if proposed investments in these sectors are less than \$1 million, they are exempted from the approval process.

The Government of China has also promoted FDI to Hong Kong. For example, in 1986 the China International Trust and Investment Corporation (CITIC) acquired the Ka Wah Bank, and China Merchants Holdings Ltd. acquired Union Bank. Other major investments in Hong Kong by Chinese companies have included the Bank of China Building (\$130 million), the second harbour tunnel (\$390 million), and the partial take-over of Cathay Pacific Airline by CITIC (a 12.5 per cent stake for \$260 million).

While the general trend during the 1980s and the early 1990s has been a gradual liberalization of China's outward FDI regime, concern over the lack of government control beyond the initial screening process and the poor performance of some Chinese foreign affiliates have motivated the Government to strengthen its post-approval monitoring capabilities. However, this is not likely to decrease Chinese outward FDI significantly in the long term (although it may have a short-term dampening effect), given the Government's commitment to the ongoing internationalization of the Chinese economy and the important role that Chinese TNCs have played in this process since 1979.

Source: Zhan, 1995.

Still, there is no denying that countries facing foreign exchange constraints confront a policy dilemma concerning outward FDI policies. The allocation of scarce exchange resources requires trade-offs among competing objectives (financing of imports, servicing of debt, servicing of inward FDI, financing of outward FDI, etc.). Nevertheless, most countries should be able to develop calibrated and phased strategies on outward investment that fit their own unique conditions and support the efforts of their enterprises to maintain their international competitiveness.

(b) Promotional policies

In the developed countries, promotional policies typically fall under an umbrella goal of encouraging FDI in developing countries, with variations in relative emphasis on this objective as compared to enhancing home country competitiveness. A few advanced developing countries (such as Malaysia) also espouse development assistance objectives, but most developing countries focus on competitiveness factors. Specific programme goals vary widely, dependent on variables such as the stage of economic development, sectoral competitiveness of national firms, balance-of-payments conditions, regional integration ties, and broader foreign policy concerns. Moreover, their nature varies in type, ranging from information provision to more complex and costly subsidies or direct involvement in specific FDI projects.

i. Information and technical assistance

The earliest and easiest form of outward FDI promotion is the provision of information and technical assistance. The scope and content of such promotion vary with country characteristics, including especially the nature of the local business-government relationship:

Box VII.7. Management training and outward FDI: the experience of China

The technical and logistical complexities of outward FDI projects dictate the need for personnel with international management skills. In addition to detailed knowledge about host country markets

in which FDI projects are planned (e.g., language, business culture, competition of suppliers, distribution networks, etc.), managers in TNCs also need to have a good understanding of the intricacies of international legal frameworks, international finance, communications, and customs regulations, among a host of other issues.

In the case of Chinese TNCs, a lack of management skills related to international trade acted as an impediment to outward investment. In response to this challenge, the Ministry of Trade and Economic Cooperation (MOFTEC), in conjunction with UNCTAD, Transnational Corporations and Investment, initiated a training programme in September 1994 to strengthen management skills relevant to the internationalization of Chinese business. The specific objectives of this programme were to impart formal knowledge about the trade process of enterprises, especially regarding the establishment and management of foreign affiliates, and to create a forum in which over 60 senior and middle managers from leading Chinese companies could exchange information on their experiences with outward investment. The programme is, clearly, just a small step, but one element in a process of preparing for global integration through outward FDI.

Box VII.8. The evolution of Chile's outward FDI regime

Among the Latin American countries, Chile has recently taken important steps towards liberalizing restrictions on outward FDI. The evolution of the outward FDI regime in Chile is related to its general macroeconomic performance. When the balance-of-payments situation improved at the beginning of the 1990s, outward FDI regulations were relaxed and the Government made it easier for local companies to look abroad for business opportunities, partly driven by the relatively small size of the local market; ownership advantages of national firms; and the benefits to be reaped from advantageous conditions provided for in several commercial agreements. Although the Government maintains a *laissez-faire* approach to economic activity, with foreign exchange reserves topping \$ 15 billion in 1995, Chilean companies are being encouraged to invest outside the country through, for example, the introduction of measures to avoid double taxation of outward FDI.

Evolution of the regulatory regime

Control of outward FDI transactions by the Central Bank began in 1975. During 1975-1978, outward FDI projects were authorized directly by the Council of the Central Bank of Chile. Since 1979, the regulatory regime for outward FDI is defined in Chapter XII of the exchange regulations of the Central Bank of Chile. In the 1979 regulations, outward FDI was defined as capital investments made for the purpose of:

- constituting new companies abroad;
- acquiring companies already established;
- opening agencies or branches.

Capital investment could be made in convertible foreign exchange and in the form of machinery and equipment priced in freely convertible foreign exchange. The main requirements were as follows:

- Previous authorization of outward FDI by the Central Bank in all cases upon presentation of a detailed description of the project, including, among other things, the amount of the outward investment, its share in the total investment project, expected benefits, flow of capital, sources of financing and detailed description of other investments already made by the investor. The investor needed to show that local taxes had been paid.
- Previous authorization from the Central Bank to access foreign exchange.
- Outward FDI had to be registered in the host country.
- Notification to the Central Bank when the capital contribution had been undertaken.
- Filing of annual reports and accounts with the Central Bank.
- Profits were to be remitted to Chile within 30 days following distribution.
- Capital was to be repatriated to Chile within 30 days after liquidation.
- Payments to co-signers or guarantees were authorized only if the Chilean investor owned more than 50 per cent of the entire project abroad, or the outward investment was a subsidiary or branch of a Chilean company.

These regulations were complemented in 1980 with the following additional requirements:

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(Box VII.8, cont'd)

- Foreign investors were required to submit to the Central Bank a certificate of earnings and received profits, together with an indication of the period during which the profits were made and what share of a given project they accounted for.
- Profits had to be exchanged in the formal exchange market within ten days after the date of remittance.
- A limited period of 60 days was established to report on the capitalization of profits.

In 1990, some aspects of this regime were liberalized as follows:

- Outward investments could also be made through specific contracts.
- Capital investment in machinery and equipment was to be executed in accordance with the current foreign trade regulations.
- The time limit for the remittance of profits to Chile was extended to 90 days after the distribution date.
- The time limit for the repatriation of capital was extended to 90 days, after which the capital should be exchanged in the formal exchange market within ten days.

Important changes were introduced in 1991 which eliminated many of the previous restrictions and provided for two parallel regimes, depending on whether the outward FDI operations were made through the official exchange market (called the formal exchange market (Chapter XII, Part A) or were made outside of the official market (called informal exchange market) (Chapter XII, Part B).^a The main changes introduced by the 1991 regulations were:

- Part A expands the definition of outward FDI to include the enlargement of related activities, production or commercialization abroad in the context of the expansion of export markets and the improvement of commercial channels.
- Capital investment under Part A can be made in convertible foreign exchange (machinery and equipment is no longer included as a capital investment).
- Outward investments made under Part A, subject to certification, are considered authorized if the Central Bank has not decided within 30 days.
- Access to the formal exchange market for operations made according to part A requires previous authorization.
- For Part A investments, the capital contribution must be undertaken within a maximum term of 180 days. A subsequent term of 60 days is stipulated to inform the Central Bank.
- The time limit for profit remittances to the country for Part A investments is extended to 120 days after distribution date. The limit for the liquidation of convertible foreign exchange in the formal exchange market is extended to 11 days.
- The time limit to repatriate capital for investments falling under Part A is also extended to 120 days, and 11 days to convert the foreign exchange in the formal exchange market.
- The capital payments made to cover co-signers or guarantees under Part A investments must be transferred through the formal exchange market.
- For investments made with foreign exchange not acquired in the formal exchange market (Part B), authorization is not required. Instead, the investor is required to inform the Central Bank within a period of 20 days.

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(Box VII.8, cont'd)

In September 1994, the Central Bank included Part C in Chapter XII. Part C deals with the acquisition by banks established in Chile of shares of banks established abroad, with the following requirements:

- Previous authorization by the Central Bank and additional authorization by the Superintendent of Banks and Financial Institutions.
- The total amount of outward investment cannot exceed 20 per cent of the capital and reserves of the investor bank after the investment has been undertaken.
- Foreign assets weighted by risk, according to official criteria and methodology, cannot exceed more than ten times the net equity of the investor bank.
- If the maximum coefficients are exceeded in response to an increase in the assets of the investor bank, the Superintendent of Banks and Financial Institutions could establish the term to eliminate the excess.
- Requirements on profit remittance and capital repatriation are in accordance with Chapter XII, Part A.

In June 1995, the Government announced further liberalizations in the capital account, by allowing institutional investors to invest fixed-rent assets abroad. This further liberalization of portfolio investments *de facto* opens additional possibilities for financing outward FDI.

Outward FDI promotion

There are no specific national policies aimed at promoting outward FDI, nor are there any national insurance schemes for investments of national origin (but Chilean companies have access to international insurance mechanisms); general financial or non-financial incentives do not exist, other than the granting of tax credits for taxes paid on profits by Chilean investments abroad.

At the international level, Chile has entered into bilateral treaties for the promotion and protection of outward FDI with Belgium, Croatia, the Czech Republic, Denmark, Finland, France, Germany, Italy, Norway, Portugal, Spain, Sweden and Switzerland in Europe, and with China and Malaysia in Asia. Moreover, Chile is a member of the Multilateral Investment Guarantee Agency (MIGA) and the Asean Pacific Cooperation Council and has endorsed the recently adopted Investment Principles. In all these instruments, reciprocal commitments exist for the liberalization and encouragement of FDI.

Source: Cid, 1995, based on official information.

^a The formal exchange market involves transactions made through the banking system. The Central Bank of Chile may request that certain transactions be executed only through the banking system and through legally authorized exchange houses. Such is the case with transactions related to import or export of goods and services, foreign loans, capital flows and profit remittances. The informal market consists of those foreign exchange transactions which can be made outside the formal market. These do not require a previous authorization by the Central Bank of Chile but, on the other hand, do not benefit from certain advantages available through the formal market, such as tax credits for taxes paid abroad. The informal market acts as an important self-adjusting mechanism of the exchange rates.

- *Hong Kong*, for example, has traditionally pursued a non-interventionist policy, with no controls on outward FDI. Direct promotional initiatives were not undertaken until 1989, when training facilities and technical services were made available by the Industry Department to firms investing abroad (OECD, 1993d).
- *Singapore's* Economic Development Board, which manages a programme to attract inward FDI, began in the late 1980s also to facilitate outward FDI, using overseas offices to establish a database on investment opportunities. In 1992, the Board received a renewed mandate to promote outward FDI, particularly in the Asian region where Singapore's companies could access more abundant land, labour and other resources. Government, statutory boards, the private sector, academia and the workforce were all briefed and consulted on issues related to promoting outward FDI. The result was the programme Regionalization 2000, which encourages local firms to invest abroad. To implement this programme, the Board set up an International Business Development Strategic Business Unit that analyses foreign market potential, helps match project opportunities with Singapore companies, forges linkages between FDI projects and the Singapore economy, and utilizes tax and financial incentives (including low cost loans, grants for business development, marketing and investment, training), together with government-to-government business councils to promote outward FDI (Singapore, EDB, 1993). This approach can also include the creation of company consortia for outward FDI that include foreign affiliates in Singapore as well as locally-owned enterprises. In 1993, the Board organized 38 overseas missions for over 600 local firms and foreign affiliates in Singapore; it successfully coordinated 150 outward FDI projects, split almost equally between infrastructure, manufacturing and service-related ventures. Over one-half of the new projects were in China, with another one-fifth located in South Asia (Sreenivasan, 1994).
- *Thailand* is another country in which rising labour costs, resource availabilities, concern about protectionism in foreign markets, and new market opportunities in emerging economies have combined to stimulate outward FDI. This issue has received attention at the highest level: at a meeting chaired by the Prime Minister in August 1991, Thailand's Board of Investment, which is responsible for the promotion of inward FDI issued new policy guidelines to encourage outward FDI to maintain or expand foreign markets and to gain access to raw materials and technology. The Office of the Board of Investment (specifically, its Overseas Investment Unit) facilitates Thai involvement in overseas investment projects in targeted countries, namely Cambodia, China, Lao People's Democratic Republic, Myanmar and the members of ASEAN including Viet Nam. (Since the need for convertible currencies for investments in those countries is limited, any foreign exchange constraint is likely to be less strong there, as will be discussed further below.) The Office of the Board of Investment helps identify FDI opportunities, conducts feasibility studies, examines relevant rules and regulations, organizes investment missions, and coordinates with agencies in charge of FDI in countries that host Thai FDI (Vackrarish, 1992; OECD, 1993d).

In general, many developing countries use existing overseas investment offices to gather information and inform the local business community about outward FDI opportunities. Some technical assistance may be provided, especially to small enterprises, similar to the trade assistance historically given to new exporters.

ii. Direct financial support and fiscal incentives

Some developing countries also grant direct financial support and provide fiscal incentives to promote desired outward FDI. It is not obvious from an economic standpoint why capital exports should be subsidized, but the measures are an indication of the importance these countries attach to facilitating the internationalization of their firms. Examples are:

- The Government of the *Republic of Korea* supplements information and technical assistance services regarding outward FDI with financial and fiscal incentives. The Export-Import Bank of Korea provides both information services and overseas investment credits. An Overseas Investment Information Center gathers and provides information on countries and industries, offers consultation and advisory services, arranges promotional seminars and hosts visitors interested in Korean investment (Republic of Korea, Ministry of Finance, 1994). As well as trade finance, the Bank provides FDI credits with preferential rates covering up to 90 per cent of the investment amount. (Compared to Japan's Export-Import Bank, however, the Korean facility devotes a relatively small proportion -- under 5 per cent -- of its credit commitments to outward FDI.) Small and medium-sized firms, whose outward FDI for labour-intensive manufacturing operations has been increasing recently, benefit most from this support.⁷ But support is also available to large enterprises, in an extension of the Government's earlier efforts to support the creation of *chaebols* in heavy industrial sectors and in complex, technologically demanding activities. *Chaebol* enterprises are now among the most active foreign investors from developing countries, seeking market share in host countries and access to new technologies and skills in developed countries (UN-TCMD, 1993b). Resource access is promoted by the Korea Petroleum Development Corporation and the Mining Promotion Corporation, which support surveys to develop essential foreign resources and may provide initial and operating capital for FDI projects. Tax incentives for outward FDI include loss-reserve provisions -- which allow for a reservation for losses of up to 20 per cent of the total investment for a period of two years, effectively reducing the income tax payment for the year it is accounted -- a foreign income-tax credit, and the deductibility for resource-development projects granted host country income tax exemption on dividends (Republic of Korea, Ministry of Finance, 1994; Export-Import Bank of Korea, 1994). The Korean Export-Import Bank also administers overseas investment loans for the Economic Development Cooperation Fund, an aid programme for other developing countries, which extends credit for economic co-operation projects too risky or low in return to qualify for commercial credits (OECD, 1993d).
- *India's* Export-Import Bank has added outward FDI promotion to its objectives. An Overseas Investment Finance programme provides equity finance for overseas joint

ventures through term export credits serving as bridge finance or by way of refinancing to commercial banks, covering up to 80 per cent of the equity contribution. Indian companies can also obtain equity finance for establishing wholly-owned foreign affiliates or for acquiring foreign companies (Export-Import Bank of India, 1994).

- *Singapore's* approach to promoting outward FDI attempts to replicate the strategy used for domestic development, combining tax and financial incentives with close government-business coordination. Initial tax incentives in 1988 included a write-off for overseas investment losses and the abolition of some taxes on overseas earnings, dividends and management fees. These measures parallel the type of benefits offered to inward FDI (Capien and Ng, 1990). Specific programmes implemented include the Local Enterprise Finance Scheme, the Local Enterprise Technical Assistance Scheme, and the Business Development Scheme Law, 1995. The first of these schemes alone provided \$1.2 billion of loans to support local enterprises and their outward investment projects between 1987 and 1993. Fiscal incentives have also played an important role in supporting outward FDI: between 1987 and 1993, these amounted to \$326 million (table VII.2). Among the incentives are some that help local firms (including foreign affiliates) to set up regional headquarters in Singapore. New fiscal measures adopted in 1993 include an overseas enterprise incentive allowing a ten-year income tax exemption for firms expanding abroad, a double tax deduction for expenses in developing FDI opportunities, and an overseas investment incentive to facilitate the remittance of foreign income (Sreenivasan, 1994). Large, government-linked corporations (such as Temasek Holdings, Keppel, Singapore Telecom and the Government of Singapore Investment Corporation) also play an important role, sometimes led by former high-ranking civil servants.⁸

Table VII.2. Singapore: the value of incentives for local enterprises and their outward FDI, 1987-1993
(Millions of dollars)

Year	Loans			Grants		Fiscal incentives		Total incentives
	A	B	C	D	E	F	G	
1987	137.3	..	1.4	0.0	0.4	11.4	4.5	155.1
1988	126.3	..	1.9	0.0	0.9	18.9	6.6	154.5
1989	139.1	16.0	2.8	0.1	1.0	16.0	7.4	182.5
1990	177.4	21.0	4.5	0.1	1.0	43.4	6.5	253.8
1991	206.0	12.7	6.0	0.1	0.9	68.7	6.9	301.3
1992	208.0	6.1	16.2	0.1	0.8	40.6	10.2	282.0
1993	238.4	1.4	4.7	0.1	1.6	71.5	8.4	326.0

Source: Adapted from Low, 1995, tables 17 and 18.

A: Local Enterprise Finance Scheme.

B: Automation Licensing/Extended Automation Scheme.

C: Local Enterprise Technical Assistance Scheme.

D: Business Development Scheme.

E: Product Development Assistance.

F: Investment Allowance Scheme.

G: Double taxation agreements.

- *Thailand* does not provide fiscal incentives for outward FDI. However, the Export-Import Bank of Thailand provides enterprises in Thailand (including majority foreign-owned affiliates) with access to the following facilities: (1) investors wishing to export used machinery from Thailand to their foreign affiliates can have access to long-term loans, with interest rates not exceeding LIBOR plus two per cent; the maximum value of a loan is 85 per cent of machinery value; (2) the Bank may participate in certain FDI projects after taking the following factors into account: activities beneficial to the host country's economy; activities that contribute to Thailand's expansion of trade and production; projects that are commercially viable.
- The Government of *Malaysia* has also reassessed its outward FDI policy, noting that, "with increasing globalization of trade, it is necessary for Malaysian exporters and manufacturers to remain competitive. Rising production costs, tight labour-market conditions, depleting local resources and cost competition from new developing economies make it economically necessary for local companies to reassess their operational strategies. Therefore, by investing overseas, they may at least be guaranteed of market access and the supply of raw materials and components at competitive prices" (MIDA, 1993). In line with this recognition, it encourages outward FDI, undertaking promotional programmes that operate as mixed public/private ventures. But, "as Malaysia is not a capital exporting country, any deliberate policy to encourage investments overseas must be done selectively and for specific purposes" (MIDA, 1993), to ensure there will not be an adverse impact on the balance of payments situation and on the country's own industrial development programme. In its 1991 budget, the Government introduced incentives to encourage Malaysian firms to invest abroad, especially in areas in which Malaysian firms have special expertise (such as in resource-based manufacturing and processing of agricultural products). For outward FDI that met certain criteria, the following incentives were offered: (1) tax on income earned from overseas investment and remitted back to Malaysia would be abated by 50 per cent; dividends paid from the tax-exempt income would also be exempted from income tax, this exemption is for a period of five years after the company commences operation and makes profits; (2) pre-operating expenses such as cost of market research would be allowed as a deduction for income tax purposes.

To be eligible for the tax incentives, the proposed overseas investments by Malaysian-owned and locally-incorporated companies should meet one of the following criteria: (i) the project should be undertaken to overcome market access problems and utilize Malaysian raw materials, parts and/or components; (ii) the project should supply inputs required by domestic industries in Malaysia; and (iii) projects should contribute to South-South cooperation. In the 1995 budget, the Government went one step further and decided to abolish the tax on remitted overseas income in order to promote outward FDI and encourage profit repatriation.

- *Taiwan Province of China* offers special financial support for small and medium-sized firms seeking to invest in Latin America and the Caribbean. These promotional devices include subsidies for travel expenses together with preferential loans and partial

payment of preferential investment-insurance premiums. The Export-Import Bank provides outward investment insurance and provides loans up to 70 per cent. A five-year tax-exemption is offered to outward FDI projects in extractive industries, and to projects involving the processing of raw materials, the transfer of specifically identified technologies, and other identified product sales. Tax provisions further provide for FDI loss reserves -- as in the case of the Republic of Korea -- and a tax-credit system for foreign income taxes that is a unilateral concession, not requiring a bilateral tax treaty (Ming-I, 1994).

These examples suggest that, in many cases, the countries involved have adapted financial techniques from programmes used to promote domestic industrial development and/or incentives provided to inward FDI. Financial support for outward FDI can also evolve from trade-based export promotion programmes, especially where FDI is associated with increased exports.

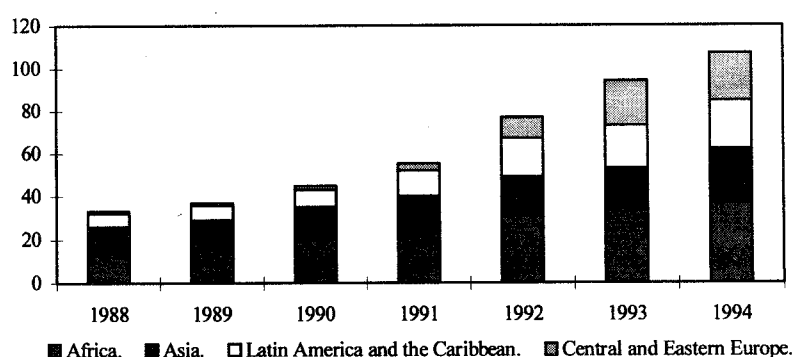
iii. Investment insurance

Outward investment-insurance programmes have not been priority concerns for developing countries and economies in transition because, until recently, there were few potential users of such services. But, as in developed countries, national programmes exist. In the case of the Republic of Korea, the country's Export Insurance Corporation offers outward investors up to 90 per cent coverage against political risk. But perhaps the need to provide such insurance is alleviated by the establishment of MIGA in 1985, which provides insurance for non-commercial risks to firms from member countries undertaking outward FDI (box VII.9). Since its establishment, 109 developing countries and countries in transition have become members (figure VII.4).

2. International policies

Until recently, developing countries and economies in transition dealt with international arrangements on FDI from their perspective as host countries. The emergence of these countries as home countries is, therefore, not surprisingly also leading to evolving attitudes in this area. This is most obvious in the growth of bilateral investment protection and promotion treaties signed among developing countries and economies in transition

Figure VII.4. Number of developing countries and economies in transition members of the Multilateral Investment Guarantee Agency, by region, 1988-1994



Source: MIGA.

(figure VII.5): only two such treaties were negotiated in the 1960s, followed by 12 in the 1970s, 46 in the 1980s, and 154 in the first half of the 1990s. The Republic of Korea, for example, had concluded bilateral investment protection agreements with 22 developing countries and economies in transition by January 1995; China had concluded 46, Argentina 18 and Egypt 19. (For a listing of the bilateral investment protection agreements conducted in 1994, UNCTAD-DTCI, forthcoming).

Box VII.9. The Multilateral Investment Guarantee Agency

Although FDI to developing countries has boomed, and is also flowing to the economies in transition, concerns about political risks exist and have, in fact, led to increased demand for political risk insurance. The Multilateral Investment Guarantee Agency (MIGA) was precisely created to provide non-commercial (i.e., political) risk insurance to private foreign investors in developing member countries; it also renders promotional and advisory services to developing member countries to improve their ability to attract FDI. The Agency's investment insurance programme covers foreign investments against the major political risks of currency transfer, expropriation and war and civil disturbance. Its membership (128 as of July 1995) is open to all World Bank members.

MIGA can insure new investments and the expansion, modernization, privatization, or financial restructuring of existing investments. Three aspects of MIGA's coverage are particularly noteworthy:

- It is non-cancellable by the Agency (unless the insured defaults on its contractual obligations), though it can be terminated by the insured on any anniversary date.
- It is long term, and can be issued for up to 15 (sometimes even 20) years.
- It can cover foreign private investments in, as well as between, developing member countries. MIGA also enjoys great flexibility in covering different forms of investment, such as equity, shareholder loans, loan guaranties, technical assistance and management contracts.

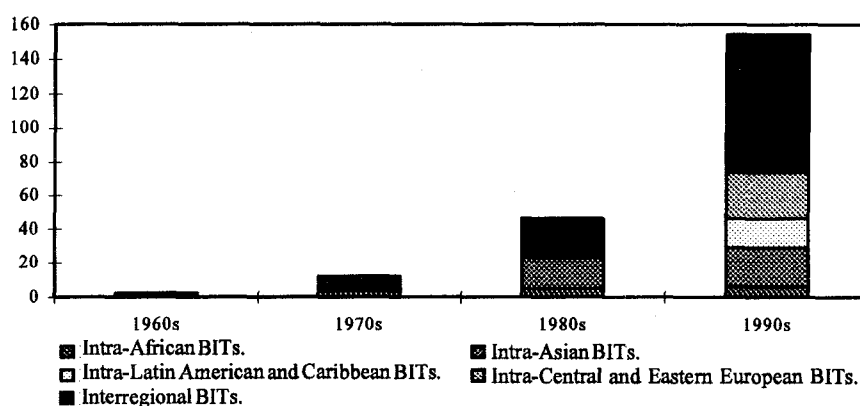
The Agency's guarantee activities have expanded rapidly from the issuance of its first contract in financial year 1990. In financial year 1995 (ending 30 June 1995), MIGA issued 54 guarantee contracts totalling about \$672 million in coverage. (These totals compare with 38 guarantee contracts issued in financial year 1994, totalling \$372 million in coverage.) The insured investments cover a wide range: from a copper products facility and machine tools manufacturing plant in China to a pension management fund in Peru, an ecotourism project in Costa Rica, and private power plants in Honduras and Jamaica. The increase in demand for MIGA's insurance services is also reflected in the number of preliminary applications received from prospective investors; in early 1995, they arrived at a rate of about 50 per month. As a result of its guarantee programme, MIGA has facilitated over \$6 billion in FDI in its developing member countries and over \$930 million in member countries in Central and Eastern Europe.

Source: Information provided by MIGA.

Developing countries and economies in transition are also increasingly concluding double taxation agreements among themselves. The Czech Republic, for example, has signed 22 bilateral taxation treaties, Poland 38 and the Republic of Korea 19. In addition, a number of regional agree-

ments provide insurance for FDI, e.g., the Convention Establishing the Inter-Arab Investment Guarantee Corporation and the Articles of Agreement of the Islamic Corporation for the Insurance of Investment and Export Credit (UNCTAD-DTCI, 1995b).

Figure VII.5. Bilateral investment treaties among developing countries and economies in transition, by region, 1960s-1990s



Source: UNCTAD, Division on Transnational Corporations and Investment, database.

Increased outward FDI from developing countries and economies in transition may also shift perspectives and attitudes towards international agreements on FDI. As already noted, historically, these countries viewed the negotiation of such instruments primarily from the perspective of host countries, concerned principally with reducing possible negative impacts from TNC operations and placing responsibilities on outward investors. As countries began to recognize the potential benefits of FDI, they liberalized inward investment restrictions and sought to create a more attractive investment climate. Outward FDI from a number of developing countries and economies in transition ensures that those countries will have a broad and multi-faceted interest in international policies influencing direct investment.

* * *

Most developing countries that have a well articulated policy on outward FDI explicitly link the liberalization of these policies and their support through promotion programmes to maintaining and enhancing the competitiveness of their firms and, broader, national economic performance. Not surprisingly, therefore, the three principal avenues discussed in Part Two through which outward FDI can enhance competitiveness -- resource and market access and economic restructuring -- figure prominently in the reforms that countries have instituted. At the same time, there is no clear and consistent pattern. Most developing countries and economies in transition with outward FDI pursue a mix of objectives as their needs and goals vary over time. It appears, however, that resource-access goals predominate at an early stage of industrialization, followed by broader outward FDI objectives when local firms acquire ownership-specific advantages that can be exploited in overseas locations.

C. Implementing policies on outward foreign direct investment

In deciding when and how to liberalize outward FDI policies, beginning from a restrictive policy base, a government has various policy and programme options, ranging from permitting exceptions to actively promoting outward FDI. The liberalization process itself, however, relates only to a reform of the regulatory environment rather than to the possible promotion of

Box VII.10. Hungary's policy on outward FDI

Until the 1990s, the assessment of outward FDI applications in Hungary was done by an interministerial committee which decided depending upon the purpose and the expected advantage of an investment both for the company and for the country. Outward FDI was mostly in the form of joint ventures by Hungarian state owned firms or cooperatives.

Since 1990, two ministries handle the licensing of outward FDI. The Ministry of Industry and Trade considers the purpose and feasibility of the investment, but does not have any specific requirements. A foreign exchange licence has to be obtained from the Ministry of Finance. The permit is granted, provided there is no outstanding debt with the tax or customs authorities. Insurance, broking and real estate trade activities are excluded from outward FDI.

Since the regulations that presently deal with outward FDI were created under different economic conditions, they are applied in a rather liberal manner when applications are considered. A new foreign exchange law is expected to be adopted before the end of 1995. Under the draft foreign exchange law outward FDI will, in principle, be free of any licensing requirements.

If the law is adopted, residents -- legal or natural persons -- may establish enterprises, acquire significant stakes in existing enterprises or increase capital in such enterprises and establish or extend branch offices abroad, if the following conditions are met:

- The host country's legislation allows the immediate transfer of dividends, profit shares, interest and premiums from Hungarian foreign affiliates abroad, of the proceeds in the case of the sale of the shares, as well as amounts due to Hungarian investors in the case of the liquidation of such enterprise or branch and in the case of nationalization or expropriation, of the actual amount of compensation.
- The resident is not liable for harm caused by the enterprise in excess of the resident's share.
- There is an international agreement between Hungary and the host country on the protection of investments and on the avoidance of double taxation. This condition does not apply in case the host country is a member of the OECD.
- The resident has fulfilled its tax obligations for the year prior to the submission of the application (and any obligations for the present year) fully and without delay.
- The resident has no outstanding obligations regarding payments on customs duties, pensions, health insurance or social security contributions, and has no record of undue delay in such payments in the previous year.
- The resident is not in a situation of bankruptcy or liquidation and has had a record of financial soundness in the previous year.
- The resident has not violated foreign exchange regulations regarding outward FDI during the two years prior to the investment.

/...

by the Republic of Korea that requires a full assessment only for the largest projects. This approach lessens the inhibiting effects of regulatory restrictions, especially for small investors, while saving administrative time and expense. On the other hand, the cumulative impact of numerous small investments could still negatively affect a country's balance of payments. Automatic authorizations of small investments might also be abused by investors who could arrange to link multiple small investments together at some point, thereby evading the regulatory scrutiny normally given to larger projects. Another potential danger that might exist for countries with relatively high marginal corporate tax rates is the potential for companies producing intellectual property products marketable in foreign markets to establish "P.O. box companies" abroad with a minimum of FDI in order to operate under a more advantageous tax regime. While these are all potential risks, they typically do not relate to large projects, and their impact, therefore, would tend to be limited.

- A third approach is to evaluate all proposed outward FDI projects against a list of benefits desired for the home country. The specific benefit criteria will vary, but generally aim at obtaining benefits from access to resources and markets, as well as economic restructuring. Among the measurements of the criteria are increased exports, inward technology transfers, raw material imports and repatriated earnings. Particular business sectors are often closely associated with certain types of benefits so that criteria may be specified in terms of qualifying industries rather than specific benefits.
- An industry approach is in more common use when the opposite, "negative list", approach is chosen, requiring review and licensing only from specified industries where outward FDI might involve certain negative impacts for the home economy (e.g., loss of jobs).
- Another approach is to review and approve outward FDI applications in terms of country or regional destinations. For example, Portugal applies different restrictions on outward FDI depending on whether the host countries are members of the European Union, while

(Box VII.10, cont'd)

In case these conditions are not fully met, a permit from the National Bank of Hungary is required for the use of foreign exchange.

In-kind contributions to the registered capital of the enterprise to be established can be freely provided by residents, except for real estate, as well as securities and other negotiable instruments not freely available for non-residents.

All further transactions regarding the enterprise abroad -- including merger, reduction of registered capital, liquidation or sale -- need to be reported to the National Bank of Hungary within eight days of a transaction.

Source: National Bank of Hungary.

Malaysia and Singapore encourage outward FDI particularly to neighbouring but also to other developing countries. Similarly, South Africa gives preferential considerations to other southern African countries.⁹

- The existence of bilateral investment or taxation agreements can be taken into account when evaluating outward FDI proposals by destination; for instance, host country guarantees regarding investment protection or the free transfer of profits and invested capital might serve as minimum conditions. Besides foreign policy considerations, many

Each of these options, individually or in combination with each other, permit developing countries and economies in transition with restrictive regulations on outward FDI to liberalize their regimes incrementally. Recent experiences, especially if combined with the changed global economy conditions and the nature of TNC activities, suggest that more and more countries will utilize these options to phase in progressively less restrictive policies on outward FDI. The administration of this process could be further facilitated if "one-stop shops" for outward investors would assist in obtaining the required approvals, permits and licences.

(b) Dealing with foreign exchange concerns

The feasibility of liberalizing outward FDI policies is typically seen to be linked to a country's foreign exchange position, and especially its current account balance (box VII.12). If the underlying philosophy of a country with respect to outward FDI policy is favourable, there are various technical possibilities to deal with any perceived foreign exchange constraint to liberalization:

- Outward FDI can be financed by foreign borrowing. This is, in fact, not an uncommon practice (though not recorded in FDI flow statistics); in the case of the United States, for instance, at least one-half of the loans outstanding of the foreign affiliates of the country's TNCs (not all of it, of course, used to finance investments) was with local sources in 1993 (United States, Department of Commerce, 1995); similarly, Japanese affiliates abroad raised 58 per cent of their funds through the local issuance of corporate bonds and loans from local financial institutions in 1992 (Japan, Ministry of International Trade and Industry, 1994a). In the case of a merger or acquisition, the foreign borrowing can be secured by the assets acquired (i.e., they would be pledged to the lender), with the servicing and repayment of the debt being made from profits arising from the new venture (box VII.13). Where an outward FDI takes the form of a new (greenfield) enterprise, a guarantee could be issued by the parent firm in the home country, with this guarantee to be replaced by the pledging of the assets once these have been established abroad. This guarantee (unless executed) would not appear in the balance of payments of the home country. However, care would have to be taken in the issuance of such "investment guarantees" since they will be taken into account in determining the credit available to the country from abroad for other purposes, such as trade financing, under so-called "country limits" restrictions that determine undue credit exposure to any one country.
- Once an outward greenfield FDI project is approved and a foreign bank has agreed to finance it, the government of the home country could provide a guarantee for the loan required (either by itself or together with, e.g., an international financial institution or a regional development bank). In a variation of this approach, domestic financial institutions could issue the guarantee to obtain the necessary credit from abroad (with the government perhaps giving an implicit guarantee to these institutions). This could be a sort of bridging guarantee, to be replaced by the assets of the foreign affiliate once it becomes established. However, such operations may only be sensible in the case of large projects.

Box. VII.12. Liberalizing foreign exchange controls

Liberalized foreign exchange regulations are often a part of broader policy reforms -- including initiatives to attract inward FDI -- that open a country to the world economy. However, there may be various reasons why it is not possible to liberalize controls all at once, and typically outward FDI ranks low on a country's priority list in the use of foreign exchange.

Liberalization of the capital account typically begins with inward investment and explicit conditions governing the repatriation of non-resident capital and interest and dividends. Inward FDI poses less of a potential threat to a host country's foreign exchange position than more volatile flows of liquid capital because the acquired assets are illiquid and, frequently, TNCs will want to reinvest some of their profits into an expansion of their affiliates. Moreover, it is possible, in principle, for the portfolio of inward FDI to be biased towards foreign-exchange saving activities (export-creation and import-substitution) so that inward FDI will cover its own foreign-exchange costs.

The different implications of direct and financial inward investment are also relevant to phasing a possible parallel liberalization of outward FDI. Countries that have sufficient foreign exchange reserves to consider liberalizing restrictions on inward portfolio (financial) investments may have enough of a cushion to consider permitting outward FDI, or at least certain types of it. Hence, a liberalization of the capital account to permit outward FDI does not necessarily need to wait for a fully permissive regime for all inward capital flows to be established.

In this context, it is important to remember that, once liberalization steps are taken, it is costly to reverse them, especially in terms of damaging the country's international financial standing. (For example, reimposing restrictions on outward FDI will underline the weakness of a country's overall reserve position.) The OECD countries, furthermore, are bound by the liberalization codes. Hence, authorities often take a cautious approach to the liberalization of capital controls, to assure that the reforms can be maintained and to allow, in a phased manner, for the economy to adjust gradually to the changes. In other words, phasing allows a government to watch the effects of each step on the economy before taking the next step.

Phasing the liberalization of outward investment policy also affects the relationship between direct and portfolio investment. For example, once outward FDI is derestricted, other external transactions may be made possible through foreign affiliates unless such transactions are regulated and monitored by home country authorities. (A certain level of investment in short-term instruments would constitute a normal business activity to manage cashflow.) Conversely, if a government permitted outward portfolio investments but not outward FDI, potential leakage into FDI-related activities would be even more difficult to monitor or control. This consideration would be relevant, for example, if a country wanted to restrict outward FDI to avoid adverse impacts on domestic employment or for foreign policy purposes; the permitted outward portfolio investment could provide a channel to circumvent such restrictions.

Source: UNCTAD, Division on Transnational Corporations and Investment.

- Foreign-direct-investment venture capital funds could be established by investors permitted to do so and looking for good projects. These funds, in turn, could provide finance to FDI projects, including approved FDI projects by firms in countries that

restrict capital outflows on account of foreign exchange difficulties. The Governments of Brunei and Singapore, for example, have jointly established in 1994 a venture capital fund for infrastructure projects in Asia.

- Another possibility would be to allow entities such as insurance companies and pension funds to diversify their investments by investing abroad. Initial permission for such outward portfolio investment could be linked to the funding of approved outward FDI projects from the same country, thereby utilizing the same foreign exchange draw-off for a dual purpose. Such a facility could be of particular interest in the case of mergers and acquisitions, as these provide an immediate collateral.
- In cases where foreign affiliates already exist, a government could permit the free usage of the earnings of these affiliates for (additional) investment abroad, be it for the expansion of an existing venture or the establishment of new ventures. Such "reinvested" earnings involve, for balance-of-payments account purposes, simultaneous and offsetting entries in both the current and capital accounts, i.e., they do not affect the level of foreign reserves. Reinvested earnings account for a substantial amount of FDI outflows in the case of both developed and developing countries. For example, the share of reinvested earnings in total average outflows from the United States during the period 1990-1994 was 53 per cent.¹⁰
- Much FDI, particularly by middle income developing countries, involves the establishment of sourcing or marketing affiliates in countries that are less developed than the home

Box VII.13. International financing: a Chinese TNC example

A joint venture between CITIC Canada Inc., a subsidiary established in Canada by the China International Trust and Investment Corporation (CITIC) and Power Corporation of Canada provides an example for raising funds locally for a FDI project. The two companies bought in 1986 the Canadian Celgar Pulpmill which had an annual output of 180,000 tons of bleached long-stable kraft pulp. Each partner holds a 50 per cent share and is committed to provide a half of any required additional investments as well as working capital. The Consolidated Bathurst Inc. (later called Stone Consolidated Inc.) was entrusted with providing expertise for managing the newly purchased factory. As regards the funds required for the acquisition, CITIC Canada Inc. raised the funds locally. It obtained full financing of Canadian \$60 million in the form of a syndicate loan through the Royal Bank of Canada, supported by an Equity Equivalent Investment Facility to CITIC Canada and guaranteed by CITIC. The financing was provided on the condition that half of its share in the pulpmill be mortgaged to the bank and a long-term sales contract be signed with its parent company in China. The business was so successful that, in less than three years, CITIC managed not only to pay off its loan with the profits from the pulpmill, but also to reinvest the balance of the profits (together with Swedish and Hong Kong companies) in a sawmill with an annual processing capacity of 310,000 cubic meters of log, at a value of Canadian \$40 million. In addition, CITIC Canada Inc. and Stone Consolidated Inc. also succeeded in 1991 in obtaining a loan of Canadian \$700 million from the Royal Bank of Canada and the National Westminster Bank of the United Kingdom to expand the production capacity of the pulpmill to 420,000 tons annually, upgrade its technology and improve its pollution control methods.

Source: Zhan, 1995.

country. Such FDI is less likely to be subject to a foreign exchange constraint in terms of convertible currencies. (This is the case in Thailand, as noted earlier.) It is possible that the central bank of the home country has assets denominated in the (non-convertible) currency of the potential host country; in that event, it may be easier to authorize outward FDI.

- The assets used for outward FDI need not always be of a monetary nature. For instance, they can consist of such intangible assets as intellectual property rights (including trademarks and patents), goodwill and brand names or such tangible assets as capital equipment (an approach pursued, for example, by India), or raw materials. Some of these approaches may be particularly suitable for joint ventures. Even where foreign exchange is involved, joint ventures reduce proportionately the contribution to be made by parent firms. China appears to have a preference for this approach, as Hungary did in the past.
- Since lasting control over assets abroad -- the defining characteristic of FDI -- can also be established through means other than equity, the use of non-equity forms could be allowed if not encouraged. Management contracts, licensing arrangements and franchising are examples of such non-equity forms that are in wide use.

In brief, there are a number of ways in which outward FDI can be undertaken without a cost, or with quite limited costs, to the foreign exchange reserves of a country.

Clearly, however, there are situations in which outward FDI requires a capital contribution from the parent firm. In those countries where foreign exchange is still rationed through exchange controls, governments can use the same criteria discussed in the preceding section in the context of alternative approaches to evaluate and appraise outward FDI proposals. As governments become more comfortable with exchange liberalization, the application of such criteria can become less and less necessary.

2. Promotional options

Careful thought is essential before countries choose promotional measures to accompany their regulatory policy reforms. The outward FDI promotion options described earlier in this chapter cover a broad range of measures whose costs and potential distortionary impacts increase as governments move from providing information services to offering fiscal and financial incentives. In particular, financial incentives both entail budget costs and distort commercial decisions.

One way to analyse how governments select promotional programmes to match their outward FDI objectives is to examine the agencies primarily responsible for their implementation. Two typical choices are an export-import bank facility and a country's (inward) investment-promotion agency. Export-import bank programmes are normally associated with trade-related objectives, and can fairly easily be expanded to cover certain FDI activities as well,

especially where these relate to market access. Investment promotion agencies are an alternative sponsor for outward FDI programmes. These organizations offer two immediate advantages. Existing offices and procedures used to collect and exchange information regarding prospective inward investors can be adapted to encompass potential foreign investments for national enterprises. In addition, expertise developed for evaluating the relative costs and benefits of proposed inward FDI projects may prove useful in assessing the merit of particular outward FDI projects. Moreover, these agencies could also become "one-stop shops" for outward investors, a facility that may be of particular use to small and medium-sized enterprises. Or both trade and investment agencies can become involved in outward FDI promotion, as exemplified by the activities of Singapore's Boards of Economic Development and Trade Development.

Providing basic information on possible FDI locations is a relatively low-cost promotional technique useful at early stages in outward FDI, especially when national firms lack size or prior experience. Higher levels of government involvement evolve as sponsored activities progress into investment missions, government organized consortia, or intergovernmental discussions that lead to special industrial parks or investment zones (such as Singapore is arranging with China and Viet Nam). Singapore and some other developing countries also use state enterprises or government-linked corporations to assist or directly carry out a desired foreign investment.

Fiscal or financial incentives involve a subsidization of enterprise operations and may be harder to justify on both economic and political grounds (chapter VI).¹¹ Some incentives, such as financing feasibility studies, may be limited in scale and perhaps be useful for smaller firms exploring initial FDI opportunities. Other measures that fund or subsidize plant start-up costs are potentially more expensive and market-distorting, presenting a mirror image of inward FDI incentives offered by host countries. One area, however, that may merit special attention concerns training of management in matters related to establishing and operating foreign affiliates. China, for example, has become active in this regard (box VII.7), and Singapore even supports its outward investors by assisting in the training of employees in foreign affiliates (financed through its Skill Development Fund). Many fiscal measures -- such as tax provisions for loss reserves, accelerated investment allowances, double deductions or even the exemption of foreign source income from home country taxation -- are more difficult to evaluate because a neutral market standard is less obvious. Some of these promotional devices could be viewed as incentives to subsidize outward FDI or as initiatives to offset the impact of different foreign and domestic tax regimes.

Finally, governments can provide investment insurance programmes, especially as far as non-commercial risks are concerned. In such programmes it is, in principle, not necessary to distinguish between various groups of countries. Bilateral investment protection and promotion treaties can also be helpful in this respect.

Recognizing the complex cost/benefit trade-offs involved in promotional programmes, a few developing countries have recently attempted to define and focus outward FDI promotions on supporting projects with clear beneficial impacts for the home economy. For example,

Singapore's Economic Development Board announced a refinement of its promotional activities during 1994 to emphasize economic returns to the home economy in terms of job creation and reverse investment flows. The Chairperson of the Board stressed that Singapore must boost its competitiveness by seeking out opportunities to combine its strengths with other countries' assets, but when providing grants and other benefits for FDI, "any investment decision made must be based on pure hard-nosed economic sense".¹² Properly applied, this approach can encourage economic restructuring whereby local firms (be they indigenous enterprises or foreign affiliates) hive off some operations to lower-cost countries -- precisely what the Government of Singapore seeks to achieve.

Conclusions

Over the past decade, changes in global economic conditions and TNC activities have begun to change the parameters of government policies and interests regarding outward FDI. Consequently, developed countries, which already have well-established, liberal national regimes governing outward FDI, complemented typically by various promotional programmes, have moved their attention towards the creation of an enabling international framework for FDI. At the same time, a growing number of developing countries have begun to focus attention on policies with respect to outward FDI, liberalizing their regulations governing outward FDI, often to match liberalization that has already occurred in foreign exchange policies; a few of them have moved on to the promotion of outward FDI as well. Policies related to outward FDI have increased in importance particularly for developing countries that have established, or are establishing, a reasonably broad manufacturing base; have already had some degree of success in penetrating external markets for manufactures and have therefore an established base of internationally competitive firms; have reasonable access to external finance on commercial terms and, consequently, have a degree of flexibility with regard to the management of their capital account; and have experienced lengthy periods of relative ease in their balance of payments.

Developing countries have approached -- and undoubtedly will continue to approach -- the question of outward FDI with caution. In many countries, considerable care is taken to align outward investment with macroeconomic and balance-of-payments conditions and with development priorities, such as securing access to raw materials, technology, or other key inputs for domestic industry, or ensuring the continued competitiveness of key foreign

a policy dilemma for national policy makers in that it juxtaposes overall balance-of-payments considerations with the competitiveness requirements of individual firms. In fact, both enterprise competitiveness and national welfare could be harmed by restricting potential TNCs only to the domestic market.

In considering this and other policy dilemmas arising from a globalized and more competitive environment, governments must recognize that firms not allowed to invest abroad in today's world economy could be handicapped. If, furthermore, imports, inward FDI and technology transfer are liberalized, they are doubly handicapped, in that they must directly confront foreign competitors at home without a comparable opportunity to realize the benefits from their own overseas investments or from challenging competitors in their home markets. When liberalizing outward FDI, governments can turn this double handicap for their firms into a double advantage for their countries: they release the competitive strength of their own firms to exploit their competitive advantages in foreign markets and they can potentially harness the foreign affiliates in their countries to develop overseas projects (as Singapore did when including foreign investors in outward FDI consortia).

Furthermore, if governments are not sufficiently flexible in terms of allowing outward FDI, they may actually face the loss of firms, including perhaps of those whose ownership-specific advantages could have made them competitive internationally. This can occur when the handicapped firms cannot withstand the increased competition (from e.g., foreign firms) in their own markets and, therefore, fail, or when firms use various means to escape from overly restrictive and/or uncompetitive domestic economies in order to survive and grow. Prior to recent reforms, some FDI from India reflected the latter motivation, as may some of the disguised or unreported FDI from China's partially reformed economy, and as did some FDI from the former Yugoslavia (box VII.14). More generally, firms will move their headquarters and the centre of gravity of their operations if business considerations dictate that they should.

These enterprise compulsions and actions put pressures on Governments to liberalize outward FDI policies. As discussed, such liberalization can be phased in on the basis of various criteria and even lead to promotional policies. Individual countries have pursued different strategies that mix and match approaches over time within fairly broad parameters reflecting country-specific factors such as the balance-of-payments position, relative resource endowments, sectoral business configurations and regional and international ties.

In addition, governments need to take into account that important interlinkages exist between FDI, trade and technology flows and that firms that invest internationally gain important advantages from integrating these flows under the common governance of their corporate systems. Liberalizing outward FDI policies enhances the capacity of countries to benefit from these interlinkages (see Introduction to Part Two). This also raises a broader question, namely whether governments are formulating and pursuing coherent policies that take these interrelationships fully into account, and whether they are organized accordingly. In other words, the interrelated nature of international transactions by firms challenges the effectiveness of the traditional policy and institutional segmentation that characterizes most

countries. That some of these interlinkages are being recognized, and that some of this segmentation is breaking down is reflected in the selection of export-import banks (India, Japan, Republic of Korea) to support outward FDI in addition to trade transactions. But these are exceptions rather than the rule, and they are only a partial response to the range of international transactions, in both their outward and inward dimensions. The challenge, therefore, is to match the integration of international transactions by TNCs within their corporate systems with equally coherent national policies and institutions.

The trend towards more liberal outward FDI policies helps in this respect in that it opens up a policy area that has so far been largely restrictive in many countries. Indeed, more governments in all parts of the world are beginning to accept outward FDI as a necessary strategic option that can enhance enterprise competitiveness and national economic welfare in an increasingly globalized economy. The past decade's experience, particularly in Asia, also suggests that countries may face a more compressed time frame for deciding upon and implementing liberalizing reforms under pressure from growing forces of technological innovation, international competition and regional economic integration. At the same time, most governments lack well-developed policies towards outward FDI, particularly when contrasted with the time and effort spent on designing inward FDI policies and programmes.

Box VII.14. The experience of former Yugoslavia and system-escape outward FDI

Yugoslav policies towards outward FDI fluctuated between highly restrictive to performing only a monitoring role since the first legislation on this issue in 1960. These policy shifts were largely in response to the country's external economic situation -- in particular the perceived need to encourage exports and to increase foreign exchange earnings. Yugoslav firms, in turn, have used outward FDI to escape various administrative bottlenecks with respect to acquiring the foreign exchange necessary to source their required inputs internationally -- a kind of FDI that can be characterized as "system-escape" FDI. By investing abroad, Yugoslav companies benefited from the greater autonomy associated with the use of foreign exchange. Under circumstances of chronic foreign exchange shortages and overvaluation of the dinar, "system escape" constituted one of the principal motivations for outward FDI from former Yugoslavia.

Four stages characterized the development of the outward FDI regime of former Yugoslavia (accompanying table):

- The period from the early 1950s, after the first recorded case of outward FDI (the establishment of foreign affiliates by Yugoslavia's largest trading company, Generalexport, in the United Kingdom, Germany and Sweden), to the mid-1960s was marked by the adoption, in 1960, of the first official legislation dealing with outward FDI, the "Decree on certain activities of domestic firms abroad" (OG SFRY, 26/60). This legislation was largely neutral towards outward investment insofar as it was mainly concerned with reporting requirements and the codification of existing practices.
- The period between 1965 and 1972, although not characterized by any formal changes in the legal regime governing outward FDI, witnessed a major market reform of domestic and foreign economic policy, which allowed greater scope for Yugoslav companies to invest abroad. In

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(Box VII.14, cont'd)

particular, companies were given higher levels of autonomy in their activities, and the state reduced its role in foreign economic relations. Therefore, although this period was not marked by specific measures aimed at supporting outward investment, less government involvement in external economic activities gave Yugoslav companies greater freedom in their international activities.

Four stages in the development of the outward regime of former Yugoslavia

Period	Early 1950s to 1964	1965 to 1972	1973 to 1988	1989 to 1991
General attitude towards outward FDI	Quite neutral, but with monitoring introduced in 1960	More liberal Government policy with respect to external economic activities of companies	Restrictions on outward FDI, most regulated stage	Removal of many restrictions on outward FDI, most liberal stage
Specific legislation during stage	Decree on certain activities of domestic firms abroad, 1960	No new legislation, just more liberal approach by Government in practice	Law on establishing companies abroad, 1972/73; Law on performing economic activities abroad, 1977/78/82/85;	Foreign Trade Law, 1989
Objectives of outward FDI policy as stipulated in laws	No specific objectives	Promotion of exports and integration with international markets	1) To promote exports and foreign exchange earnings 2) To assure supply of raw materials 3) To develop domestic production/productivity 4) To enter new markets	Outward FDI started to be regarded as part of the overall internationalization process
Approval criteria	Completion of feasibility study	Completion of feasibility study	1) Repatriation of share of profits 2) For trade companies, exports from Yugoslavia must account for largest part of revenue 3) Completion of feasibility studies 4) Provision of information on foreign partners	No specific criteria
Profit repatriation	Ministry of Finance can require part of profit to be exchanged for dinars	None	Predetermined share of profits, varying by sector, to be repatriated within 30 days of reporting annual balance (extended to 60 days after 1985)	Only in case of balance of payments crisis can the government require profit repatriation
Incentives for outward FDI	None	None	Preferential loans for companies establishing foreign affiliates in developing countries	None

Source: UNCTAD, Division on Transnational Corporations and Investment, based on "Decree on certain activities of domestic firms abroad" (Official Gazette of the SFR Yugoslavia, No. 26, 1960); Law on establishing companies abroad (Official Gazette of the SFR Yugoslavia, No. 39, 1972); Law on changes and amendments to the Law on establishing companies abroad (Official Gazette of the SFR Yugoslavia, No. 13, 1973); Law on performing economic activities abroad (Official Gazette of the SFR Yugoslavia, No. 17, 1978); Law on changes and amendments to the Law on performing economic activities abroad (Official Gazette of the SFR Yugoslavia, No. 5, 1982); Law on performing economic activities abroad (Official Gazette of the SFR Yugoslavia, No. 71, 1985); Foreign trade law (Official Gazette of the SFR Yugoslavia, No. 63, 1989).

(Box VII.14, cont'd)

- The period from 1972 to 1989 was characterized by a reversal in the Government's attitude towards outward FDI. The perceived failure of the liberalization experiment of the previous seven years culminated in the adoption in 1972 of the "Law on establishing companies abroad" (OG SFRY, 39/72, 13/73). This law, unlike the one first adopted in 1960, aimed specifically at regulating outward FDI with a view to increasing foreign exchange earnings. The main features of the 1972 law included an emphasis on the export promoting and foreign exchange generating potential of outward FDI, repatriation requirements, export-related performance requirements (e.g., trading company affiliates were required to earn the larger part of their revenues from exports from Yugoslavia), and various administrative requirements, such as the completion of feasibility studies demonstrating the social implications and need for a particular outward investment, which became preconditions for approval. The 1972 law was amended four times. Each time, the restrictiveness of the original law was reduced by allowing a broader range of types of affiliates to be established abroad. However, these amendments did not change the general thrust of the law, in particular the detailed monitoring of companies and the imposition of performance requirements related to exports and foreign exchange earnings. During that period, FDI was viewed primarily as a means to increase exports and foreign exchange earnings, rather than as an integral aspect of the internationalization of the Yugoslav economy.
- Beginning with the Foreign Trade Law of 1989, Yugoslavia witnessed a return to a more liberal attitude on the part of the Government towards international economic relations. This new law eliminated the mandatory profit-repatriation requirements imposed in 1977 (except for a safeguard provision allowing the Government to re-establish repatriation requirements in case of balance-of-payments problems), and drastically reduced the criteria upon which approval of outward FDI requests would be based. The elimination of the profit-repatriation requirement constituted a drastic change in the outward FDI policy regime. In 1987, two years before the new law was adopted, wholly owned affiliates of Yugoslav trading companies in developed countries had to repatriate 30 per cent of their profits, affiliates of manufacturing companies, 15 per cent, and banks, 40 per cent. Outward FDI in developing countries was treated more leniently, with profit-repatriation levels for trading companies set at 15 per cent, for manufacturing companies at 7.5 per cent, and for banks at 5 per cent.

Although outward FDI is usually associated with the pursuit by TNCs of markets and resources to enhance their competitiveness, the Yugoslav experience highlights the defensive nature that outward FDI can play when conditions in the home economy are characterized by administrative constraints and economic (and political) instability. The main policy implication for governments derives from the fact that TNCs are able to use international networks not only to increase their efficiency and competitiveness but also to respond to uncertain conditions. A restrictive and unstable economic environment, especially one characterized by severe bottlenecks (such as the foreign exchange shortages in the Yugoslav case), can give rise to outward FDI that represents a reaction to conditions in the home country -- i.e., "system escape" outward FDI -- rather than FDI that is part of a more "natural" process of internationalization, based upon efficiency or other commercial considerations. As such, the case of outward investment from the former Yugoslavia highlights the relationship between the nature of TNC internationalization and the nature of economic conditions in the home country.

Source: Svetlicic, 1991.

At a minimum, governments should assess the costs and benefits that outward FDI can bring to their economies and then decide what policy approach to pursue. In so doing, possible short-term costs need to be weighed against possible medium- and long-term gains that outward FDI can bring to their firms and, ultimately, economies, in a liberalizing and globalizing world economy. Such an assessment is made harder by the possibility that the interests of countries and firms may not always coincide entirely and that there may be a danger that firms may invest abroad even if there are attractive investment opportunities at home. In the end, however, it is the firm that needs to decide what is best for its competitiveness -- and without competitive firms, countries cannot improve their economic performance. Governments need, therefore, to be responsive to their firms' requirements as regards outward FDI.

In sum, while developing countries' policies with regard to outward investment will continue to evolve in ways that reflect the specific circumstances of the country concerned, policy makers in these countries need to be alert to the role that outward FDI, and its timely facilitation, can play in meeting development objectives.

Notes

- ¹ United States Department of Commerce, unpublished data.
- ² Before 1979, capital leaving the country for FDI purposes had to be approved by the Bank of England. There were, however, no restrictions on where funds could be raised and just how much left the United Kingdom, but monies earned overseas had to be repatriated to the United Kingdom.
- ³ Turkey is classified as a developing country according to the country classification of the UNCTAD secretariat.
- ⁴ Information provided by OPIC.
- ⁵ Counterpart policy towards inward FDI paradoxically reflected similar restrictive tendencies through the 1970s, as governments sought to establish the conditions of entry and particular benefit distribution associated with inward FDI.
- ⁶ Information provided by the Ministry of Industry and Trade of Hungary.
- ⁷ Paisley, E. and T. Klernan, "Reforms boost capital flows", *Far Eastern Economic Review*, 26 May 1994, pp. 53 et seq..
- ⁸ Cook, K., "Investing overseas: Lee's 'go regional' directive", *Financial Times*, 24 February 1995, p. II (survey of Singapore); see also Sikes, 1994.
- ⁹ "Special window for SA investors: forex controls on ventures in Africa may go", *Business Day*, 4 May 1994, p. 1.
- ¹⁰ United States Department of Commerce, unpublished data.
- ¹¹ It is not clear, however, whether financial incentives to promote outward investment would fall, in principle, under the scope of the WTO Agreement on Subsidies and Countervailing Duties, and thus could be prohibited or actionable, under criteria similar to those applied to subsidies offered to domestic producers.
- ¹² "EDB's challenge in next phase of Singapore's economic development", *The Straits Times*, 16 February 1994, p. 36.

References

- Abernaty, W. J. (1978). *The Productivity Dilemma: Roadlock to Innovation in the Automobile Industry* (Baltimore: Johns Hopkins University Press).
- Abo, Tetsuo, ed. (1994). *Hybrid Factory: The Japanese Production System in the United States* (New York, Oxford: Oxford University Press).
- Akamatsu, Kaname (1935). "Waga Kuni Yomo Kogyohin no Boeki Susei", *Shogyo Keizai Ronso*, Nagoya Higher Commercial School.
- _____. (1961). "A theory of unbalanced growth in the world economy", *Weltwirtschaftliches Archiv*, 86, 2, pp. 196-215.
- Agarwal, Jamuna Prasad (1994). "Impact of 'Europe Agreements' on FDI in developing countries" (Kiel: Institute of World Economics), Kiel Working Papers No. 640, mimeo..
- _____. (1962). "A historical pattern of economic growth in developing countries", *The Developing Economies*, 1 (March-August), pp. 1-23.
- Album, A. (1995a). "Israel: paving the road to prosperity", *The Middle East*, 246 (June), pp. 19-22.
- _____. (1995b). "Jordan: fortune in adversity", *The Middle East*, 243 (March), pp. 20-21.
- América Economía (1995a). *Latin America's 500 Largest Companies*, special issue 1994/1995 (Santiago, Chile: América Economía).
- América Economía (1995b). *América Economía 1000 on Disk* (Santiago, Chile: América Economía).
- Anand, J. and B. Kogut (1994). "Are America's competitors acquiring its technology through foreign investment?", in Harvey Kahalas, Yash R. Puri and Kathleen Suchon, eds., *Global Competitiveness* (Boston: Allen and Unwin), pp. 51-57.
- Andersson, T. (1995). "Links between technology creation and human resource management in a small open economy". Paper presented at a conference on the effects of technology and innovation on firm performance and employment, National Academy of Sciences, Washington, D.C., 1-2 May, mimeo..
- Andersson, T., T. Fredriksson and R. Svensson (1995). *Multinational Restructuring in Small Economies: The Swedish Case* (London and New York: Routledge), forthcoming.
- Argentina, Ministerio de Economía y Obras y Servicios Públicos (1992). "Iniciativas Inter e Intra-empresariales Argentino-Brasileñas en el Marco del Mercosur" (Buenos Aires: Ministerio de Economía y Obras y Servicios Públicos), mimeo..
- Audretsch, D.B. (1995). "Foreign direct investment, international competitiveness and small and medium-sized enterprises", paper prepared for UNCTAD-DTCI, mimeo..
- Bank of Korea (1991). *Current Status of Foreign Direct Investment* (Seoul: Bank of Korea).
- Bartlett, C. (1986). "Building and managing the transnational: the new organizational challenge", in E. M. Porter, ed., *Competition in Global Industries* (Boston: Harvard Business School Press), pp. 367-401.

- Beardsley, T. (1993). "Trends in Russian science: selling to survive", *Scientific American*, 268, 2 (February), pp. 68-76.
- Behrman, J. and H. Wallender (1976). *Transfer of Manufacturing Technology within Multinational Enterprises* (Cambridge, Mass.: Ballinger).
- Belot, Therese J. and Dale R. Weigel (1992). *Programs in Industrial Countries to Promote Foreign Direct Investment in Developing Countries*, Foreign Investment Advisory Service, Occasional Paper 3 (Washington, D.C.: The World Bank).
- Berggren, C. (1992). *Alternatives to Lean Production: Work Organisation in the Swedish Auto Industry* (Ithaca, New York: ILR Press).
- Bielschowsky, R. (1994). "Two studies on TNCs in the Brazilian manufacturing sector: the 1980s and the early 1990s", *Desarrollo Productivo*, 18, LC/G.1842 (Santiago: ECLAC).
- Bird, M.C.J. (1988). "Mexico's motor vehicle industry in the 1980s", World Employment Programme Research Working Paper No. 21 (Geneva: ILO).
- Blomström, Magnus (1991). "Host country benefits of foreign investment", in D. Mc Petridge, ed., *Foreign Investment, Technology and Economic Growth* (Calgary: The University of Calgary Press), pp. 93-109.
- Bloom, M. (1992). *Technological Change in the Korean Electronics Industry* (Paris: OECD).
- Bonacich, Edna and David V. Waller (1994a). "Mapping a global industry: apparel production in the Pacific rim triangle", in E. Bonacich, et al., eds., *Global Production: The Apparel Industry in the Pacific Rim* (Philadelphia: Temple University Press), pp. 21-41.
- _____. (1994b). "The role of U.S. apparel manufacturers in the globalization of the industry in the Pacific rim", in E. Bonacich, et al., op. cit., pp. 80-104.
- Bonturi, Marcos and Fukasako Kiichiro (1993). "Globalization and intra-firm trade: an empirical note", in *OECD Economic Studies*, 20 (Spring) pp. 146-158.
- Borras, Michael (1994). "Left for dead: Asian production networks and the revival of U.S. electronics", in Eileen H. Doherty, ed., *Japanese Investment in Asia: International Production Strategies in a Rapidly Changing World: A Conference* (San Francisco: The Asia Foundation and Berkeley Round Table on the International Economy), pp. 125-145.
- Brash, D.T. (1966). *American Investment in Australian Industry* (Canberra: Australian University Press).
- Brewer, Thomas L. and Stephen Young (1995). "Towards a multilateral framework for foreign direct investment: issues and scenarios", *Transnational Corporations*, 4, 1 (April), pp. 69-83.
- Brindle, S. (1995). "Egypt: a high rise economy", *The Middle East*, 247 (January), pp. 25-26.
- Brittan, Leon (1995). "Investment liberalization: the next great boost to the world economy", *Transnational Corporations*, 4, 1 (April), pp. 1-10.
- Buckley, Peter J. (1989). "Foreign market servicing strategies and competitiveness: a theoretical framework", in Anant R. Negandhi and Arun Savara, eds., *International Strategic Management* (Lexington: Lexington Press D.C. Heath), pp. 79-104.
- _____. and Gordon E. Smith (1994). "An international comparison of the structure of national foreign market servicing strategies", *International Business Review*, 3, 1, pp. 71-94.
- Buckley, Peter J., C. L. Pass and Kate Prescott (1990). "Foreign market servicing by multinationals: an integrated treatment", *International Marketing Review* 7, 4, pp. 25-40.

- Burstall M., John H. Dunning and A. Lake (1981). *The Impact of Multinational Enterprises on National Scientific and Technological Capacity: The Pharmaceutical Industry* (Paris: OECD).
- Business International and Creditanstalt (1992). *East European Survey* (Vienna: Creditanstalt).
- Calderon A., M. Mortimore M. and W. Peres (1994). "Mexico's incorporation into the new industrial order: Foreign investment as a source of international competitiveness", *Desarrollo Productivo*, 21, LC/G.1867 (Santiago: ECLAC).
- Cantwell, John A. (1989). *Technological Innovations and Multinational Corporations* (Oxford: Basil Blackwell).
- _____ (1991). "Foreign multinationals and industrial development in Africa", in P. J. Buckley and L. J. Clegg, eds., *Multinational Enterprises in Less Developed Countries* (London: Macmillan), pp. 183-224.
- _____ (1992a). "Innovation and technological competitiveness", in P.J. Buckley and M. Casson, eds., *Multinational Enterprises in the World Economy* (Aldershot: Edward Elgar Publishing), pp. 20-40.
- _____ (1992b). "The internationalization of technological activity and its implications for competitiveness", in O. Granstrand, L. Håkanson and S. Sjölander, eds., *Technology Management and International Business: Internationalization of R&D and Technology* (Chichester, West Sussex: John Wiley & Sons), pp. 75-95.
- _____ (1994). "Introduction", in John Cantwell, ed., *Transnational Corporations and Innovative Activities*, United Nations Library on Transnational Corporations, volume 17 (London and New York: Routledge for the United Nations), pp. 1-36.
- _____ (1995a). "Globalization and development in Africa", in UNCTAD-DTCI, *Globalization and Developing Countries* (Geneva: United Nations), United Nations publication, forthcoming.
- _____ (1995b). "The globalisation of technology: what remains of the product cycle model?", *Cambridge Journal of Economics*, 19, 1 (February), pp. 155-174.
- Capien, Brian and Lilian Ng (1990). "Singapore's global gamble", *Asian Business*, June, 1990, pp. 26-29.
- Castro, M. C. (1989). "Multinationals in China: transfer of technology, management and training" (Geneva: ILO), ILO discussion paper No. 40, mimeo..
- Chandler, A. D. (1977). *The Visible Hand: The Managerial Revolution in American Business* (Cambridge: Harvard University Press).
- _____ (1990). *Economies of Scale and Scope* (Cambridge, Mass.: Harvard University Press).
- Chang, C.S. and N. J. Chang (1994). *The Korean Management System* (London: Quorum Books).
- Chang, Victor J. (1987). "Big trading companies in the Republic of China", in Terutomo Ozawa, ed., *Role of General Trading Firms in Trade and Development: Some Experiences* (Tokyo: Asian Productivity Organization), pp. 73-77.
- Charap, J. and A. Zemlineroa (1993). "Foreign direct investment in the privatization and restructuring of the Czech economy". Paper presented at the Workshop on "Legacies, linkages and localities -- the social embeddedness of economic transformation in Central and Eastern Europe", Berlin, 24-25 September, mimeo..
- Chen, Che-Hung (1986). "Taiwan's foreign direct investment", *Journal of World Trade Law*, 20, pp. 639-664.
- Chen, Edward K.Y. and Y.C. Wong (1989). "the future direction of industrial development in the Asian NIEs", in Jan-Won Suh, ed., *Strategies for Industrial Development* (Seoul: Korea Development Institute).

- _____. (1994). "Introduction: transnational corporations and technology transfer to developing countries", in Edward K. Y. Chen, ed., *Transnational Corporations and Technology Transfer to Developing Countries*, United Nations Library on Transnational Corporations, volume 18 (London and New York: Routledge for the United Nations), pp. 1-35.
- Chesnais, F. (1988). "Multinational enterprises and the international diffusion of technology", in G. Dosi, C. Freeman, R. Nelson, G. Silverberg and L. Soete, eds., *Technical Change and Economic Theory* (London and New York: Printer Publishers), pp. 496-527.
- Cid, Gonzalo (1995). "Evolution of the outward foreign investment regime in Chile", (Santiago: Committee on Foreign Investment), mimeo..
- Clark, Colin (1935). *The Conditions of Economic Progress* (London: Macmillan).
- Cline, William R. (1987). *The Future of World Trade in Textiles and Apparel* (Washington, D.C.: Institute for International Economics).
- Cockcroft, L. and R. C. Riddell (1991). "Foreign direct investment in sub-Saharan Africa" (Washington, D.C.: The World Bank), Working Paper No. 619, mimeo..
- Cominotti, M. and S. Mariotti (1994). *L'Italia Multinazionale, 1994* (Milan: Etas Libri).
- Commission of the European Communities (1992). *European Community Investment Partners (ECIP): A User's Guide* (Luxembourg: Office for Official Publications for the European Communities).
- _____. (1994). "Towards a new Asia strategy", communication from the Commission to the Council, Brussels, 27 July, mimeo..
- _____. (1995). *European Community Investment Partners, Progress Report 1994*. (Brussels: Commission of the European Communities).
- Cook, Kieran (1995). "Investing overseas: Lee's 'go regional' directive", *Financial Times*, Survey of Singapore, February 24, 1995, p. II.
- Czinkota, Michael R., Ilkka Ronkainen and John J. Tarrant (1995). *The Global Marketing Imperative - Positioning Your Company for the New World of Business* (Lincolnwood, Illinois: NTC Publishing Group).
- Dahlman, Carl J. and Ousa Sananikone (1990). "Technology strategy in the economy of Taiwan: exploiting foreign linkages and investing in local capability" (Washington, D.C.: The World Bank), mimeo..
- Deane, R.S. (1970). *Foreign Investment in New Zealand Manufacturing* (Wellington: Sweet and Maxwell).
- Dedoussis, V. (1994). "The core workforce - peripheral workforce dichotomy and the transfer of Japanese management practices", in Campbell N. and F. Burton, eds., *Japanese Multinationals: Strategies and Management in the Global Kaisha* (London and New York: Routledge), pp. 186-217.
- De Maria y Campo, M. (1992). "Reestructuración y desarrollo de la industria automotriz mexicana en los años ochenta: evolución y perspectivas", *Estudios e Informes de la CEPAL*, num. 83 (Santiago: CEPAL).
- Deutsche Bundesbank (1994). *Technologische Dienstleistungen in der Zahlungsbilanz* (Frankfurt: Deutsche Bundesbank).
- Di Filippo, Armando (1994). "Regionalismo abierto e inversión extranjera en América Latina", Working Paper No. 34, División de Comercio Internacional, Transporte y Financiamiento (Santiago, Chile: ECLAC), mimeo..

- Doz, Y. and C. K. Prahalad (1988). "Quality of management: an emerging source of global competitive advantage?", in N. Hood and J.E. Vahlne, eds., *Strategies in Global Competition* (London: Croom Helm), pp. 345-369.
- Dunning, John H. (1958). *American Investment in British Manufacturing Industry* (London: Allen & Unwin).
- _____ (1981). "Explaining the international direct investment position of countries: towards a dynamic or developmental approach", *Weltwirtschaftliches Archiv*, 119, pp. 30-64.
- _____ (1985). *Multinationals, Technology and Competitiveness* (London: Unwin Hyman).
- _____ (1986). "The investment development cycle revisited", *Weltwirtschaftliches Archiv*, 122, 667-677.
- _____ (1988). *Multinationals, Technology and Competitiveness* (London: Unwin Hyman).
- _____ (1992). "Multinational enterprises and the globalization of innovatory capacity", in O. Granstrand, L. Håkanson and S. Sjölander, eds., *Technology Management and International Business: Internationalization of R&D and Technology* (Chichester, West Sussex: John Wiley & Sons Ltd), pp. 19-51.
- _____ (1993). *Multinational Enterprises and the Global Economy* (Wokingham: Eddison-Wesley).
- _____ (1994). "Globalization, economic restructuring and development", The Prebisch lecture for 1994, UNCTAD, Geneva 29 April.
- _____ (forthcoming). "The geographical sources of competitiveness: some results of a new survey", *Transnational Corporations*.
- _____ and R. Narula (1994). "Transpacific FDI and the investment development path: the record assessed", *University of South Carolina Essays in International Business*, 10 (May).
- Dunning, John H. and Matija Rojec (1993). "Foreign privatization in Central and Eastern Europe", Central and Eastern European Privatization Network, Technical Paper Series No. 2 (Ljubljana, Slovenia: CEEPN), mimeo..
- Economic Commission for Europe (ECE) (1993). "The development of telecommunication in Central and Eastern Europe", document TRADE/R.604, 21 December.
- _____ (1994a). "Statistical survey of recent trends in foreign investment in East European countries", document TRADE/R.624, 30 November.
- _____ (1994b). "The impact of foreign direct investment on the trade of countries in transition: results of a preliminary survey", document TRADE/R.617, 24 November.
- _____ (1995). *Economic Survey of Europe in 1994-1995* (New York and Geneva: United Nations), p. 14.
- Economic Commission for Latin America and the Caribbean and UNCTAD Joint Unit on Transnational Corporations (ECLAC/UNCTAD) (1995a). "Summary of the report on foreign investment and transnational corporations in Latin America: 1995" (Santiago, Chile: ECLAC/UNCTAD), mimeo..
- _____ (1995b). "Informe sobre la inversión extranjera en América Latina y el Caribe" (Santiago, Chile: ECLAC/UNCTAD), mimeo..
- _____ (1995c). "Report on foreign investment and transnational corporations in Latin America: 1995" (Santiago, Chile: ECLAC/UNCTAD), mimeo..

Economic and Social Commission for Asia and the Pacific and UNCTAD Joint Unit on Transnational Corporations (ESCAP/UNCTAD) (1994). *Transnational Corporations and Technology Transfer in Export Processing Zones and Science Parks* (New York: United Nations), Economic and Social Commission for Asia and the Pacific, monograph 2.

Economist Intelligence Unit (EIU)(1994). *Indochina: Viet Nam, Laos, Cambodia* (London: EIU).

_____ (1995). *Viet Nam to 2005* (London: EIU).

Economist Intelligence Unit and United Nations Industrial Development Organization (EIU and UNIDO) (1994). *Egypt: An Enabling Environment for Investment* (London: EIU).

_____ (1995). *Towards Globalization: India* (London: EIU).

Eden, Lorraine (1994). "Who does what after Nafta? Location strategies of United States multinationals", in Lorraine Eden, ed., *Multinationals in North America* (Calgary: The University of Calgary Press), pp. 193-252.

Ehrbar, Thomas J. (1993). *Business International's Guide to International Licensing* (New York: McGraw-Hill).

Emergency Committee for American Trade (ECAT)(1993). *Mainstay II: A New Account of the Critical Role of U.S. Multinational Companies in the U.S. Economy* (Washington, D.C.: Government Printing Office).

Enderwick, P., ed. (1994). *Transnational Corporations and Human Resources. United Nations Library on Transnational Corporations* (London: Routledge for the United Nations).

Enderwick, P. and P. J. Buckley (1983). "Industrial relations practices in Britain: a comparative analysis of foreign- and domestically-owned firms", *Labour and Society*, 8, 4, pp. 315-332.

Ernst, Dieter (1994a). "Network transactions, market structure and technology diffusion: implications for South-South co-operation", in L. Mytelka, ed., *South-South Co-operation in a Global Perspective* (Paris: OECD), pp. 89-125.

_____ (1994b). "Carriers of regionalization: the East Asian production networks of Japanese electronics firms". BRIE Working Paper, University of California, Berkeley, mimeo..

_____ (1994c). "What are the limits to the Korean model? The Korean electronics industry under pressure". BRIE Working Paper, University of California, Berkeley, mimeo..

_____ (1994d). "Mobilizing the region's capabilities? The East Asian production networks of Japanese electronics firms" (Berkeley: The Berkeley Round Table on the International Economy), Working Paper 73 (November), mimeo..

Ernst, Dieter, Tom Ganiatsos and L. Mytelka, eds. (forthcoming). *Technological Capability Building and Export Success: Cases from Asia* (Geneva: UNCTAD).

Ernst, D. and D. O'Connor (1992). *Competing in the Electronics Industry: The Experience of Newly Industrializing Economies* (Paris: OECD).

Estrin, Saul, Alan Gelb and Inderjit Singh (1993). *Enterprises in Transition: Issues and Methods of Analysis* (Washington, D.C.: The World Bank).

European Bank for Reconstruction and Development (EBRD) (1994). *Transition Report* (London: EBRD).

Evans, P. (1979). *Dependent Development: The Alliance of Multinational, State and Local Capital in Brazil* (Princeton: Princeton University Press).

- Export-Import Bank of India (1994). *Export-Import Bank of India: Objectives, Operations, Organization* (Bombay: Export-Import Bank).
- Export-Import Bank of Japan (1994). *Guide to the Export-Import Bank of Japan* (Tokyo: Export-Import Bank of Japan).
- Export-Import Bank of Korea (1994). *Annual Report 1993* (Seoul: Export-Import Bank of Korea).
- Fajnzylber, F. (1983). *La Industrialización Truncada de América Latina* (México D.F.: CET).
- Falush, Peter (1994). "Investment in the insurance industry". Paper delivered at the Fourth Plenary Meeting for the OECD Advisory Group on Investment in Bucharest, 2-4 November, mimeo..
- Farzin, Y.H. (1993). "Importance of foreign investment for the long-run economic development of the United Arab Emirates", *World Development*, 21, 4 (April), pp. 509-521.
- Feiler, G. (1995). "Privatisation drive in the Middle East", report prepared by Info-Prod Research (Middle East) Ltd., Israel, mimeo..
- Feldstein, Martin (1994). "The effects of outbound foreign direct investment on the domestic capital stock" (Boston: NBER), Working Paper No. 4668, mimeo..
- Fischer, Bernhard and Helmut Reisen (1993). *Liberalising Capital Flows in Developing Countries: Pitfalls, Prerequisites and Perspectives* (Paris: OECD).
- Fors, Gunnar (1993). "Technology transfer to foreign manufacturing affiliates by multinational firms" (Stockholm: IUI), Working Paper No. 370, mimeo..
- Fors, Gunnar and Roger Svensson (1994). "R&D in Swedish multinational corporations" (Stockholm: The Industrial Institute for Economic and Social Research), Working Paper 406 (January), mimeo..
- Forsgren, M. and C. Pahlberg (1992). "Subsidiary influence and autonomy in international firms", *Business Review*, 1, 3, pp. 41-51.
- Fruin, Mark (1992). *The Japanese Enterprise System: Competitive Strategies and Cooperative Structures* (Oxford: Clarendon Press).
- _____ and Toshihiro Nishiguchi (1993). "Supplying the Toyota production system: intercorporate organizational evolution and supplier subsystems", in Bruce Kogut, ed., *Country Competitiveness: Technology and the Organizing of Work* (Oxford: Oxford University Press), pp. 225-245.
- Gazdasagi Hetilap Figyelő (1994). *The Largest 200 Hungarian Companies 1994* (Budapest: Gazdasagi Hetilap Figyelő).
- Gereffi, Gary (1990). "Big business and the state: East Asia and Latin America compared", *Asian Perspective*, 14, 1, pp. 5-29.
- _____ (1994). "Global commodity chains and Third World development", paper No. 3, presented at The Forum on Labour in a Changing World Economy, Fourth Meeting, "Regionalization and Labour Market Interdependence in East and South East Asia", Bangkok, 23-26 January 1995 (Geneva: International Institute for Labor Studies), mimeo..
- _____ and Mei-Lin Pan (1994). "The globalization of Taiwan's garment industry", in E. Bonacich et al, op. cit., pp. 126-146.
- Gereffi, Gary and Richard S. Newfarmer (1985). "International oligopoly and uneven development: some lessons from industrial case studies", in Richard S. Newfarmer, ed., *Profits, Progress and Poverty. Case Studies of International Industries in Latin America* (Notre Dame, Indiana: University of Notre Dame), pp. 385-413.

- Germany, Ministry of Economics (1995). *Initiatives for Foreign Trade, Germany as a Business Location in an Open World Economy* (Bonn: Ministry of Economics).
- Geroski P.A. and A. Murfin (1991). "Entry and industry evolution: the UK car industry, 1958-83", *Applied Economics*, 23, pp. 799-810.
- Gerschenberg, I. (1987). "The training and spread of managerial know-how: a comparative analysis of multinational and other firms in Kenya", *World Development*, 15, pp. 931-939.
- Gestrin, Michael and Alan M. Rugman (1994). "The North American Free Trade Agreement and foreign direct investment", *Transnational Corporations*, 3, 1 (February), pp. 77-96.
- Ghoshal, S. and C. A. Bartlett (1990). "The multinational corporation as an interorganisational network", *Academy of Management Review*, 15, 4, pp. 603-625.
- Globerman, S., ed. (1994). *Canadian-based Multinationals* (Calgary, Canada: University of Calgary Press).
- Graham, Edward M. (1994). "Towards an Asia-Pacific investment code", *Transnational Corporations*, 3, 2 (August), pp. 1-27.
- _____ and Naoko Anzai (1994). "Is Japanese direct investment creating an Asian economic bloc?", in Eileen M. Doherty, ed., *Japanese Investment in Asia: International Production Strategies in a Rapidly Changing World: A Conference* (San Francisco: The Asian Foundation and Berkeley Round Table on the International Economy), pp. 161-176.
- Granstrand, O., L. Håkanson and S. Sjölander (1992). "Introduction and overview", in O. Granstrand, L. Håkanson and S. Sjölander, eds., *Technology Management and International Business: Internationalization of R&D and Technology* (Chichester, West Sussex: John Wiley & Sons), pp. 1-18.
- Gray, H. Peter (1990). "Free trade, economic integration and nationhood", *Journal of International Economic Integration*, 5 (Spring), pp. 1-12.
- _____ (1995). "The eclectic paradigm: the next generation". Paper to be presented at the meeting of the European International Business Association, Urbino, December.
- Guisinger, S. (1989). "Total protection: a new measure of the impact of government intervention on investment profitability", *Journal of International Business Studies*, 20, pp. 280-295.
- _____ (1992). "Rhetoric and reality in international business: a note on the effectiveness of incentives", *Transnational Corporations*, 1, 2 (August), pp. 111-123.
- Hagedoorn, John and Geert Duysters (1994). "Strategic groups and networks of strategic partnering in international high-tech industries". Paper presented at the annual meeting of the Academy of International Business, 3-6 November, mimeo..
- Hagedoorn, John and J. Schakenraad (1989). "Strategic partnering and technological cooperation", in B. Dankbar, J. Groenewegen and H. Schenk, eds., *Perspectives in Industrial Economics* (Dordrecht: Kluwer), pp. 3-37.
- _____ (1990). "Inter-firm partnerships and cooperative strategies in core technologies", in C. Freeman and L. Soete, eds., *New Explorations in the Economics of Technical Change* (London and New York: Printer Publishers), pp. 3-37.
- _____ (1991). "The role of interfirm cooperation agreements in the globalization of economy and technology" (Brussels: Commission of the European Communities), mimeo..
- Håkanson, L. and R. Nobel (1993). "Foreign research and development in Swedish multinationals", *Research Policy*, 22, pp. 373-396.

-
- Hamilton, Geoffrey (1986). *Red Multinationals or Red Herrings* (London: Frances Pinter).
- Hammer, Michael and James Champy (1995). *Reengineering the Corporation: A Manifesto for Business Revolution* (London: N. Brealey).
- Harrold, Peter and Rajiv Lall (1993). "China reform and development in 1992-93" (Washington, D.C.: The World Bank), World Bank Discussion Paper No. 215, mimeo..
- Hedlund, G. (1986). "The hypermodern MNC: a heterarchy?", *Human Resource Management*, 25, 1, pp. 9-37.
- Herrigel, Gary (1993). "Large firms, and the governance of flexible specialization: the case of Baden Württemberg and socialized risk", in Bruce Kogut, ed., *Country Competitiveness: Technology and the Organizing of Work* (Oxford: Oxford University Press), pp. 15-35.
- Hilty D.P. (1994). "Outlook for the North American auto industry", *Business Economics*, 29, 4 (October), pp. 7-10.
- Hipple, Steb. F. (1995). *Multinational Companies in United States International Trade* (Westport, Connecticut: Quorum Books).
- Hobday, Michael (1994). "Technological learning in Singapore", *The Journal of Development Studies*, 30, 3, pp. 830-858.
- Hoffman K. and R. Kaplinsky (1988). *Driving Force: The Global Restructuring of Technology, Labour and Investment in the Automobile and Components Industries*, Westview special studies in international economics and business, published in cooperation with the United Nations Centre on Transnational Corporations (London: Westview Press).
- Hong, Yoo-Soo (1995). "Technology transfer: the Korean experience", in Korean Economic Institute of America, ed., *Korea's Economy 1995*, 11, pp. 43-51.
- Hood, Neil and Stephen Young (1994). "The internationalization of business and the challenge of East European's development", in Peter Buckley and Pervez Ghauri, eds., *The Economics of Change in East and Central Europe* (London: Academic Press), pp. 321-342.
- Hsu, Robert C. (1991). *The MIT Encyclopedia of the Japanese Economy* (Cambridge, Mass.: The MIT Press).
- Hufbauer, Gary, Darius Lakdawalla and A. Malani (1994). "Determinants of foreign direct investment and its connection to trade", *UNCTAD Review* (Geneva: United Nations), pp. 39-51.
- Hymer, S.H. (1968). "La grande firme multinationale", *Revue Economique*, 14, pp. 949-973.
- India, Ministry of Industry, Secretariat of Industrial Approvals (1995). "Liberalization and foreign direct investment in India" (New Delhi: Government of India), mimeo..
- India, Ministry of External Affairs (undated). *Doing Business in India: Investment* (New Delhi: Macro Graphics).
- International Monetary Fund (IMF) (1989). *Direction of Trade Statistics Yearbook, 1989* (Washington, D.C.: IMF).
- _____ (1990). *International Financial Statistics Yearbook* (Washington, D.C.: IMF).
- _____ (1992). *International Financial Statistics Yearbook* (Washington, D.C.: IMF).
- _____ (1993a). *Direction of Trade Statistics Yearbook, 1993* (Washington, D.C.: IMF).
- _____ (1993b). *Balance of Payments Manual*, 5th edition (Washington, D.C.: IMF).
-

- _____ (1994a). *World Economic Outlook* (Washington, D.C.: IMF).
- _____ (1994b). *Direction of Trade Statistics Yearbook, 1994* (Washington, D.C.: IMF).
- _____ (1994c). *Exchange Arrangements and Exchange Restrictions. Annual Report 1994* (Washington, D.C.: IMF).
- _____ (1994d). *International Financial Statistics Yearbook* (Washington, D.C.: IMF).
- _____ (1994e). *Balance of Payments Yearbook 1992* (Washington D.C.: IMF).
- _____ (1995). *International Financial Statistics Yearbook* (Washington, D.C.: IMF).
- Israel Investment Authority (1994). *Investment Center Report for 1993* (in Hebrew) (Jerusalem: Trade and Industry Ministry).
- Japan, Agency of Industrial Science and Technology (1994). *Kagaku Gijyutsu Hakusho* (Toyko: Ministry of Finance Printing Bureau).
- Japan, Ministry of International Trade and Industry (MITI)(1983). *Dai 1-Kai Kaigai Jigyo Katsudo Kihon Chosa: Kaigai Toshi Tokei Soran* (Tokyo: Toyo Hoki Shuppan).
- _____ (1985). *Dai 18-Kai Gaishikei Kigyo no Doko* (Tokyo: Toyo Hoki Shuppan).
- _____ (1986). *Dai 2-Kai Kaigai Jigyo Katsudo Kihon Chosa: Kaigai Toshi Tokei Soran* (Tokyo: Keibun Shuppan).
- _____ (1991). *Dai 4-Kai Kaigai Jigyo Katsudo Kihon Chosa: Kaigai Toshi Tokei Soran* (Tokyo: Ministry of Finance Printing Bureau).
- _____ (1992). *Dai 25-Kai Gaishikei Kigyo no Doko* (Tokyo: Ministry of Finance Printing Bureau).
- _____ (1994a). *Dai 5-Kai Kaigai Jigyo Katsudo Kihon Chosa: Kaigai Toshi Tokei Soran* (Tokyo: Ministry of Finance Printing Bureau).
- _____ (1994b). *Dai 27-Kai Gaishikei Kigyo no Doko* (Tokyo: Ministry of Finance Printing Bureau).
- Jenkins, R. (1984). *Transnational Corporations and Industrial Transformation in Latin America* (New York: St. Martin's Press).
- JETRO (1993). *The 9th Survey of European Operations of Japanese Companies in the Manufacturing Sector* (Tokyo: JETRO).
- _____ (1994). *JETRO Hakusho: Toshihen 1994* (White Paper on Japanese Foreign Direct Investment) (Tokyo: JETRO).
- Johnson, C. (1988). "Japanese-style management in America", *California Management Review*, 20, 4 (Summer), pp. 34-45.
- Johnson, R. T. (1977). "Success and failure of Japanese subsidiaries in America", *Columbia Journal of World Business*, 12, 1 (Spring), pp. 30-37.
- Kajiwarra, H. (1993). "Taiwan's electronics industry: from an import substitution and export oriented industry to a highly advanced industry", in R. Inoue, H. Kohama and S. Urata, eds., *Industrial Policy in East Asia* (Tokyo: JETRO), pp. 165-191.
- Karshenas, M. (1994). "Growth, macroeconomic stability and employment expansion in the Middle-East and North Africa", paper prepared for expert meeting on economic policies and employment, 26-27 May (Geneva: ILO), mimeo..

- Katz, J. M. (1987). *Technology Creation in Latin American Manufacturing Industries* (New York: St. Martin's Press).
- Khan, Sikander and Hideki Yoshihara (1994). *Strategy and Performance of Foreign Companies in Japan* (Westport, Connecticut: Quorum Books).
- Kiss, Karoly (1993). "Western prescriptions for Eastern transition", in *Trends in World Economy*, Series No. 72 (Budapest: Hungarian Academy of Sciences).
- Kobrin, Stephen J. (1988). "Expatriate reduction and strategic control in American multinational corporations", *Human Resource Management*, 27, 1, pp. 63-75.
- _____ (1991). "An empirical analysis of the determinants of global integration", *Strategic Management Journal*, 12, pp. 17-31.
- Kogut, Bruce (1989). "A note on global strategies", *Strategic Management Journal*, 10, pp. 383-389.
- _____ (1990). "International sequential advantages and network flexibility", in C.A. Bartlett, Y. Doz and G. Hedlund, eds., *Managing the Global Firm* (London and New York: Routledge), pp. 47-68.
- _____ and S. J. Chang (1991). "Technological capabilities and Japanese direct investment in the United States", *Review of Economics and Statistics*, 73, 3 (August), pp. 401-403.
- _____ and D. Parkinson (1993). "The diffusion of American organizing principles to Europe", in Bruce Kogut, ed., *Country Competitiveness: Technology and the Organizing of Work* (Oxford: Oxford University Press), pp. 179-202.
- Kohama, Hirohisa and Shujiro Urata (1993). "Korea: export promotion policies for the electronics industry", in R. Inoue, H. Kohama and S. Urata, eds., *Industrial Policy in East Asia* (Tokyo: JETRO), pp. 143-164.
- Kojima, Kiyoshi (1958). "Nihon Keizai no Gankokeitaiteki Hatten to Boeki no Yakuwari", reproduced in Kiyoshi Kojima, ed. (1972), *Nihon Boeki no Kozo to Hatten* (Tokyo: Shiseido).
- _____ (1973). "A macro economic approach to foreign direct investment", *Hitotsubashi Journal of Economics*, 14, 1 (June).
- _____ (1975). "International trade and foreign investment: substitutes or complements", *Hitotsubashi Journal of Economics*, 16, 1 (June), pp. 1-12.
- _____ (1978). *Direct Foreign Investment: A Japanese Model of Multinational Business Operations* (London: Croom Helm).
- _____ (1990). "Japanese Direct Investment Abroad", Mitaka, Tokyo, Social Science Research Institute, International Christian University, Monograph Series 1.
- _____ and Terutomo Ozawa (1985). "Toward a theory of industrial restructuring and dynamic comparative advantage", *Hitotsubashi Journal of Economics*, 25, 2 (December), pp. 135-145.
- Kokko, A. (1994). "Technology, market characteristics, and spillovers", *Journal of Development Economics*, 43, pp. 279-293.
- _____, R. Tansin and M. Zejan (1994). "Local technological capability and spillovers from FDI in the Uruguayan manufacturing sector" (Stockholm: Stockholm School of Economics), Working Paper Series in Economics and Finance No. 2, mimeo..
- Korea Institute for International Economic Policy (1993). *Shifting Toward the New Economy: Korea's Five-Year Economic Plan 1993-97: Synopsis* (Seoul: KIEP).

- Korea, Republic of, Ministry of Finance and Economy (1995). *Trends in Foreign Direct Investment as of December 31, 1994* (Seoul: Ministry of Finance and Economy).
- Korea, Republic of, Economic Cooperation Bureau (1994). *Trends in Foreign Investment* (Seoul: Ministry of Finance).
- Korhonen, Pekka (1994). *Japan and the Pacific Free Trade Area* (London: Routledge).
- Krugman, P. (1994). "Competitiveness: a dangerous obsession", *Foreign Affairs*, 73 (March/April), pp. 28-44.
- Labbe, Paul (1992). "Tools of the Trade: Competing in the Global Market", *Canadian Business Review*, Autumn, pp. 38-41.
- Lau, Ho-Fuk and Chi-Fai Chan (1994). "The development process of the Hong Kong garment industry: a mature industry in a newly industrialized economy", in E. Bonacich et al., op. cit., pp. 105-125.
- Lecraw, D. (1990). "Factors influencing FDI in LDCs", in Jeremy Clegg and Peter Buckley, eds., *Multinational Enterprises and Developing Countries* (London: Macmillan Press).
- _____ and D. Conklin (forthcoming). "Sectoral and foreign equity ownership restrictions" (Washington: The World Bank), mimeo..
- Lee, Chung H. and Eric D. Ramstetter (1991). "Direct investment and structural change in Korean manufacturing", in Eric D. Ramstetter, ed. (1991). *Direct Foreign Investment in Asia's Developing Economies and Structural Change in the Asia-Pacific Region* (Boulder: Westview Press).
- Lee, Seung Hoon and Ho Keun Song (1994). "The Korean garment industry: from authoritarian patriarchy to industrial paternalism", in E. Bonacich et al, eds., *Global Production: The Apparel Industry in the Pacific Rim* (New York: Greenwood Press), pp. 325-339.
- Lee, Yong Ki (1990). "Conglomeration and business concentration in Korea", in Jene K. Kwon, ed., *Korean Economic Development* (New York: Greenwood Press), pp. 325-339.
- Lim, L. Y. C. and E. F. Pang (1982). "Vertical linkages and multinational enterprises in developing countries", *World Development*, 10, pp. 585-595.
- Lipsey, Robert (1995). "Competitiveness in a world of transnational corporations", paper prepared for UNCTAD-DTCI, mimeo.
- Lipsey, Robert and Zbigniew Zimny (1994). "The impact of transnational service corporations on developing countries: competition, market structure and the provision of unique services", in Karl P. Sauvant and Padma Mallampally, eds., *Transnational Corporations in Services*, United Nations Library on Transnational Corporations, volume 12 (London and New York: Routledge for the United Nations), pp. 316-332.
- Low, L. (1995). "Direct foreign investment policies in Singapore" (Singapore: National University), mimeo..
- Lubetzky D. (1994). "Incentives for peace and profits: federal legislation to encourage U.S. enterprises to invest in Arab-Israel joint ventures", *Michigan Journal of International Law*, 15 (Winter), pp. 405-457.
- Madeo, David (1994). "Clinton Administration Policy Ties Economic Aid to Foreign Policy Goals", *Law & Policy in International Business*, 25, pp. 1215-1221.
- Malaysian Industrial Development Authority (MIDA) (1993). *MIDA Report 1993* (Kuala Lumpur: MIDA).
- Mansfield, E. (1984). "R&D and innovation: some empirical findings", in Zvi Griliches, ed., *R&D, Patents and Productivity* (Chicago: NBER), pp. 127-148.

- _____ and Anthony Romeo (1980). "Technology transfer to overseas subsidiaries by U.S.-based firms", *Quarterly Journal of Economics*, 94, pp. 737-750.
- _____, David Teece and Anthony Romeo (1979). "Overseas research and development by US-based firms", *Economica*, 46, pp. 187-196.
- Markusen, James R. (1991). "The theory of the multinational enterprise: a common analytical framework", in Eric D. Ramstetter, ed. (1991). *Direct Foreign Investment in Asia's Developing Economies and Structural Change in the Asia-Pacific Region* (Boulder: Westview Press).
- _____(1995). "The boundaries of multinational enterprises and the theory of international trade", *Journal of Economic Perspective*, 9, 2 (Spring), pp. 169-189.
- Martin, J. (1995a). "Beirut bourse reborn", *The Middle East*, 247 (July/August), p. 22.
- _____(1995b). "Lebanon lures international finance to pay for reconstruction", *The Middle East*, 247 (July/August), pp. 18-19.
- Mataloni, Raymond J. (1995). "A guide to BEA statistics on U.S. multinational companies", *Survey of Current Business*, 74, 3 (March), pp. 38-55.
- _____ and Lee Golberg (1994). "Gross product of United States multinational companies", in United States, Department of Commerce, *Survey of Current Business*, 74, February, pp. 42-55.
- Mathieson, D.J. and L. Rojas-Suarez (1992). "Liberalization of the capital account: experiences and issues", working paper 46, IMF (Washington D.C.: IMF).
- McFetridge, D. G. (1987). "The timing, mode and terms of technology transfer: some recent findings", in A. E. Safarian and G. Y. Bertin, eds., *Multinationals, Governments and International Technology Transfer* (London: Croom Helm), pp. 135-150.
- McKinnon, Ronald I. (1964). "Foreign exchange constraints in economic development and efficient aid allocation", *Economic Journal*, LXXIV, June, pp. 388-409.
- McMillan, Carl H. (1987). *Multinationals from the Second World: Growth of Foreign Investment by Soviet and East European State Enterprises* (London: Macmillan).
- Mexico, Secretaria de Comercio y Fomento Industrial (SECOFI) (1994). *Resultados de la Nueva Política de Inversión Extranjera en México 1989-1994* (Mexico City: SECOFI).
- _____(1995). *Evolución de la Inversión Extranjera en México* (Mexico City: SECOFI).
- Milward, Brinton H. and Hosbach Newman, Heidi (1989). "State incentive packages and the industrial location decision", *Economic Development Quarterly*, 3 (August), pp. 203-222.
- Ming-I, Yu (1994). "Tax Treatments on Outward Investment in Taiwan", in OECD, *Taxation and Investment Flows: An exchange of experiences between the OECD and the Dynamic Asian Economies* (Paris: OECD), pp. 183-196.
- Morales R. (1994). *Flexible Production: Restructuring of the International Automobile Industry* (Cambridge: Polity Press).
- Mortimore, Michael (1993). "Flying geese or sitting ducks? Transnationals and industry in developing countries", *CEPAL Review*, 51 (December), pp. 15 - 34.
- _____(1994). "Transforming sitting ducks into flying geese: the Mexican automobile industry" (Santiago: ECLAC/UNCTAD Joint Unit on Transnational Corporations), mimeo..

- _____ (1995a). "Transforming sitting ducks into flying geese: the example of the Mexican automobile industry", *Desarrollo Productivo*, 26, LC/G.1865 (Santiago: ECLAC).
- _____ (1995b). "América Latina frente a la globalización", *Desarrollo Productivo*, 23, LC/G.1867 (Santiago: ECLAC).
- _____ (1995c). "The contribution of TNCs to industrial restructuring: insights from the experience of Latin America", paper prepared for UNCTAD-DTCI, mimeo..
- _____, H. Duthoo and J.A. Guerrero (1995). "Informe sobre la competitividad internacional de las zonas francas de la República Dominicana", *Desarrollo Productivo*, 22, LC/G.1866 (Santiago: ECLAC).
- Mortimore, M. And R. Zamora (forthcoming). "Informe sobre la competitividad de la industria de confecciones en Costa Rica".
- Nankivell, Neville (1994). "Investment abroad doesn't threaten jobs at home", *The Financial Post*, July 7, p. 15.
- Narula, R. (1993). *An Examination of the Evolution and Interdependence of Foreign Direct Investment and Economic Structure: the Case of Industrialized Countries*, Ph.D. Thesis (Newark: Rutgers University).
- _____ (1995). *Multinational Investment and Economic Structure* (London: Routledge).
- Naya, Seiji and Eric D. Ramstetter (1991). "Direct foreign investment and structural change in the Asia-Pacific region: the issues", in Eric D. Ramstetter, ed. (1991). *Direct Foreign Investment in Asia's Developing Economies and Structural Change in the Asia-Pacific Region* (Boulder: Westview Press).
- Newfarmer, Richard S., ed., *Profits, Progress and Poverty. Case Studies of International Industries in Latin America* (Notre Dame, Indiana: University of Notre Dame).
- New United Motor Manufacturing, Inc. (NUMMI) (1993). "New United Motor Manufacturing, Inc.: a joint venture between General Motors Corporation and Toyota Motor Corporation" (Fremont: NUMMI), mimeo..
- Nonaka, Ikujiro and Hirotaka Takeuchi (1995). *The Knowledge-Creating Company* (New York, Oxford: Oxford University Press).
- Norgren, L. (1992). *Industriföretags FoU i Sverige och Utomlands* (Industrial Firms' R&D in Sweden and Overseas) (Stockholm: FA-Rdet).
- NUTEK (Swedish National Board for Industrial and Technical Development) (1994). *Swedish Industry and Industrial Policy* (Stockholm: Modin Tryck).
- Okada, Y. (1991). "Cooperative sectorial governance structure of Japanese automobile manufacturing in Asean countries: framework for analysis" (Niigata Ken city: Niigata-Ken International University of Japan), mimeo..
- Okamoto, Y. (1994). "Impact of trade and FDI liberalization policies on the Malaysian economy", *The Developing Economies*, XXXII (December), pp. 460-478.
- Organisation for Economic Co-operation and Development (OECD) (1987). "Science parks and technology complexes in relation to regional development" (Paris: OECD), mimeo..
- _____ (1988). *Science and Technology Policy Outlook 1988* (Paris: OECD).
- _____ (1989a). *International Direct Investment and the New Economic Environment: The Tokyo Roundtable* (Paris, OECD).

-
- _____ (1989b). *International Investment and Multinational Enterprises: Investment Incentives and Disincentives. Effects on International Direct Investment* (Paris: OECD).
- _____ (1992). *International Direct Investment: Policies and Trends in the 1980s* (Paris: OECD).
- _____ (1993a). *Exchange Control Policy* (Paris: OECD).
- _____ (1993b). *Globalization of Industrial Activities: Sector Case of Globalization in the Automobile Industry* (Paris: OECD).
- _____ (1993c). *Promoting Foreign Direct Investment in Developing Countries* (Paris: OECD).
- _____ (1993d). *Foreign Direct Investment Relations Between the OECD and the Dynamic Asian Economies: The Bangkok Workshop* (Paris: OECD).
- _____ (1994a). *International Direct Investment Statistics Yearbook* (Paris: OECD).
- _____ (1994b). *Private Foreign Financial Institutions in the Central And Eastern European Countries* (Paris: OECD).
- _____ (1994c). *The Performance of Foreign Affiliates in OECD Countries* (Paris: OECD).
- _____ (1995). *Code of Liberalization of Capital Movements* (Paris: OECD), forthcoming.
- Ouchi, W. G. (1981). *Theory Z* (Reading, Mass.: Addison-Wesley).
- Ozawa, Terutomo (1974). *Japan's Technological Challenge to the West: Motivation and Accomplishment, 1950-1974* (Cambridge: MIT Press).
- _____ (1979). *Multinationalism, Japanese Style: The Political Economy of Outward Dependency* (Princeton: Princeton University Press).
- _____ (1986). "Japan's largest financier of multinationalism: the EXIM Bank", *Journal of World Trade Law*, 20, 6, pp. 599-614.
- _____ (1990). "Multinational corporations and the 'flying geese' paradigm of economic development in the Asian Pacific". Paper presented at the 20th anniversary World Conference on Multinational Enterprises and 21 Century Szenarios, Tokyo, 4-6 July, mimeo..
- _____ (1992). "Foreign direct investment and economic development", *Transnational Corporations*, 1, 1, pp. 27-54.
- _____ (1993). "Foreign direct investment and structural transformation: Japan as a recycler of market and industry", *Business and the Contemporary World*, 5, 2 (Spring), pp. 129-150.
- _____ (1994). "Japan's external asymmetries and assembly industries: lean production as a source of competitive advantage", *Transnational Corporations*, 3, 3, pp. 25-52.
- _____ (1995a). "The flying-geese paradigm of tandem growth: TNCs' involvement and agglomeration economies in Asia's industrial dynamism". Paper presented at the 1995 AIB annual meeting in Seoul, Republic of Korea, 15-18 November, mimeo..
- _____ (1995b). "Japan: the macro-DIP, meso-IDPs and the technology development path (TDP)", in John H. Dunning and R. Narula, eds., *Foreign Direct Investment, Economic Structure and Governments* (London: Routledge), forthcoming.
- _____ and Sue Hine (1993). "A strategic shift from international to multinational banking: a 'macro-developmental' paradigm of Japanese banks qua multinationals", *Banca Nazionale del Lavoro Quarterly Review*, 186 (September), pp. 159-174.
-

- Paisley, Ed and Terrence Klerman (1994). "Reforms boost capital flows", *Far Eastern Economic Review*, May 26, pp. 53 et seq.
- Park, Yung Chul and Won-Am Park (1993). "Capital movement, real asset speculation, and macroeconomic adjustment in Korea," in Helmut Reisen and Bernhard Fischer, eds., *Financial Opening: Policy Issues and Experiences in Developing Countries* (Paris: OECD).
- Patel, P. and K. Pavitt (1992). "Large firms in the production of the world's technology: an important case of non-globalization", in O. Granstrand, L. Håkanson and S. Sjölander, eds., *Technology Management and International Business: Internationalization of R&D and Technology* (Chichester, West Sussex: John Wiley & Sons), pp. 53-74.
- Papanastassiou, M. and R. D. Pearce (1992). "The research and development of Japanese multinational enterprises in Europe". Paper prepared for the Institut Francaise des Relations Internationale, mimeo..
- Pearce, Robert D. (1993). *The Growth and Evolution of Multinational Enterprise: Patterns of Geographical and Industrial Diversification* (Aldershot: Edward Elgar Publishing).
- Perez Nu ez, Wilson (1990). *Foreign Direct Investment and Industrial Development in Mexico* (Paris: OECD).
- Pigou, A. (1920). *The Economics of Welfare* (London: Macmillan).
- Pilat, Dirk (1994). *The Economics of Rapid Growth* (Aldershot: Edward Elgar Publishing).
- Piore, M. J. and C. Sabel (1984). *The Second Industrial Divide: Possibilities for Prosperity* (New York: Basic Books).
- Plasschaert, S., ed. (1994). *Transnational Corporations, Transfer Pricing and Taxation. United Nations Library on Transnational Corporations* (London: Routledge).
- Porter, M.E. (1990). *The Competitive Advantage of Nations* (London: Macmillan).
- Pugel, T. A. (1981). "The determinants of foreign direct investment: an analysis of US manufacturing industries", *Managerial and Decision Economics*, 2, pp. 220-228.
- Ramstetter, Eric D., ed. (1991). *Direct Foreign Investment in Asia's Developing Economies and Structural Change in the Asia-Pacific Region* (Boulder: Westview Press).
- _____ (1992). "Foreign direct investment and exports of manufactures from developing economies: An empirical evaluation by regions and countries", study prepared for the UNCTAD Secretariat (UNCTAD/ITD/2), mimeo..
- _____ (1993). "Characteristics of foreign multinationals in selected Asian economies". Paper prepared for the Fourth Convention of the East Asian Economic Association, Taipei, 26-27 August 1994, mimeo..
- _____ (1994). "Characteristics of foreign multinationals in selected Asian economies and their role in host economy exports". Paper prepared for the Joint Conference on Promoting South-South Cooperation in the Asia-Pacific Region, Colombo, Sri Lanka, 16-18 February.
- Ranis, G. (1976). "The multinational corporation as an instrument of development", in D. Apter and L. Goodman, eds., *The MNC and Social Change* (New York: Praeger Publishers).
- Rao, S., M. Legault and A. Ahmad (1994). "Canadian-based multinationals: an analysis of activities and performance", in Steven Globerman, ed., *Canadian-Based Multinationals* (Calgary, Canada: University of Calgary Press), pp. 63-123.

- Rapp, William V. (1967) "Theory of changing trade patterns under economic growth", Yale Economic Essays, fall, pp. 69-135.
- Reddy, Prasada (1993). "Emerging patterns of internationalization of corporate R&D: opportunities for developing countries?", in C. Brundenius and B. Göransson, eds., *New Technologies and Global Restructuring: The Third World at a Crossroads* (London: Taylor Graham), pp. 78-99.
- _____ (1994). "New trends of locating corporate R&D in developing and East European countries by transnational corporations and their implications" (Vienna: UNIDO), United Nations document No. ITPD.13 (SPEC.), 30 December, mimeo..
- _____ (1995). "Emerging patterns of globalization of corporate R&D and scope for innovative capability building in developing countries: the country case study of India" (Lund: Research Policy Institute, Lund University), mimeo..
- _____ and J. Sigurdson (1994). "Emerging patterns of globalisation of corporate R&D and scope for innovation capability building in developing countries", *Science and Public Policy*, 21, 5 (October), pp. 283-294.
- Reid, Neil (1991). "Japanese direct investment in the United States manufacturing sector", in Jonathan Morris, ed., *Japan and the Global Economy: Issues and Trends in the 1990's* (London: Routledge), pp. 61-91.
- Richman, B. and M. Copen (1973). "Management techniques in the developing nations", *Columbia Journal of World Business*, 8, 2, pp. 49-58.
- Rojec, Matija (1994). "Foreign direct investment in the transformation process", *Development & International Co-operation*, 10, 18 (June), p. 5-26.
- _____ (1995). "Direct investment from abroad and Tolar exchange rate", *Bančni vestnik* (Ljubljana), 44, 3, pp. 17-18.
- _____, P. Artisien, J. Dunning, M. Illes, W. Jermakowicz, M. Svetlicic and A. Zemplerova (1995). "Foreign direct investment and privatization in Central and Eastern Europe: a comparative analysis of concepts, experiences and policy issues in the Czech Republic, Hungary, Poland and Slovenia", PHARE-ACE Project No. ACE-92-0108-R, Ljubljana, Centre for International Cooperation and Development, mimeo..
- Rondinelli, Dennis A. (1994). "Privatization and economic reform in Central Europe: experience of the early transition period", in Dennis A. Rondinelli, ed., *Privatization and Economic Reform in Central Europe: The Changing Business Climate* (London: Quorum Books), pp. 1-40.
- Rosenberg, N. (1976). *Perspective on Technology* (New York: Cambridge University Press).
- Rugman, Alan M. and Joe R. D'Cruz (1994). "A theory of business network", in Lorraine Eden, ed., *Multinationals in North America* (Calgary: University of Calgary Press), pp. 103-140.
- Rugman, A.M. and R. Tilley (1987). "Canada's reversal from importer to exporter of foreign direct investment", *Management International Review*, 27, 3, pp. 13-25.
- Sader, F. (1994). "Privatization techniques and foreign investment in developing countries, 1988-93" (Washington, D.C.: The World Bank), mimeo..
- Safarian, A.E. (1985). *Foreign Direct Investment: a Survey of Canadian Research* (Montreal: Institute for Research on Public Policy).

- Salleh, Ismail Muhd and Saha Dhevan Meyanathan (1993). *The Lessons of East Asia: Malaysia. Growth, Equity, and Structural Transformation* (Washington, D.C.: The World Bank).
- Sauvant, K.P. (1990). "The tradability of services", in World Bank and UNCTC, *The Uruguay Round, Services in the World Economy* (Washington, D.C.: The World Bank and UNCTC).
- _____ and V. Aranda (1994). "The international legal framework for transnational corporations" in A. A. Fatouros, ed., *Transnational Corporations: The International Legal Framework. United Nations Library on Transnational Corporations* (London: Routledge).
- Schive, Chi and Jenn-Hwa Tu (1991). "Foreign firms and structural change in Taiwan", in Eric D. Ramstetter, ed. (1991). *Direct Foreign Investment in Asia's Developing Economies and Structural Change in the Asia-Pacific Region* (Boulder: Westview Press).
- Schultz, Siegfried (forthcoming). *Auslandsdirektinvestitionen ostasiatischer Länder in Europa und in der Bundesrepublik Deutschland* (Berlin: Duncker and Humblot).
- Schumpeter, Joseph (1942/1989). *Capitalism, Socialism and Democracy* (New York: Harper and Row).
- Senge, Peter M. (1992). *The Fifth Discipline: The Art and Practice of the Learning Organization* (London: Century Business).
- Shahin, M. (1995). "Syria: secret to the economic future", *The Middle East*, 242 (February), pp. 27-29.
- Shaiken H. (1991). "The universal motor assembly and stamping plants: Transferring high-tech production to Mexico", *The Columbia Journal of World Business*, 26, 2 (Summer), pp. 124-137.
- Sheti, P. S., N. Namiki and C. L. Swanson (1984). *The False Promise of the Japanese Miracle: Illusions and Realities of the Japanese Management System* (Boston, London and Toronto: Pitman).
- Shinohara, Myohei (1982). *Industrial Growth, Trade and Dynamic Patterns in the Japanese Economy* (Tokyo: University of Tokyo Press).
- Sikes, Jon (1994). "Reaching out for growth", *Asian Business*, September, p. 32.
- Singapore, Economic Development Board (EDB) (1993). *Singapore Unlimited: Economic Development Board Yearbook 1992/1993* (Singapore: Singapore National Printers).
- Sreenivasan, Ven (1994). "EDB in thrust to promote regional investments", *Business Times*, January 14, p. 2.
- Statistics Canada (1994). *Canada's International Investment Position* (Ottawa, Canada: Statistics Canada).
- Stevens, Guy V. G. and Robert Lipsey (1992). "Interactions between domestic and foreign investment", *Journal of International Money and Finance*, 11, pp. 40-62.
- Stonehill, Arthur I. and Michael H. Moffett, eds. (1993). *International Financial Management*, United Nations Library on Transnational Corporations, volume 5 (London and New York: Routledge for the United Nations).
- Stubenitsky, F. (1970). *American Direct Investment in Netherlands Industry* (Rotterdam: Rotterdam University Press).
- Sullivan, J. J. (1992). *Invasion of the Salaryman: The Japanese Presence in America* (Connecticut and London: Praeger).
- Svensson, Roger (1993). "Domestic and foreign investment by Swedish multinationals" (Stockholm: The Industrial Institute for Economic and Social Research), Working Paper No. 391, mimeo..

- Svetlicic, Marjan and M. Rojec (1991). "Export oriented industrial collaboration in Yugoslavia" (Ljubljana: Centre for International Cooperation and Development), mimeo..
- Svetlicic, Marjan (1994). "foreign direct investment and the transformation: public expectations and results, the case of Slovenia", in K. Fatemi, ed., *The Globalization of Business in the 1990s: Implications for Trade and Investment* (Laredo, Texas: A&M International University), pp. 1369-1382.
- Taiwan Province of China, economic affairs authorities (1993). *Outward Investment from Taiwan ROC: A New Source of International Capital* (Taipeh, Taiwan Province of China: Industrial Development & Investment Center).
- Taiwan Province of China, Investment Commission (1995a). *Outward Investment from Taiwan ROC: A New Source of International Capital* (Taipeh, Taiwan Province of China: Economic Authority).
- _____ (1995b). *Statistics on Overseas Chinese & Foreign Investment, Technical Cooperation, Outward Investment, Outward Technical Cooperation, Indirect Mainland Investment* (Taipeh, Taiwan Province of China: Economic Authority).
- Teece, D. J. (1977). "Technology transfer by multinational firms: the resource cost of transferring technological know-how", *Economic Journal*, 87, pp. 242-261.
- Tajima, Shiroki (1995). "Future trends in Japanese foreign direct investment", *Transnational Corporations*

-
- _____ (1992c). *The Determinants of Foreign Direct Investment: A Survey of the Evidence* (New York: United Nations), United Nations publication, Sales No. E.92.II.A.2.
- _____ (1992d). *World Investment Directory, Vol II, Central and Eastern Europe* (New York: United Nations), United Nations publications, Sales No. E.93.II.A.1.
- _____ (1993). *Intellectual Property Rights and Foreign Direct Investment*, Current Studies, Series A, No. 24 (New York: United Nations), United Nations publication, Sales No. E.93.II.A.10.
- United Nations Conference on Trade and Development (UNCTAD) (1989). *Transfer and Development of Technology in Developing Countries: A Compendium of Policy Issues* (Geneva: United Nations), United Nations publication, Sales No. E.89.II.D.17.
- _____ (1991). "Transfer and development of technology in a changing world environment: the challenges of the 1990s" (Geneva: United Nations), United Nations document, No. TD/B/C.6/153, mimeo..
- _____ (1992). "The interrelationship between investment and technology transfer: an overview of the main issues" (Geneva: United Nations), United Nations document, No. UNCTAD/ITD/TEC/1, mimeo..
- _____ (1993). *Handbook of International Trade and Development Statistics 1993* (Geneva: United Nations), United Nations publication, Sales No. E/F.94.II.D.24.
- _____ (1994a). *Trade and Development Report 1994* (Geneva: United Nations), United Nations publication, Sales No. E.94.II.D.26.
- _____ (1994b). *Privatization in the Transition Process. Recent Experiences in Eastern Europe* (Geneva: UNCTAD), United Nations publication, Sales No. E.94.II.D.25.
- _____ (1994c). "Prospects for sustained development of the Palestinian economy in the West Bank and Gaza Strip, 1990-2010: a quantitative framework" (Geneva: United Nations), United Nations document, No. UNCTAD/ECDC/SEU/6 and Add.1, 11 November, mimeo..
- _____ (1995a). *Trade and Development Report 1995* (Geneva: United Nations), United Nations publication, Sales No. E.95.II.D.16.
- _____ (1995b). *Handbook of International Trade and Development Statistics* (Geneva: United Nations) Sales No. E/F.95.II.D.15.
- _____ (1995c). *The Least Developed Countries 1995 Report* (Geneva: United Nations), United Nations publication, Sales No. E.95.II.D.2.
- _____ (1995d). *Compendium of Documents relating to the Work of the UNCTAD Working Group on the Interrelationship between Investment and Technology Transfer* (Geneva: United Nations), United Nations publication, Sales No. E.95.II.D.12.
- United Nations Conference on Trade and Development, Division on Transnational Corporations and Investment (UNCTAD-DTCI)(1993a). *World Investment Report 1993: Transnational Corporations and Integrated International Production* (Geneva and New York: United Nations), United Nations publication, Sales No. E.93.II.A.14.
- _____ (1993b). *Environmental Management in Transnational Corporations: Report on the Benchmark Corporate Environmental Survey* (New York: United Nations), United Nations publications, Sales No. E.94.II.A.2.
- _____ (1993c). *Small and Medium-sized Transnational Corporations, Role, Impact and Policy Implications* (New York: United Nations), United Nations publication, Sales No. E.93.II.A.15.
-

- _____. (1994a). *World Investment Report 1994: Transnational Corporations, Employment and the Workplace* (Geneva: United Nations), United Nations publication, Sales No. E.94.II.A.14).
- _____. (1994b). "Country and regional experiences in attracting foreign direct investment for development: foreign direct investment in Africa." Report by the UNCTAD secretariat (Geneva: United Nations), United Nations document, E/C.10/1994/5, 23 March.
- _____. (1994c). *World Investment Directory, volume IV: Latin America and the Caribbean* (Geneva: United Nations), Sales No.E.94.II.A.10.
- _____. (1995a). *Foreign Direct Investment in Africa* (Geneva: United Nations), Current Studies, Series A, No. 28, United Nations publication, Sales No. E.95.II.A.6.
- _____. (1995b). *Transnational Corporations and Foreign Direct Investment: a Compendium of Multi-lateral and Regional Instruments* (Geneva: United Nations), forthcoming.
- _____. (1995c). *Foreign Direct Investment and Incentives* (Geneva: United Nations), forthcoming.
- _____. (forthcoming). *Bilateral Investment Treaties, 1959-1995* (Geneva: United Nations).
- _____ and World Bank (forthcoming). *Assessing the Sustainability of Regional Flows of Foreign Direct Investment* (Geneva and Washington, D.C.: United Nations and the World Bank).
- United Nations, Department for Economic and Social Development, Transnational Corporations and Management Division (UN-TCMD) (1992a). *The East-West Business Directory 1991-1992* (New York: United Nations), United Nations publication, Sales No. E.92.II.A.20.
- _____. (1992b). *World Investment Report 1992: Transnational Corporations as Engines of Growth* (New York: United Nations), United Nations publication, Sales No. E.92.II.A.19.
- _____. (1992c). *World Investment Directory, Central and Eastern Europe* (New York: United Nations), United Nations publications, Sales No. E.93.II.A.1.
- _____. (1993a). *World Investment Directory. Volume III: Developed Countries* (New York: United Nations), United Nations publication, Sales No. E.93.II.A.9.
- _____. (1993b). *Transnational Corporations from Developing Countries: Impact on Their Home Countries* (New York: United Nations), United Nations publication, Sales No. E.92.II.A.8.
- _____. (1993c). *Regional Economic Integration in the European Community and TNCs* (New York: United Nations), United Nations publications, Sales No. E.93.II.A.2.
- _____ and Economic Commission for Europe (UN-TCMD and ECE) (1992). *World Investment Directory. Volume II: Central and Eastern Europe* (New York: United Nations), United Nations publication, Sales No. E.93.II.A.1.
- United Nations, Department of Economic and Social Information and Policy Analysis (1993). "Handbook of world development statistics" (New York: United Nations), mimeo..
- United States Congress, Office of Technology Assessment (OTA) (1994). *Multinationals and the U.S. Technology Base*, OTA-ITE-612 (Washington D.C.: Government Printing Office).
- United States, Department of Commerce (1985a). *Foreign Direct Investment in the United States: Operations of United States Affiliates of Foreign Companies* (Washington, D.C.: Government Printing Office).
- _____. (1985b). *United States Direct Investment Abroad: 1982 Benchmark Survey*, final results (Washington, D.C.: Government Printing Office).

- _____ (1992a). *Foreign Direct Investment in the United States: Operations of United States Affiliates of Foreign Companies* (Washington, D.C.: Government Printing Office).
- _____ (1992b). *United States Direct Investment Abroad: 1989 Benchmark Survey*, final results (Washington, D.C.: Government Printing Office).
- _____ (1994a). "United States multinational companies: operations in 1992", *Survey of Current Business*, 74, 6 (June), pp. 42-62.
- _____ (1994b). *U.S. Direct Investment Abroad: Operations of U.S. Parent Companies and Their Foreign Affiliates*, preliminary 1992 estimates (Washington, D.C.: Government Printing Office).
- _____ (1994c). *U.S. Direct Investment Abroad: Operations of U.S. Parent Companies and their Foreign Affiliates*, revised 1991 estimates (Washington, D.C.: Government Printing Office).
- _____ (1994d). *Foreign Direct Investment in the United States: 1992 Benchmark Survey*, preliminary results (Washington, D.C.: Government Printing Office).
- _____ (1994e). *US Industrial Outlook 1994* (Washington, D.C.: Government Printing Office).
- _____ (1995). *United States Direct Investment Abroad: Operations of United States Parent Companies and their Foreign Affiliates*, revised 1992 estimates (Washington, D.C.: Government Printing Office).
- Vackrarish, Viraphong (1992). "Thai investment abroad", *Bangkok Bank Monthly Review*, 33, April, pp. 10-21.
- Vernon R. (1966). "International investment and international trade in the product cycle", *Quarterly Journal of Economics*, 80, pp. 190-207.
- _____ (1979). "The product cycle hypothesis in the new international environment", *Oxford Bulletin of Economics and Statistics*, 41, pp. 255-267.
- Weiermair, K. (1991). "On the transferability of management systems: the case of Japan", in P. Buckley and J. Clegg, eds., *Multinational Enterprises in Less Developed Countries* (London: Macmillan), pp. 56-76.
- Wells, L.T. and A.G. Wint (1990). *Marketing a Country: Promotion as a Tool for Attracting Foreign Investment* (Washington, D.C.: The World Bank), International Finance Corporation, Occasional Paper No. 1.
- Westney, D. Eleanor (1994). "Japanese multinationals in North America", in Lorraine Eden, ed., *Multinationals in North America* (Calgary: University of Calgary Press), pp. 253-275.
- Whipp, R., R. Rosenfeld and A. Pettigrew (1989). "Culture and competitiveness: evidence from two mature UK industries", *Journal of Management Studies*, 26, 6, pp. 561-585.
- Williamson, John (1993). "A cost-benefit analysis of capital account liberalization", in Helmut Reisen and Bernhard Fischer, eds., *Financial Opening: Policy Issues and Experiences in Developing Countries* (Paris: OECD).
- Wilson, R. (1994). "The economic relations of the Middle East: towards Europe or within the region?", *Middle East Journal*, 48, 2 (Spring), pp. 356-367.
- Wint, A.G. (1992). "Public marketing of foreign investment: successful international offices stand alone", *International Journal of Public Sector Management*, 5, 5, pp. 27-39.
- Witherell, William H. (1995). "The OECD multilateral agreement on investment", *Transnational Corporations*, 4, 2, forthcoming.

- Womack J.P., D.T. Jones and D. Roos (1990). *The Machine that Changed the World* (New York: Rawson Associates).
- World Bank (1991). "Global trends in textile technology and trade" (Washington, D.C.: The World Bank), Industry Series Paper 47, mimeo..
- _____ (1993a). *World Debt Tables 1993-94* (Washington, D.C.: The World Bank).
- _____ (1993b). *The East Asian Miracle: Economic Growth and Public Policy* (New York: Oxford University Press).
- _____ (1994). *World Development Report 1994* (Washington D.C.: The World Bank).
- _____ (1995). *World Debt Tables 1994-1995* (Washington, D.C.: The World Bank).
- Wu, Frierich and Anthony Adams (1993). "Stepping out the door: Chinese investments abroad", *The China Business Review*, 20, 6, pp. 14 et seq.
- Xing, Hooyvan (1994). "Trends in China's outward investment", *Economic Circle*, 12 (December).
- Yamada, B. (1990). *Internationalization Strategies of Japanese Electronics Companies: Implications for Asian Newly Industrialising Economies (NIEs)* (Paris: OECD), Technical Papers No. 28.
- Yamazawa, Ippei (1990). *Economic Development and International Trade: the Japanese Model* (Honolulu: East-West Center).
- Yokota Kazuhiko (1994). "The globalization and the changing patterns of international transactions of Japanese firms", in Koichi Ohno and Yumiko Okamoto, eds., *Regional Integration and Foreign Direct Investment: Implications for Developing Countries* (Tokyo: Institute of Developing Economies), pp. 84-95.
- Yoshihara, H., et al. (1988). *Nippon kigyo no gurobaru keiei* (Tokyo: Toyo Keizai Shimpusha).
- Young, Namkoong (1989). *Political Economy of Korean Multinational Corporations: A Mercantilist Approach* (Ann Arbor, Michigan: University Microfilms International), Ph.D. dissertation.
- Yu, Ching-Hsun (1994). "Ethnic Chinese overseas -- their economic power and their likely role in the 21st century", *Management Japan*, 27, 2, pp. 14-18.
- Zhang, James (1995). "The internationalization of Chinese firms and new overseas investment", *Transnational Corporations*, forthcoming.

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TECHNICAL NOTE

A. General definitions

1. *Transnational corporation*

Transnational corporations are incorporated or unincorporated enterprises comprising parent enterprises and their foreign affiliates. A *parent enterprise* is defined as an enterprise that controls assets of other entities in countries other than its home country, usually by owning a certain equity capital stake. An equity capital stake of 10 per cent or more of the ordinary shares or voting power for an incorporated enterprise, or its equivalent for an unincorporated enterprise, is normally considered as a threshold for the control of assets.¹ A *foreign affiliate* is an incorporated or unincorporated enterprise in which an investor, who is resident in another economy, owns a stake that permits a lasting interest in the management of that enterprise (an equity stake of 10 per cent for an incorporated enterprise or its equivalent for an unincorporated enterprise). In the *World Investment Report*, subsidiary enterprises, associate enterprises and branches are all referred to as *foreign affiliates* or *affiliates*.

- *Subsidiary*: an incorporated enterprise in the host country in which another entity directly owns more than a half of the shareholders voting power and has the right to appoint or remove a majority of the members of the administrative, management or supervisory body.
- *Associate*: an incorporated enterprise in the host country in which an investor owns a total of at least 10 per cent, but not more than a half, of the shareholders' voting power.
- *Branch*: a wholly or jointly owned unincorporated enterprise in the host country which is one of the following: (i) a permanent establishment or office of the foreign investor; (ii) an unincorporated partnership or joint venture between the foreign direct investor and one or more third parties; (iii) land, structures (except structures owned by government entities), and /or immovable equipment and objects directly owned by a foreign resident; (iv) mobile equipment (such as ships, aircraft, gas or oil-drilling rigs) operating within a country other than that of the foreign investor for at least one year.

2. *Foreign direct investment*

Foreign direct investment (FDI) is defined as an investment involving a long-term relationship and reflecting a lasting interest and control of a resident entity in one economy (foreign direct investor or parent enterprise) in an enterprise resident in an economy other than that of the foreign direct investor (FDI enterprise or affiliate enterprise or foreign affiliate).² Foreign direct investment implies that the investor exerts a significant degree of influence on the management of the enterprise resident in the other economy. Such investment involves both the initial transaction between the two entities and all subsequent transactions between them

and among foreign affiliates, both incorporated and unincorporated. Foreign direct investment may be undertaken by individuals as well as business entities.

Foreign-direct-investment inflows and outflows comprise capital provided (either directly or through other related enterprises) by a foreign direct investor to a FDI enterprise, or capital received from a FDI enterprise by a foreign direct investor. There are three components in FDI: equity capital, reinvested earnings and intra-company loans.

- *Equity capital* is the foreign direct investor's purchase of shares of an enterprise in a country other than its own.
- *Reinvested earnings* comprise the direct investor's share (in proportion to direct equity participation) of earnings not distributed as dividends by affiliates or earnings not remitted to the direct investor. Such retained profits by affiliates are reinvested.
- *Intra-company loans or intra-company debt transactions* refer to short- or long-term borrowing and lending of funds between direct investors (parent enterprises) and affiliate enterprises.

Foreign-direct-investment stock is the value of the share of their capital and reserves (including retained profits) attributable to the parent enterprise, plus the net indebtedness of affiliates to the parent enterprise.³ Foreign-direct-investment flow and stock data used in the *World Investment Report* are not always defined as above, because these definitions are often not applicable to disaggregated FDI data. For example, in analysing geographical and industrial trends and patterns of FDI, data based on approvals of FDI may also be used because they allow a disaggregation at the country or industry level. Such cases are denoted accordingly.

3. *Non-equity forms of investment*

Foreign direct investors may also obtain an effective voice in the management of another business entity through means other than acquiring an equity stake. These are non-equity forms of FDI, and they include, *inter alia*, subcontracting, management contracts, turnkey arrangements, franchising, licensing and product sharing. Data on transnational corporate activity through these forms are usually not separately identified in balance-of-payments statistics. These statistics, however, usually present data on royalties and licensing fees, defined as "receipts and payments of residents and nonresidents for: (i) the authorized use of intangible non-produced, non-financial assets and proprietary rights such as trade-marks, copyrights, patents, processes, techniques, designs, manufacturing rights, franchises, etc., and (ii) the use, through licensing agreements, of produced originals or prototypes, such as manuscripts, films, etc."⁴

B. Availability and limitations of foreign-direct-investment data presented in the *World Investment Report*

Data on FDI flows in annex tables 1 and 2, as well as some tables in the text, are on a net basis (capital transactions' credits less debits between direct investors and their foreign affiliates). Net decreases in assets or net increases in liabilities are recorded as credits (recorded with a positive sign in the balance of payments), while net increases in assets or net decreases in liabilities are recorded as debits (recorded with a negative sign in the balance of payments). In the annex tables, as well as in the tables in the text, the negative signs are deleted for practical use. Hence, FDI flows with a negative sign in the *World Investment Report* indicate that at least one of the three components of FDI (equity capital, reinvested earnings or intra-company loans) is negative and not offset by positive amounts of the remaining components. These are instances of reverse investment or disinvestment.

Not all countries record every component of FDI flows. Table 1 summarizes the availability of each component of FDI during 1980-1994, the period covered in the *World Investment Report*. Comparison of data among countries should therefore be made bearing these limitations in mind.

1. Inflows

The most reliable and comprehensive data on FDI flows that are readily available from international sources and follow the above definition are reported by the International Monetary Fund (IMF). For the purpose of assembling balance-of-payments statistics for its member countries, IMF collects and publishes data annually on FDI inflows and outflows in the *Balance of Payments Statistics Yearbook*. Data from IMF used in the *World Investment Report* were obtained directly from IMF's computer tape containing balance-of-payments statistics. In those cases in which economies do not report to IMF (e.g., Taiwan Province of China), or their reporting does not cover the entire 1980-1994 period that is used in the *World Investment Report*, data from UNCTAD Division on Transnational Corporations and Investment, FDI database, which contains published or unpublished national official FDI data obtained from central banks, statistical offices or national authorities, were used. These data were also supplemented with data of the Organisation for Economic Co-operation and Development, *Geographical Distribution of Financial Flows to Developing Countries* (retrieved by OECD from a computer tape). Data reported by OECD are based on FDI outflows to developing countries from the member countries of the Development Assistance Committee of OECD. Inflows of FDI to developing countries reported by OECD are therefore underestimated. Those countries and territories for which OECD data, or estimates based on OECD data, were used for the 1980-1993 period, or part of that period, are listed below.

1980-1993

Afghanistan, Bermuda, Brunei Darussalam, Burundi, Cayman Islands, Cuba, Democratic People's Republic of Korea, Guinea-Bissau, Gibraltar, Hong Kong, Islamic Republic of Iran, Iraq, Kuwait, Lebanon, Macao, Myanmar, Nepal, Qatar, Sudan, Syrian Arab Republic, United Republic of Tanzania, United Arab

Table 1. List of economies for which at least one component of foreign direct investment is not available ^a

<i>Equity investment</i>	<i>Reinvested earnings</i>	<i>Intra-company loans</i>
Developed countries:		
Denmark, Iceland ^b , Ireland, Italy, Spain, Sweden ^c , United Kingdom	Austria ^b , Belgium, Canada ^d , Denmark, France ^e , Greece ^f , Iceland, Ireland, Japan, Norway, South Africa, Spain, Sweden ^c	Austria ^b , Denmark, Ireland, Italy, Spain, Sweden ^c
Developing economies:		
Africa:		
Algeria, Egypt, Angola ^f , Benin, Botswana ^g , Burundi, Cape Verde, Chad, Comoros, Djibouti, Equatorial Guinea, Ghana ^h , Gambia, Israel, Lesotho, Liberia, Libyan Arab Jamahiriya, Madagascar, Malawi, Mali ⁱ , Mauritania, Mozambique, Namibia ^j , Nigeria, Seychelles, Somalia, Uganda, Zaire, Zambia ^l , Zimbabwe	Algeria, Angola ^f , Benin, Burundi, Cameroon ^k , Cape Verde, Libyan Arab Jamahiriya ^l , Chad ^m , Comoros, Congo ⁿ , Djibouti ^m , Egypt, Equatorial Guinea, Gambia, Ghana ^h , Guinea-Bissau, Lesotho, Liberia ^k , Madagascar, Malawi, Mali, Mauritania, Mauritius ^o , Mozambique, Namibia ^o , Nigeria, Senegal ^p , Somalia, Togo ^q , Tunisia, Uganda, Zambia ^l , Zimbabwe ^h	Algeria, Egypt, Angola, Benin, Burundi, Cape Verde, Chad, Comoros, Djibouti, Equatorial Guinea, Gambia, Ghana ^h , Guinea, Lesotho, Libyan Arab Jamahiriya ^l , Madagascar, Malawi, Mali, Mauritania, Mauritius ^o , Mozambique, Namibia, Nigeria, Somalia, Uganda, Zaire, Zambia ^l
Latin America and the Caribbean:		
Chile, Suriname, Paraguay, Peru, Venezuela, Antigua and Barbuda ^b , Aruba, Barbados, Dominican Republic, Grenada, Netherlands Antilles, Saint Kitts and Nevis ^b , Saint Lucia ^b , Saint Vincent and the Grenadines ^b , Uruguay ^b	Chile ^f , Paraguay ^j , Antigua and Barbuda ^b , Aruba, Belize ^r , Dominica ^s , Grenada ^s , Saint Kitts and Nevis ^b , Saint Lucia ^o , Saint Vincent and the Grenadines ^b , Uruguay ^b	Argentina, Bolivia, Chile, Colombia, Ecuador, Paraguay, Suriname, Venezuela, Antigua and Barbuda, Aruba, Dominican Republic, El Salvador, Grenada, Guatemala ^o , Netherlands Antilles, Saint Kitts and Nevis ^b , Saint Lucia ^b , Saint Vincent ^b , Uruguay ^b
West Asia:		
Bahrain, Cyprus, Islamic Republic of Iran, Iraq, Kuwait, Lebanon, Qatar, Saudi Arabia, Syrian Arab Republic, Turkey, United Arab Emirates, Yemen	Bahrain, Islamic Republic of Iran, Iraq, Jordan, Kuwait, Lebanon, Qatar, Saudi Arabia, Syrian Arab Republic, Turkey, United Arab Emirates, Yemen	Bahrain, Islamic Republic of Iran, Iraq, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syrian Arab Republic, Turkey, United Arab Emirates, Yemen
South, East and South-East Asia:		
Bangladesh, Cambodia, China, Republic of Korea, Lao People's Democratic Republic, Malaysia, Myanmar, Pakistan, Singapore, Singapore, Sri Lanka, Thailand ⁱ	Bangladesh, Indonesia, Republic of Korea ⁱ , Lao People's Democratic Republic ^o , Malaysia, Maldives, Myanmar, Pakistan, Philippines, Sri Lanka	Bangladesh, China, Cambodia, Indonesia, Republic of Korea, Lao People's Democratic Republic, Malaysia, Maldives, Sri Lanka, Taiwan Province of China
The Pacific:		
Kiribati, New Caledonia, Tonga	Kiribati, New Caledonia, Solomon Islands, Tonga	Kiribati, New Caledonia, Solomon Islands, Tonga, Vanuatu

(Table 1, cont'd)

<i>Equity investment</i>	<i>Reinvested earnings</i>	<i>Intra-company loans</i>
Central and Eastern Europe:		
Albania, Belarus, Bulgaria, Czech Republic, Czechoslovakia (former), Hungary, Latvia, Lithuania, Republic of Moldova, Romania, Russian Federation, Slovakia, Ukraine	Albania, Belarus, Bulgaria, Czechoslovakia (former), Czech Republic, Latvia, Lithuania, Republic of Moldova, Poland ^j , Romania, Russian Federation, Ukraine	Albania, Belarus, Bulgaria, Czech Republic, Czechoslovakia (former), Hungary, Latvia, Lithuania, Republic of Moldova, Romania, Russian Federation, Slovakia, Ukraine

Source: UNCTAD, Division on Transnational Corporations and Investment, based on International Monetary Fund, balance-of-payments tape, retrieved in June 1995, and official national sources.

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|---|--|---|-------------------------------|
| a | Countries not available at least one year are all reported in the table. | k | Stopped reporting since 1985. |
| b | Started reporting since 1986. | l | Stopped reporting since 1983. |
| c | Started reporting since 1982. | m | Started reporting since 1993. |
| d | Started reporting since 1983. | n | Stopped reporting since 1987. |
| e | Stopped reporting since 1981. | o | Started reporting since 1988. |
| f | Reported only in 1991. | p | Stopped reporting since 1988. |
| g | Stopped reporting since 1991. | q | Stopped reporting since 1989. |
| h | Stopped reporting since 1984. | r | Started reporting since 1987. |
| i | Started reporting since 1989. | s | Started reporting since 1985. |
| j | Started reporting since 1990. | | |

Emirates, Samoa, Viet Nam, United States Virgin Islands, (former)
Yugoslavia, Zaire

1980-1991	Djibouti, Mongolia, United Republic of Tanzania
1980-1990	Ethiopia, India, Uganda
1980-1988	Equatorial Guinea, Madagascar
1980-1986	Comoros
1980-1985	Guinea, Maldives, New Caledonia
1980-1984	Angola, Burundi, Mozambique
1980-1982	Belize
1981-1990	Benin
1982-1993	Malawi, Sudan
1982-1986	Gambia
1982-1985	
and 1988-1992	Uruguay
1984-1991	Nicaragua
1984-1989	Namibia
1985-1993	Niger, Guyana
1986-1993	Somalia
1987-1993	Burkina Faso, Yemen
1988-1993	Liberia

As of 1 July 1995, data on FDI inflows for 1994 were available for Argentina, Brazil, Canada, Chile, China, Colombia, Denmark, Finland, India, Japan, Republic of Korea, Malaysia, Mexico, Norway, Peru, Portugal, Romania, Sweden, Taiwan Province of China, United Kingdom and the United States (from UNCTAD Division on Transnational Corporations and Investment, FDI database) and for Albania, France, Germany, Italy, Netherlands, Spain, Israel and Slovenia (from IMF, balance-of-payments tape). For some countries such as Belgium and Luxembourg inflow data were available for only a part of 1994. In those cases, estimates for 1994 were obtained by annualizing FDI data on the basis of the partial actual figures. Inflows of FDI to Hong Kong, Indonesia, Philippines, Singapore, Taiwan Province of China and Thailand for 1994 were estimated by UNCTAD's Division on Transnational Corporations and Investment.

For those countries for which FDI data were not available beyond 1993, estimates for 1994 are an annual average of inflows over the period 1991-1993. The countries for which FDI data for 1994 were estimated in this way are all those in Africa, Western Asia, Central Asia, the Pacific, as well as: Afghanistan, Antigua and Barbuda, Aruba, Bahamas, Bangladesh, Barbados, Belarus, Belize, Bermuda, Bolivia, Brunei Darussalam, Cambodia, Cayman Islands, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, Gibraltar, Greece, Grenada, Guatemala, Guyana, Haiti, Honduras, Iceland, Ireland, Jamaica, Democratic People's Republic of Korea, Lao People's Democratic Republic, Macao, Maldives, Malta, Mongolia, Myanmar, Nepal, Netherlands Antilles, New Zealand, Nicaragua, Pakistan, Panama, Paraguay, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, South Africa, Sri Lanka, Suriname, Switzerland, Trinidad and Tobago, Uruguay, Venezuela, Viet Nam and Virgin Islands. Estimation based on averaged flows for the previous three years is also used for other years if these years' data are not obtained. This estimation method also applies to FDI outflows.

All FDI data and estimates in the *World Investment Report* are continuously revised. Because of the on-going revision, FDI data reported in the *World Investment Report* may differ from those reported in earlier *Reports* or other publications of the Division on Transnational Corporations and Investment.

2. Outflows

In the case of FDI outflows, IMF was the principal source. However, for a number of developing countries, including large outward investors such as Argentina (IMF data available only until 1983), Hong Kong, India, Malaysia, Mexico, Nigeria and Thailand, IMF does not report outward flows. For Malaysia and Nigeria, as well as Taiwan Province of China (which is not a member of IMF), the FDI data base of UNCTAD Division on Transnational Corporations and Investment was used. The FDI data base was also used to supplement gaps in IMF data for Ireland (1984-1987) and New Zealand (1987-1993). In the case of countries for which FDI outflows were unavailable from national authorities, inflows to large recipient economies (notably, the United States) were used as a proxy. Thus, for Bahamas, Bahrain, Bangladesh, Bermuda, India, Indonesia, Lebanon, Liberia, Mexico, Oman, Panama, Philippines, Saudi Arabia and United Arab Emirates inflows into the United States were used as a proxy of

their outflows. In the case of Hong Kong, inflows to China and United States are used as a proxy.

The United States data on FDI outflows and outward stocks were adjusted for the financial sector of the Netherlands Antilles. This is because considerable intra-company loans between United States parent enterprises and their financial affiliates in the Netherlands Antilles are in many respects more akin to portfolio investment than to FDI.

As of 1 July 1995, FDI outflows for 1994 were available for Austria, Australia, Belgium and Luxembourg, Canada, Chile, China, Denmark, Finland, Italy, Japan, Republic of Korea, Malaysia, Norway, Portugal, Sweden, Turkey, the United Kingdom and the United States (from UNCTAD, Division on Transnational Corporations and Investment, FDI data base) and for France, Germany, Israel, Netherlands and Spain (from IMF, balance-of-payments tape). For the remaining countries in annex table 2, estimates for 1994 are an average of FDI outflows for 1991-1993.

3. Stocks

Various tables in the *World Investment Report* present data on FDI stocks at book value or historical cost, reflecting prices at the time when the investment was made. For a large number of countries (as indicated in annex tables 3 and 4), FDI stocks are estimated by cumulating FDI flows over a period of time. For a number of countries (indicated in annex tables 3 and 4), estimates of FDI stocks are obtained by adding cumulated flows to a FDI stock estimate that has been obtained for a particular year. All estimates of FDI stocks for 1994 are obtained by adding FDI flows for 1994 to the stock figures of 1993.

All data, unless otherwise indicated, are expressed in United States dollars. Data reported in national currencies or Special Drawing Rights are converted to United States dollars by using the period's average exchange rate for flow data and the end-of-the-period exchange rate for stock data.

Notes

¹ In some countries such as Germany and the United Kingdom, a stake of 20 per cent or more is a threshold.

² This general definition of FDI is based on OECD, *Detailed Benchmark Definition of Foreign Direct Investment*, second edition (Paris, OECD, 1992) and International Monetary Fund, *Balance of Payments Manual*, fifth edition (Washington, D.C., IMF, 1993).

³ There are, however, some exceptions. For example, in the case of Germany, loans granted by affiliate enterprises to their parent enterprises are not deducted from the stock.

⁴ International Monetary Fund, op. cit., p. 40.

Annex table 1. Foreign-direct-investment inflows, by host region and economy, 1983-1994
(Millions of dollars)

Host region/economy	1983-1988 (Annual average)	1989	1990	1991	1992	1993	1994 ^a
Total inflows	91 554	200 612	211 425	158 428	170 398	208 388	225 692
Developed economies	71 779	171 722	176 436	115 092	111 223	129 073	134 984
Western Europe	28 902	88 566	110 586	82 555	80 141	76 387	73 660
European Union	27 425	84 191	104 408	79 357	77 978	74 004	71 157
Austria	256	756	755	418	1 051	1 163	1 531
Belgium and Luxembourg	1 838	7 057	8 056	9 377	11 286	10 650	6 026
Denmark	151	1 090	1 132	1 553	1 017	1 713	4 896
Finland	246	490	812	-233	387	865	1 476
France	3 934	10 313	13 183	15 149	21 843	20 755	16 926
Germany	1 517	10 780	9 160	7 860	5 460	1 840	4 410
Greece	572	752	1 005	1 135	1 144	977	1 085
Ireland	99	85	99	97	102	89	96
Italy	2 398	2 166	6 411	2 401	3 105	3 749	3 627
Netherlands	2 585	8 346	12 319	6 282	7 715	5 675	3 147
Portugal	373	1 737	2 610	2 448	1 873	1 516	1 255
Spain	3 401	8 428	13 841	10 503	8 058	6 782	8 216
Sweden	717	1 811	1 979	6 345	-94	3 773	8 240
United Kingdom	9 338	30 379	33 046	16 022	15 030	14 457	10 226
Other Western Europe	1 477	4 375	6 178	3 198	2 163	2 383	2 503
Gibraltar	12	67	36	37	89	107	77
Iceland	2	-27	6	35	14	8	19
Norway	207	1 509	1 175	-52	811	1 461	662
Switzerland	1 256	2 827	4 961	3 178	1 249	808	1 745
North America	38 611	72 754	55 768	24 751	22 062	46 089	55 480
Canada	4 222	5 018	7 853	2 747	4 462	4 981	6 032
United States	34 389	67 736	47 915	22 004	17 600	41 108	49 448
Other developed economies	4 266	10 402	10 082	7 785	9 020	6 596	5 844
Australia	3 478	7 849	6 547	4 377	4 668	3 397	2 772
Israel	141	125	101	350	539	555	406
Japan	326	1 054	1 753	1 368	2 728	86	888
New Zealand	314	1 365	1 686	1 698	1 090	2 566	1 785
South Africa	7	8	-5	-8	-5	-8	-7
Developing economies	19 757	28 622	34 689	40 889	54 750	73 350	84 441
Africa	2 104	4 812	2 207	2 974	3 265	3 000	3 080

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(Annex table 1, cont'd)

Hostregion/economy	1983-1988 (Annual average)	1989	1990	1991	1992	1993	1994 ^a
North Africa	1 042	1 642	1 103	995	1396	1 459	1 284
Algeria	4	12	-	12	8	7	9
Egypt	959	1 250	734	352	459	493	435
Libyan Arab Jamahiriya	-70	125	159	127	137	141	135
Morocco	43	167	165	380	424	522	442
Sudan	3	9	-31	-1	-	-	-
Tunisia	103	79	76	125	369	296	263
Other Africa	1 062	3 169	1 104	1 979	1 869	1 541	1 796
Angola	156	200	-335	664	288	206	386
Benin	-	1	1	13	7	10	10
Botswana	61	42	38	40	40	39	40
Burkina Faso	1	1	-	1	-	-	-
Burundi	1	1	1	1	1	1	1
Cameroon	108	-87	-57	-17	-17	-81	-38
Cape Verde	1	-1	-	1	-1	-	-
Central African Republic	5	1	1	-5	-3	-2	-3
Chad	17	19	..	4	2	2	3
Comoros	2	3	-	3	2	1	2
Congo	30	3	7	5	4	3	4
Côte d'Ivoire	50	19	32	81	77	30	63
Djibouti	-	-0	-	-	2	3	2
Equatorial Guinea	2	-0	10	42	17	23	28
Ethiopia	-	..	4	1	6	6	4
Gabon	78	-31	74	-55	127	97	57
Gambia	-	15	-	10	6	5	7
Ghana	4	15	15	22	23	20	21
Guinea	7	12	18	39	20	3	20
Guinea-Bissau	1	-	2	2	6	-2	2
Kenya	21	62	57	19	6	2	9
Lesotho	7	13	17	8	3	15	8
Liberia	64	656	225	8	-11	30	9
Madagascar	5	13	22	14	21	19	18
Malawi	13	9	23	18	2	3	8
Mali	-	15	-7	4	-8	-4	-3
Mauritania	4	4	7	2	5	5	4
Mauritius	11	36	41	19	15	15	16
Mozambique	2	3	9	23	25	30	26
Namibia	2	-	37	105	56	66	76
Niger	9	-	-1	1	-	-	-
Nigeria	361	1 882	588	712	897	732	780
Rwanda	16	16	8	5	2	5	4
Senegal	-3	10	-3	22	1	1	8
Seychelles	15	23	27	22	21	23	22

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(Annex table 1, cont'd)

Hostregion/economy	1983-1988 (Annual average)	1989	1990	1991	1992	1993	1994 ^a
Sierra Leone	-24	22	32	8	21	20	16
Somalia	-	-41	6	-	-12	-2	-5
Swaziland	25	72	39	77	56	40	58
Togo	6	7	-1	7	-2	1	2
Uganda	-	-2	-6	1	3	3	2
United Republic of Tanzania	1	6	-3	3	12	20	12
Zaire	-35	-6	-14	12	-1	-1	4
Zambia	49	164	203	34	134	124	97
Zimbabwe	-7	-10	-12	3	15	28	15
Latin America and the Caribbean	7 438	7488	8 989	15 254	17 672	19 900	20 254
South America	3 154	4 368	4 511	6 793	8 387	10 079	11 498
Argentina	512	1 028	1 836	2 439	4 179	6 305	1 200
Bolivia	10	-24	27	52	93	122	89
Brazil	1 503	1 267	901	972	1 580	802	2 241
Chile	439	1 289	590	623	711	891	2 533
Colombia	570	576	500	574	790	950	1 504
Ecuador	65	80	82	85	95	115	98
Guyana	1	-2	8	13	-	7	7
Paraguay	4	13	76	84	137	111	111
Peru	5	59	41	-7	127	349	2 695
Surinam	-31	-168	-43	10	-30	-21	-14
Uruguay	25	38	42	32	13	76	40
Venezuela	50	213	451	1916	692	372	993
Other Latin America	4 284	3 120	4 478	8 461	9 285	9 821	8 756
Antigua and Barbuda	20	41	59	52	20	44	39
Aruba	..	..	131	185	-37	-18	43
Bahamas	-1	25	-17	-	7	-24	-6
Barbados	6	8	11	7	14	9	10
Belize	4	19	17	15	18	11	15
Bermuda	1 383	-1 007	819	2 489	3 321	2 960	2 923
Cayman Islands	214	79	49	-9	27	-18	-
Costa Rica	75	101	163	187	262	285	245
Cuba	-	-	1	10	13	21	15
Dominica	4	8	8	11	14	10	11
Dominican Republic	66	110	133	145	180	183	169
El Salvador	19	13	2	25	15	16	19
Grenada	7	10	13	15	23	17	18
Guatemala	116	76	48	91	94	149	111
Haiti	6	9	8	14	8	10	11
Honduras	31	51	44	52	48	35	45
Jamaica	4	57	138	133	142	78	118

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(Annex table 1, cont'd)

Hostregion/economy	1983-1988 (Annual average)	1989	1990	1991	1992	1993	1994 ^a
Mexico	2 272	3 174	2 632	4 762	4 933	4 901	4 432 ^b
Netherlands Antilles	-42	17	8	33	40	11	28
Nicaragua	-	-7	1	11	15	39	22
Panama	14	37	-18	-30	2	-41	-23
Saint Kitts and Nevis	11	41	49	21	14	28	21
Saint Lucia	14	27	45	58	46	50	51
Saint Vincent and the Grenadines	4	11	8	9	19	12	13
Trinidad and Tobago	52	149	109	169	178	379	242
Virgin Islands	5	71	18	5	-131	675	183
Asia	10 042	16 021	23 083	22 201	33 195	49 984	60 664
West Asia	2 090	484	3 189	1 396	1 486	1 326	1 403
Bahrain	77	181	-4	-7	-9	6	-3
Cyprus	57	70	130	82	121	111	105
Iran, Islamic Republic of	-72	-19	362	23	9	131	54
Iraq	2	3	0	-3	8	2	2
Jordan	37	-1	38	-12	41	-34	-2
Kuwait	-1	4	-6	1	35	13	16
Lebanon	4	2	6	2	18	26	15
Oman	124	112	141	149	87	99	112
Qatar	-5	-2	5	43	40	29	37
Saudi Arabia	1 625	-654	1 864	160	79	79	106
Syrian Arab Republic	38	74	71	62	18	-	27
Turkey	142	663	684	860	897	663	807
United Arab Emirates	57	39	-116	26	130	183	113
Yemen	6	14	12	11	12	18	14
Central Asia	..	..	..	..	140	195	168
Kazakhstan	..	..	..	..	100	150	125
Uzbekistan	..	..	..	..	40	45	43
South, East and South-East Asia	7 952	15 537	19 893	20 805	31 569	48 463	59 093
Afghanistan	-	..	..	-	-	-	-
Bangladesh	1	-	3	1	4	14	6
Brunei Darussalam	-	..	-1	-1	-4	-2	-2
Cambodia	..	..	..	..	33	37	23
China	1 823	3 393	3 487	4 366	11 156	27 515	33 800
Hong Kong	1 343	1 076	1 728	538	2 051	1 667	2 000
India	92	252	236	155	261	586	947
Indonesia	341	682	1 093	1 482	1 777	2 004	3 000
Korea, Democratic People's Republic	1	629	-61	-	42	-6	12
Korea, Republic of	387	758	715	1 116	550	516	791

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(Annex table 1, cont'd)

Hostregion/economy	1983-1988 (Annual average)	1989	1990	1991	1992	1993	1994 ^a
Lao, People's Democratic Republic	-	4	6	8	9	30	16
Macao	1	-1	-	11	-20	-1	-3
Malaysia	731	1 668	2 332	3 998	5 183	5 206	4 500
Maldives	2	4	6	7	7	7	7
Mongolia	..	..	..	11	7	8	9
Myanmar	-	8	161	56	75	98	76
Nepal	1	-	6	2	..	..	1
Pakistan	106	210	244	257	335	346	313
Philippines	249	563	530	544	228	763	1 500
Singapore	1 947	2 887	5 575	4 888	6 730	6 829	7 900
Sri Lanka	39	20	43	48	123	195	122
Taiwan Province of China	448	1 604	1 330	1 271	879	917	1 350
Thailand	439	1 775	2 444	2 014	2 116	1 715	2 700
Viet Nam	1	4	16	32	28	21	27
The Pacific	144	240	298	264	403	276	314
Fiji	21	8	80	15	50	29	32
New Caledonia	-	8	31	3	17	20	13
Papua New Guinea	113	203	156	203	291	179	224
Solomon Islands	3	12	10	15	14	17	16
Tonga	-	-	-	-	1	-	-
Vanuatu	7	9	13	25	26	26	26
Western Samoa	-	...	7	3	3	4	4
Developing Europe	30	61	113	195	215	191	130
Malta	25	52	46	77	40	54	57
Slovenia	..	..	..	..	111	112	73
Former Yugoslavia	4	9	67	118	64	25	..
Central and Eastern Europe	17	268	300	2 448	4 426	5 964	6 267
Albania	..	..	..	-1	20	58	53
Belarus	..	..	..	..	7	10	6
Bulgaria	..	..	4	56	42	55	300
Czech Republic	..	..	..	..	..	568	862
Czechoslovakia (former)	..	257	207	600	1 103	..	..
Estonia	..	..	..	..	80	168	260
Hungary	..	..	..	1 462	1 479	2 350	1 510
Latvia	..	..	..	..	14	20	30
Lithuania	..	..	..	..	10	12	10
Moldova, Republic of	..	..	..	..	17	14	16
Poland	17	11	89	291	678	1 715	1 400
Romania	40	77	94	650
Russian Federation	700	700	900

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(Annex table 1, cont'd)

Hostregion/economy	1983-1988 (Annual average)	1989	1990	1991	1992	1993	1994 ^a
Slovakia	..	..	..	..	..	..	70
Ukraine	..	..	..	..	200	200	200
<i>Memorandum:</i>							
Least developed countries:^c in	337	1 201	423	1 063	740	786	863
Africa	310	1 141	190	922	548	526	665
Latin America and the Caribbean	6	9	8	14	8	10	11
Asia	10	30	195	86	140	203	143
West Asia	6	14	12	11	12	18	14
South, East and South-East Asia	4	17	182	74	128	185	129
The Pacific	10	20	30	33	43	47	45
Oil-exporting countries:^d in	7 054	9 039	10 220	14 781	15 596	15 532	15 820
Africa	1 729	3 435	1 247	1 926	2 271	1 894	2 030
Latin America and the Caribbean	2 449	3 592	3 302	6 984	5 991	5 889	5 855
Asia	2 877	2 013	5 671	5 870	7 334	7 750	7 935
West Asia	1 806	-337	2 247	391	378	541	437
South, East and South- East Asia	1 071	2 350	3 424	5 479	6 956	7 208	7 498
The Pacific	..	..	..	..	..	..	..
Developing economies minus China	17 935	25 229	31 202	36 523	43 594	45 836	50 641

Source: UNCTAD, DTCL, FDI database, based on the International Monetary Fund balance-of-payments tape, retrieved in June 1995; data provided by the Organisation for Economic Co-operation and Development Secretariat; official national sources; and own estimates.

^a Estimates. For details, see technical note.

^b During the publication process of this report, the data for 1994 was significantly revised to \$7,978 million by International Monetary Fund

^c Least developed countries include: Afghanistan, Angola, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, Cape Verde, Central African Republic, Chad, Comoros, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Haiti, Kiribati, Lao People's Democratic Republic, Lesotho, Liberia, Madagascar, Malawi, Maldives, Mali, Mauritania, Mozambique, Myanmar, Nepal, Niger, Rwanda, Western Samoa, Sierra Leone, Solomon Islands, Somalia, Sudan, Togo, Tuvalu, Uganda, United Republic of Tanzania, Vanuatu, Yemen, Zaire and Zambia.

^d Oil-exporting countries include: Algeria, Angola, Bahrain, Bolivia, Brunei Darussalam, Cameroon, Congo, Ecuador, Egypt, Gabon, Indonesia, Islamic Republic of Iran, Iraq, Kuwait, Libyan Arab Jamahiriya, Malaysia, Mexico, Nigeria, Oman, Qatar, Saudi Arabia, Trinidad and Tobago, Tunisia, United Arab Emirates and Venezuela.

Annex table 2. Foreign-direct-investment outflows, by home region and economy, 1983-1994
(Millions of dollars)

Home region/economy	1983-1988 (Annual average)	1989	1990	1991	1992	1993	1994 ^a
Total outflows	93 711	217 874	243 186	199 288	190 612	222 171	222 254
Developed economies	88 277	202 270	226 215	188 257	171 281	192 959	189 280
Western Europe	51 856	124 134	143 481	113 535	110 521	103 693	113 921
European Union	47 942	115 139	135 668	105 181	104 446	94 698	105 464
Austria	212	1 163	1 925	1 831	2 102	1 745	1 459
Belgium and Luxembourg	1 539	6 812	6 262	6 165	11 259	4 023	-30
Denmark	456	2 066	1 482	1 852	2 236	1 373	4 046
Finland	929	2 965	2 708	-124	-752	1 667	3 771
France	5 864	19 503	34 822	23 932	31 269	20 604	22 860
Germany	7 897	18 310	28 660	22 820	16 080	17 430	20 560
Ireland	278	396	499	634	510	547	564
Italy	2 771	2 160	7 585	7 222	5 891	7 409	5 136
Netherlands	5 207	14 826	15 422	13 544	14 466	10 030	11 373
Portugal	19	84	163	463	687	107	283
Spain	516	1 473	2 937	3 584	1 300	2 609	4 183
Sweden	3 496	10 198	14 573	7 254	251	1 417	6 122
United Kingdom	18 757	35 183	18 630	16 004	19 147	25 737	25 137
Other Western Europe	3 915	8 995	7 813	8 354	6 075	8 995	8 457
Iceland	1	8	9	11	5	4	7
Norway	982	1 136	1 435	1 815	399	928	1 696
Switzerland	2 932	7 851	6 369	6 528	5 671	8 062	6 754
North America	18 543	30 262	31 908	39 110	42 668	74 785	50 418
Canada	4 340	4 584	4 733	5 654	3 690	5 807	4 778
United States	14 203	25 678	27 175	33 456	38 978	68 978	45 640
Other developed economies	17 878	47 874	50 826	35 612	18 092	14 481	24 942
Australia	3 416	3 330	272	2 989	-173	1 084	5 971
Israel	63	38	165	423	651	928	826
Japan	14 040	44 130	48 024	30 726	17 222	13 714	17 938
New Zealand	266	378	2 365	1 475	392	-1 246	207
South Africa	93	-2	..	..	..	..	..
Developing economies	5 423	15 586	16 934	10 994	19 314	29 136	32 907
Africa	1 137	892	1 412	897	319	843	686
North Africa	50	71	121	116	30	83	76
Algeria	8	8	5	50	21	25	32

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(Annex table 2, cont'd)

Homeregion/economy	1983-1988 (Annual average)	1989	1990	1991	1992	1993	1994 ^a
Egypt	13	23	12	62	4	26	31
Libyan Arab Jamahiriya	30	35	105	..	..	..	..
Morocco	..	..	..	..	..	30	10
Tunisia	-1	5	-1	3	5	2	3
Other Africa	1 087	821	1 292	782	289	759	610
Angola	..	..	1	..	..	..	..
Burundi	..	-	..	..	..	-	..
Cameroon	14	26	15	22	33	22	26
Cape Verde	-	1	-	..	..	..	..
Central African Republic	2	4	4	4	6	4	5
Chad	4	13	..	11	14	8	11
Comoros	..	..	1	..	..	..	..
Gabon	6	8	29	15	26	6	15
Kenya	5	1	..	..	..	..	..
Lesotho	-	..	..	..	..	..	..
Liberia	37	76	13	291	-22	70	113
Mauritius	-	1	1	11	43	33	29
Namibia	..	..	2	6	2	3	4
Niger	-1	..	..	..	..	..	..
Nigeria	1 011	671	1 213	390	176	593	386
Senegal	2	..	..	..	..	..	..
Seychelles	6	6	6	3	3	4	3
Swaziland	5	15	8	31	9	16	18
Zimbabwe	-4	..	..	..	..	..	..
Latin America and the Caribbean	417	950	4 508	1834	2 259	-28	1 900
South America	292	791	1 094	1 272	810	1 998	1 905
Argentina	18	79	50	-41	62	-18	1
Bolivia	1	1	1	2	2	2	2
Brazil	128	523	665	1 014	146	1 094	751
Chile	7	10	8	123	378	431	856
Colombia	39	29	16	24	50	30	35
Uruguay	-	13	-1	3	-28	32	2
Venezuela	100	136	355	147	200	427	258
Other Latin America	125	159	3 414	562	1 449	-2 025	-5
Antigua and Barbuda	...	..	..	..	-2	..	..
Bahamas	-1	..	1573	360	573	-1 593	-220
Barbados	2	3	1	1	1	3	2
Belize	2	2	2	2
Bermuda	-13	-110	741	-89	61	247	73
Costa Rica	4	6	2	6	4	5	5

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(Annex table 2, cont'd)

Homeregion/economy	1983-1988 (Annual average)	1989	1990	1991	1992	1993	1994 ^a
Grenada	..	..	..	1	..	..	..
Mexico	104	107	224	156	468	-97	176
Netherlands Antilles	1	5	2	1	2	-2	-
Panama	25	148	870	124	340	-590	-42
Trinidad and Tobago	3	..	..	..	..	..	..
Asia	3 862	13 735	11 008	8 268	16 736	28 315	30 306
West Asia	567	1 481	-492	73	1202	632	684
Bahrain	10	14	-21	-2	2	-20	-7
Cyprus	..	..	3	15	14	11	14
Jordan	2	17	-32	14	-3	-53	-14
Kuwait	282	841	208	243	1 067	775	695
Lebanon	8	-2	-7	-6	-7	-6	-6
Oman	-	-1	-1	-2	-1	..	-1
Saudi Arabia	255	611	-613	-217	40	-97	-91
Turkey	2	..	-16	27	65	14	84
United Arab Emirates	9	2	-13	1	25	8	11
Yemen	-	..	..	..	..	..	..
South, East and South-East Asia	3 295	12 254	11 500	8 195	15 534	27 683	29 621
Bangladesh	..	..	..	..	-1	-	-
China	467	780	830	913	4 000	4 400	2 000
Hong Kong	1 453	2 930	2 377	3 064	7 375	17 451	20 956
India	2	5	3	-7	19	34	15
Indonesia	11	17	-13	14	41	-15	13
Korea, Republic of	107	305	820	1 357	1 047	1 056	2 073
Malaysia	224	282	532	416	460	1 357	1 753
Pakistan	3	43	2	-4	-12	-2	-6
Philippines	4	6	-5	-28	7	-5	-9
Singapore	147	882	1 570	444	748	767	653
Sri Lanka	1	2	1	5	2	7	4
Taiwan Province of China	843	6 951	5 243	1 854	1 701	2 411	1 989
Thailand	33	50	140	167	147	221	178
The Pacific	8	9	5	-4	2	6	1
Fiji	7	27	5	-4	2	6	1
Papua New Guinea	1	-18
Developing Europe	-2	1	14
Slovenia	-2	1	14

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(Annex table 2, cont'd)

Homeregion/economy	1983-1988 (Annual average)	1989	1990	1991	1992	1993	1994 ^a
Central and Eastern Europe	11	19	38	37	17	77	67
Albania	..	..	..	..	20	7	9
Czechoslovakia (former)	..	1	20	14	30	21	22
Estonia	..	..	..	..	-78	8	
Hungary	..	..	..	27	28	16	24
Poland	11	18	...	-7	13	18	8
Romania	..	..	18	3	4	7	5
<i>Memorandum:</i>							
Least developed countries:^b in	43	93	19	305	-4	83	129
Africa	43	93	19	305	-3	82	128
Latin America and the Caribbean	..	..	..	..	..	..	..
Asia	-	..	..	..	-1	-	-
West Asia	-	..	..	..	..	..	..
South, East and South-East Asia	..	..	..	..	-1	-	-
The Pacific	-	-	-	-	-	-	-
Oil-exporting countries:^c in	2 078	2 786	2 038	1 300	2 569	3 014	3 303
Africa	1 081	776	1 378	542	264	674	493
Latin America and the Caribbean	207	244	580	305	670	332	436
Asia	789	1 766	79	453	1 634	2 008	2 374
West Asia	555	1 467	-440	23	1 133	666	607
South, East and South-East Asia	234	299	519	430	501	1 342	1 767
The Pacific	..	..	..	..	..	..	..
Developing economies minus China	4 956	14 806	16 104	10 081	15 314	24 736	30 907

Source: UNCTAD, Division on Transnational Corporations and Investment FDI database, based on the International Monetary Fund balance-of-payments tape, retrieved in June 1995; data provided by the Organisation for Economic Co-operation and Development Secretariat; official national sources; and own estimates.

^a Estimates. For details, see technical note.

^b Least developed countries include: Afghanistan, Angola, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, Cape Verde, Central African Republic, Chad, Comoros, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Haiti, Kiribati, Lao People's Democratic Republic, Lesotho, Liberia, Madagascar, Malawi, Maldives, Mali, Mauritania, Mozambique, Myanmar, Nepal, Niger, Rwanda, Western Samoa, Sierra Leone, Solomon Islands, Somalia, Sudan, Togo, Tuvalu, Uganda, United Republic of Tanzania, Vanuatu, Yemen, Zaire and Zambia.

^c Oil-exporting countries include: Algeria, Angola, Bahrain, Bolivia, Brunei Darussalam, Cameroon, Congo, Ecuador, Egypt, Gabon, Indonesia, Islamic Republic of Iran, Iraq, Kuwait, Libyan Arab Jamahiriya, Malaysia, Mexico, Nigeria, Oman, Qatar, Saudi Arabia, Trinidad and Tobago, Tunisia, United Arab Emirates and Venezuela.

Annex table 3. Foreign-direct-investment inward stock, by host region and economy, 1980, 1985, 1990, 1993, 1994

(Millions of dollars)

Hostregion/economy	1980	1985	1990	1993	1994 ^a
Total inward stock	480 611	727 902	1 709 299	2 079 538	2 319 288
Developed economies	372 252	535 334	1 372 457	1 564 661	1715 483
Western Europe	198 991	242 180	757 811	883 520	964 127
European Union	183 664	223 844	711 318	832 090	910 176
Austria	3 163	3 472	9 884	11 685	12 994
Belgium and Luxembourg	7 306	8 840	36 644 ^b	67 957 ^b	73 983 ^b
Denmark	4 193	3 613	9 192 ^c	13 475 ^c	15 187 ^c
Finland	540	1 339	5 132	4 217	5 610
France	22 617	33 392	86 514	125 163	142 089
Germany	36 630	36 926	111 231	127 999	132 409
Greece ^e	4 524	8 309	14 016 ^b	17 272 ^b	18 357 ^b
Ireland	3 749	4 649	4 974 ^d	5 262 ^d	5 358 ^d
Italy	8 892	18 976	57 985	52 499	60 349
Netherlands	19 167	24 952	73 664	87 554 ^e	89 701 ^e
Portugal	1 102	1 339	5 132	4 217	5 472
Spain	5 141	8 939	66 276	105 094 ^f	113 310 ^f
Sweden	3 626	5 071	12 461	12 886	21 126
United Kingdom	63 014	64 028	218 213	196 811	214 231
Other Western Europe	15 327	18 337	46 493	51 430	53 951
Gibraltar	...	32	197 ^g	429 ^g	506 ^g
Iceland ^h	123	226	201	257	276
Norway	6 698	8 020	12 402	13 644	14 325
Switzerland	8 506	10 058	33 693	37 099	38 844
North America	137 209	249 272	507 965	551 225	610 007
Canada	54 163	64 657	113 054	105 957	105 606
United States	83 046	184 615	394 911	445 268	504 401
Other developed economies	36 053	43 882	106 681	129 916	141 349
Australia	13 173	25 049	75 752	82 721 ^f	91 082 ^f
Israel ^h	727	1 131	1 962	3 406	3 812
Japan	3 270	4 740	9 850	16 884 ^f	17 772 ^f
New Zealand	2 363	2 043	8 065	15 874	17 659
South Africa	16 519	10 919	11 052	11 032 ^b	11 025 ^b
Developing economies	108 272	192 388	334 996	500 896	583 558
Africa	20 816	26 971	41 423	50 182	53 125
North Africa	4 429	8 988	16 109	19 408	20 557

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(Annex table 3, cont'd)

Host region/economy	1980	1985	1990	1993	1994 ^a
Algeria ^h	1 320	1 281	1 315	1 354	1 363
Egypt ^h	2 256	5 700	11 039	12 244	12 679
Morocco ^h	305	557	1 034	2 300	2 742
Sudan	..	28	12 ^g	11 ^g	11 ^g
Tunisia	548	1 422	2 709 ⁱ	3 499 ⁱ	3 762 ⁱ
Other Africa	16 387	17 984	25 314	30 775	32 569
Angola ^h	61	675	1 024	2 277	2 663
Benin ^h	32	34	36	66	76
Botswana ^h	266	515	819	980	1 020
Burkina Faso ^h	18	25	31	31	31
Burundi ^h	7	23	29	31	32
Cameroon ^h	330	1 125	1 079	964	926
Cape Verde	..	..	3 ^j	3 ^j	3 ^j
Central African Republic ^h	50	77	96	89	86
Chad ^h	123	186	243	255	258
Comoros	..	-	15 ^g	21 ^g	23 ^g
Congo ^h	309	479	564	576	580
Côte d'Ivoire	650	550	1 071 ^b	1 259 ^b	1 322 ^b
Djibouti ^h	3	3	5	10	12
Equatorial Guinea	..	5	23 ^g	108 ^g	136 ^g
Ethiopia ^h	110	114	116	129	133
Gabon ^h	511	833	1 208	1 378	1 434
Gambia ^h	21	21	36	62	69
Ghana	288	312	375	443 ^c	464 ^c
Guinea ^h	2	3	70	131	151
Guinea-Bissau	..	4	8 ^k	14 ^k	16 ^k
Kenya	666	368	393	419 ^c	428 ^c
Lesotho	9	15	69	94 ^c	102 ^c
Liberia	1 230	1 334	2 527 ^l	2 555 ^l	2 564 ^l
Madagascar ^h	36	47	103	168	186
Malawi ^h	100	138	210	234	242
Mali ^h	13	35	29	26	23
Mauritania	..	33	51 ^g	60 ^g	64 ^g
Mauritius ^h	20	37	162	204	220
Mozambique ^h	15	17	42	120	146
Namibia ^k	..	1 943	2 060	2 136	2 212
Niger ^h	188	203	260	263	263
Nigeria ^h	2 404	4 405	8 022	10 531	11 311
Rwanda ^h	54	133	213	222	226
Senegal	360	194	304 ^m	329 ^m	337 ^m
Seychelles ^h	37	87	194	259	281
Sierra Leone ^h	77	66	-3	76	92
Somalia ^h	29	4	-7	-2	-7
Swaziland ^h	149	184	435	609	667
Togo ^h	182	216	249	255	257
Uganda ^h	9	7	4	11	13
United Republic of Tanzania	154	72	11	46 ^c	58 ^c

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(Annex table 3, cont'd)

Hostregion/economy	1980	1985	1990	1993	1994 ^a
Zaire ^h	440	351	277	289	293
Zambia	414	99	593 ⁱ	732 ⁱ	829 ⁱ
Zimbabwe	7 023	3 013	2 267 ^b	2 313 ^b	2 328 ^b
Latin America and the Caribbean	48 031	71 935	116 441	167 599	186 217
South America	29 330	42 131	64 289	89 088	98 995
Argentina	5 344	6 563	8 778 ^b	21 701 ^b	22 901 ^b
Bolivia	420	592	806	1 101 ^c	1 169 ^c
Brazil	17 480	25 665	37 143	40 371 ^c	41 871 ^c
Chile	886	2 321	6 175	8 238 ^c	10 771 ^c
Colombia	1 061	2 231	3 500	5 597 ^c	6 259 ^c
Ecuador	719	982	1 370	1 665 ^c	1 763 ^c
Guyana ^h	1	14	18	38	45
Paraguay ^h	218	298	401	771	882
Peru	898	1 152	1 254	1 723 ^c	4 418 ^c
Uruguay ^h	700	767	980	1 102	1 142
Venezuela	1 604	1 548	3 865	6 782 ^c	7 775 ^c
Other Latin America	18 700	29 804	52 151	78 511	87 222
Antigua and Barbuda ^h	23	94	286	383	422
Bahamas ^h	298	294	336	319	313
Barbados ^h	102	123	169	206	216
Belize ^h	12	10	72	116	131
Bermuda ^h	5 132	8 053	13 850	22 430	25 353
Cayman Islands ^h	223	1 479	1 749	1 750	1 751
Costa Rica	672	957	1 447 ^b	2 125 ^b	2 370 ^b
Cuba ⁿ	-	1	3	25	40
Dominica	..	6	41 ^g	75 ^g	86 ^g
Dominican Republic	239	265	572	1 079 ^c	1 247 ^c
El Salvador	154	181	212	269 ^c	288 ^c
Grenada ^h	1	13	70	128	146
Guatemala ^h	44	71	743	1 077	1 188
Haiti ^h	79	112	149	179	189
Honduras ^h	93	172	383	518	563
Jamaica ^h	501	458	690	1 044	1 162
Mexico ^h	8 992	14 824	27 856	41 912	46 344
Netherlands Antilles ^h	569	56	207	291	319
Nicaragua ^h	109	109	105	160	182
Panama	387	533	474 ^b	404 ^b	381 ^b
Saint Kitts and Nevis ^h	1	32	160	225	246
Saint Lucia ^h	94	197	315	479	530
Saint Vincent and the Grenadines ^h	1	9	46	84	97
Trinidad and Tobago	976	1 719	2 093	2 560 ^c	2 802 ^c
Virgin Islands	..	38	124 ^g	673 ^g	856 ^g

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(Annex table 3, cont'd)

Host region/economy	1980	1985	1990	1993	1994 ^a
Asia	37 961	91 846	174 376	279 417	340 087
West Asia	5 713	27 461	28 674	33 052	34 456
Bahrain	..	281	610 ⁱ	590 ⁱ	587 ⁱ
Cyprus	310	520	973 ⁱ	1 226 ⁱ	1 331 ⁱ
Iran, Islamic Republic of	1 214	857	284 ⁱ	315 ⁱ	369 ⁱ
Iraq	153	149	167 ^b	174 ^b	176 ^b
Jordan	155	455	344 ^b	339 ^b	337 ^b
Kuwait	348	342	343 ^b	296 ^b	312 ^b
Lebanon	12	11	7	33 ^c	48 ^c
Oman	266	985	1 407	1 742 ^c	1 854 ^c
Qatar	174	167	157	268 ^c	305 ^c
Saudi Arabia	2 200	22 422	21 519 ^b	22 463 ^b	22 569 ^b
Syrian Arab Republic ^h	-	37	374	455	482
Turkey	107	360	1 320	3 610 ^c	4 417 ^c
United Arab Emirates	719	792	1 060 ⁱ	1 398 ⁱ	1 511 ⁱ
Yemen	56	83	108 ^j	144 ^j	158 ^j
Central Asia	..	..	..	335	503
Kazakhstan	..	..	..	250 ^o	375 ^o
Uzbekistan	..	..	..	85 ^o	128 ^o
South, East and South-East Asia	32 248	64 385	145 702	246 029	305 128
Afghanistan ^h	11	12	12	12	13
Bangladesh	63	112	148 ⁱ	167 ⁱ	173 ⁱ
Brunei Darussalam ^h	19	33	26	19	17
China	..	3 444	14 135 ^b	57 172 ^b	90 972 ^b
Hong Kong	1 729	3 520	13 413 ^b	17 669 ^b	19 669 ^b
India	1 177	1 075	1 667 ⁱ	2 269 ⁱ	3 616 ⁱ
Indonesia	10 274	24 971	38 883	44 146 ^c	47 146 ^c
Korea, Democratic People's Republic	..	..	572 ^j	607 ^j	619 ^j
Korea, Republic of	1 140	1 806	7 874	11 209	12 000
Lao, People's Democratic Republic ^h	2	-	13	60	76
Macao ^h	2	11	12	3	-1
Malaysia	6 078	8 510	14 117 ⁱ	26 936 ⁱ	31 436 ⁱ
Maldives ^h	5	3	25	45	52
Mongolia	..	..	..	..	35 ^r
Myanmar ^h	5	6	173	402	478
Nepal ^h	1	2	12	14	15
Pakistan	690	1 079	1 708 ⁱ	2 646 ⁱ	2 959 ⁱ
Philippines	1 225	1 302	2 098 ^b	3 633 ^b	5 133 ^b
Singapore	6 203	13 016	32 355 ^b	50 802 ^b	58 702 ^b
Sri Lanka	231	517	681 ⁱ	1 047 ⁱ	1 169 ⁱ
Taiwan Province of China	2 405	2 930	9 735 ⁱ	12 802 ⁱ	14 152 ⁱ

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(Annex table 3, cont'd)

Hostregion/economy	1980	1985	1990	1993	1994 ^a
Thailand	981	1 999	7 980 ^b	13 824 ^b	16 524 ^b
Viet Nam ^h	7	38	66	147	174
The Pacific	1 167	1 171	2 034	2 441	2 742
Fiji	358	393	390 ^b	485 ^b	517 ^b
Papua New Guinea	748	683	1 457 ^b	1 635 ^b	1 859 ^b
Solomon Islands ^h	28	32	69	115	130
Vanuatu ^h	33	62	110	188	214
Western Samoa ^h	1	1	8	18	22
Developing Europe	297	465	722	1 257	1 387
Malta ^h	156	286	465	570	627
Slovenia	..	..	..	223 ^o	296 ^o
Former Yugoslavia ^h	141	179	257	465	465
Central and Eastern Europe	87	180	1 846	13 980	20 247
Albania	..	..	..	77 ^o	130 ^o
Belarus	..	..	..	17 ^o	23 ^o
Bulgaria	..	..	4 ^p	157 ^p	457 ^p
Czech Republic	..	..	1 055 ^q	2 680 ^q	3 542 ^q
Czechoslovakia (former)	..	..	464 ^p	...	...
Estonia	..	..	..	247 ^o	508 ^o
Hungary ^h	1	3	3	5 294	6 804
Latvia	..	..	..	34 ^o	64 ^o
Lithuania	..	..	..	22 ^o	32 ^o
Moldova, Republic of	..	..	..	31 ^o	47 ^o
Poland ^h	86	177	320	3 004	4 404
Romania	..	..	..	211 ^r	861 ^r
Russian Federation	..	..	..	1 400 ^o	2 300 ^o
Slovakia	..	..	..	404 ^o	474 ^o
Ukraine	..	..	..	400 ^o	600 ^o
<i>Memorandum:</i>					
Least developed countries:^s in	3 657	4 394	7 198	9 729	10 569
Africa	3 373	3 969	6 372	8 386	9 050
Latin America and the Caribbean	79	112	149	179	189
Asia	144	218	490	843	964
West Asia	56	83	108	144	158
South, East and South-East Asia	88	135	382	699	806
The Pacific	61	95	187	321	366
Oil-exporting countries:^t in	41 895	95 091	141 523	185 189	200 852
Africa	7 739	15 919	26 960	32 823	34 718

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(Annex table 3, cont'd)

Host region/economy	1980	1985	1990	1993	1994 a
Latin America and the Caribbean	12 712	19 664	35 989	54 020	59 853
Asia	21 444	59 508	78 574	98 347	106 282
West Asia	5 073	25 995	25 548	27 246	27 683
South, East and South East Asia	16 370	33 513	53 026	71 101	78 599
The Pacific	..	..	..	..	..
Developing economies minus China	108 272	188 944	320 860	443 724	491 586

Source: UNCTAD, Division on Transnational Corporations and Investment FDI database, based on the June 1995 IMF balance-of-payments tapes, OECD estimates, and the International Monetary Fund balance-of-payments tape, retrieved in June 1995; and own estimates.

a Estimates.

b Estimated by adding flows to the stock of 1989.

c Estimated by adding flows to the stock of 1990.

d Estimated by adding flows to the stock of 1986.

e Estimated by adding flows to the stock of 1992.

f Estimated by adding flows to the stock of 1991.

g Estimated by accumulating flows since 1982.

h Estimated by accumulating flows since 1970.

i Estimated by adding flows to the stock of 1988.

j Estimated by accumulating flows since 1987.

k Estimated by accumulating flows since 1984.

l Estimated by adding flows to the stock of 1981.

m Estimated by adding flows to the stock of 1987.

n Estimated by accumulating flows since 1980.

o Estimated by accumulating flows since 1992.

p Estimated by accumulating flows since 1990.

q Estimated by accumulating flows since 1989.

r Estimated by accumulating flows since 1991.

s Least developed countries include: Afghanistan, Angola, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, Cape Verde, Central African Republic, Chad, Comoros, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Haiti, Kiribati, Lao People's Democratic Republic, Lesotho, Liberia, Madagascar, Malawi, Maldives, Mali, Mauritania, Mozambique, Myanmar, Nepal, Niger, Rwanda, Western Samoa, Sierra Leone, Solomon Islands, Somalia, Sudan, Togo, Tuvalu, Uganda, United Republic of Tanzania, Vanuatu, Yemen, Zaire and Zambia.

t Oil-exporting countries include: Algeria, Angola, Bahrain, Bolivia, Brunei Darussalam, Cameroon, Congo, Ecuador, Egypt, Gabon, Indonesia, Islamic Republic of Iran, Iraq, Kuwait, Libyan Arab Jamahiriya, Malaysia, Mexico, Nigeria, Oman, Qatar, Saudi Arabia, Trinidad and Tobago, Tunisia, United Arab Emirates and Venezuela.

Annex table 4. Foreign-direct-investment outward stock, by home region and economy, 1980, 1985, 1990, 1993, 1994

(Millions of dollars)

Homeregion/economy	1980	1985	1990	1993	1994 ^a
Total outward stock	514 223	679 393	1 667 580	2 134 619	2 378 025
Developedeconomies	508 028	663 456	1 609 013	2 016 612	2 229 814
Western Europe	236 593	312 255	851 530	1 063 872	1 183 878
European Union	213 157	286 283	774 891	962 034	1 074 087
Austria	747	1 908	4 656	10 048	11 295
Belgium and Luxembourg	6 037	4 688	28 913 ^b	50 360 ^b	50 330 ^b
Denmark	2 065	1 801	7 342	12 803 ^c	16 849 ^c
Finland	743	1 829	11 227	9 435	13 217
France	23 604	37 077	110 126	160 546	183 406
Germany	43 127	59 909	151 581	185 048	205 608
Italy	7 319	16 301	56 102	73 792	83 462
Netherlands	42 116	47 772	109 124	134 662 ^d	146 035 ^d
Portugal ^e	130	200	517	1 774	2 057
Spain	1 226	2 076	14 987	25 795 ^f	29 978 ^f
Sweden	5 611	12 408	49 491	44 560	50 682
United Kingdom	80 434	100 313	230 825	253 213	281 170
Other Western Europe	23 435	25 973	76 640	101 838	109 791
Iceland ^e	..	..	21	41	48
Norway	1 944	4 623	10 888	12 719	14 415
Switzerland	21 491	21 350	65 731	89 078	95 328
North America	242 750	291 981	514 072	645 998	715 667
Canada	22 572	40 947	78 853	86 310	105 606
United States	220 178	251 034	435 219	559 688	610 061
Other developed economies	28 685	59 220	243 411	306 742	330 269
Australia	2 260	6 653	30 108	31 369	35 925
Israel ^e	28	510	912	2 916	3 742
Japan	19 610	43 970	201 440	259 795	277 733
New Zealand	1 065	1 583	3 320 ^g	5 032 ^g	5 239 ^g
South Africa	5 722	6 504	7 630	7 630	7 630
Developingeconomies	6 117	15 837	58 346	117 391	147 769
Africa	500	1 248	2 450	3410	3 597
North Africa	389	647	1 459	1732	1 808
Algeria ^e	99	157	185	281	313
Egypt ^e	7	59	131	223	254
Libyan Arab Jamahiriya ^e	39	121	447	451	451

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(Annex table 4, cont'd)

Homeregion/economy	1980	1985	1990	1993	1994 ^a
Morocco ^e	76	102	164	235	245
Sudan ^e	162	206	526	526	526
Tunisia ^e	6	2	6	16	19
Other Africa	111	601	991	1 678	1 789
Benin ^e	-	2	2	2	2
Botswana ^e	3	3	3	3	3
Cameroon ^e	-	30	128	205	231
Central African Republic ^e	2	3	20	34	39
Chad ^e	1	1	36	69	80
Gabon ^e	-	25	87	134	149
Kenya ^e	18	60	66	66	66
Liberia ^h	48	361	453	813	813
Mauritius	..	..	..	79 ⁱ	108 ⁱ
Namibia	..	..	2	13 ⁱ	17 ⁱ
Senegal ^e	8	45	52	52	52
Seychelles ^e	14	44	71	81	84
Swaziland ^e	18	28	72	128	146
Latin America and the Caribbean	2 910	7 207	12 654	17 307	19 205
South America	930	2 251	4 698	8 759	10 663
Argentina ^h	70	280	420	395	396
Bolivia ^e	1	1	7	11	13
Brazil	652	1 361	2 397	4 651 ^c	5 402 ^c
Chile	42	102	178	1 144 ^d	2 000 ^d
Colombia	137	301	402	476 ^c	511 ^c
Peru	3	38	63	63 ^d	63 ^d
Uruguay ^h	3	2	9	23	25
Venezuela	23	165	1 221	1 995	2 253
Other Latin America	1 980	4 956	7 956	8 548	8 542
Bahamas ^h	285	154	1 535	1 184	964
Barbados ^h	5	12	23	28	30
Bermuda ^h	727	2 002	1 550	1 442	1 515
Costa Rica ^e	6	26	44	58	63
Mexico ^h	136	533	575	1 039	1 215
Netherlands Antilles ^e	10	10	21	22	22
Panama ^h	811	2 204	4 188	4 754	4 712
Trinidad and Tobago ^e	..	16	21	21	21
Asia	2 687	7 332	43 139	96 581	124 872
West Asia	1 016	1 677	4 968	6 891	7 577
Bahrain ^h	-1	-3	46	19	12
Cyprus	3	43 ⁱ	57 ⁱ

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(Annex table 4, cont'd)

Homeregion/economy	1980	1985	1990	1993	1994 ^a
Jordan ^e	53	70	60	18	4
Kuwait ^e	568	930	2 804	4 889	5 584
Lebanon ^h	1	40	-16	-35	-41
Oman ^h	1	40	7	-1	-1
Saudi Arabia ^h	228	420	1 811	1 591	1 500
Turkey ^e	161	161	154	260	344
United Arab Emirates ^h	5	19	99	107	118
Central Asia	..	..	..	..	..
South, East and South-East Asia	1 671	5 656	38 171	89 691	117 295
Bangladesh ^h	..	..	-	1	1
China	..	131	2 489 ^b	11 802 ^b	13 802 ^b
Hong Kong ^j	148	2 345	13 242	41 215	60 156
India ^h	4	19	30	82	97
Indonesia ^h	-1	49	25	83	96
Korea, Republic of	142	526	2 095	5 555	7 628
Malaysia	414	749	2 283 ^g	4 516 ^g	6 269 ^g
Pakistan	31	127	282 ^g	264 ^g	258 ^g
Philippines	171	171	154 ^g	128 ^g	119 ^g
Singapore ^e	652	1 320	4 277	6 236	6 889
Sri Lanka ^e	..	1	8	22	26
Taiwan Province of China	97	204	12 888 ^g	18 854 ^g	20 843 ^g
Thailand	13	14	398 ^b	933 ^b	1 111 ^b
The Pacific	21	50	104	94	95
Fiji ^e	10	23	83	87	88
Papua New Guinea	10	22	7	7	7 ^b
Vanuatu ^e	..	5	14	..	..
Developing Europe	..	..	..	..	..
Central and Eastern Europe	79	100	220	616	442
Czech Republic ^e	..	..	21	86	108
Czechoslovakia (former) ^e	..	..	11	233	..
Hungary	..	..	..	71 ^k	95 ^k
Poland ^e	79	100	170	194	202
Romania ^e	..	..	18	32	37
<i>Memorandum:</i>					
Least developed countries:¹ in	212	578	1 051	1 445	1 461
Africa	212	573	1 037	1 444	1 460
Latin America and the Caribbean
Asia	-	-	-	1	1
West Asia

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(Annex table 4, cont'd)

Homeregion/economy	1980	1985	1990	1993	1994 ^a
South, East and South-East Asia	-	1	1
The Pacific	..	5	14	..	..
Oil-exporting countries:^m in	1 525	3 312	9 882	15 579	18 496
Africa	151	394	984	1 310	1 417
Latin America and the Caribbean	160	715	1 824	3 066	3 502
Asia	1 214	2 204	7 075	11 204	13 578
West Asia	801	1 406	4 767	6 605	7 213
South, East and South-East Asia	413	798	2 308	4 599	6 365
The Pacific	..	..	..	..	..
Developing economies minus China	6 117	15 706	55 858	105 589	133 967

Source: UNCTAD, Division on Transnational Corporations and Investment FDI database, based on official national sources, the International Monetary Fund balance-of-payments tape, retrieved in June 1995; and own estimates.

^a Estimates.

^b Estimated by adding flows to the stock of 1989.

^c Estimated by adding flows to the stock of 1990.

^d Estimated by adding flows to the stock of 1992.

^e Estimated by accumulating flows since 1970.

^f Estimated by adding flows to the stock of 1991.

^g Estimated by adding flows to the stock of 1988.

^h Estimated by using the country's inward stock in the United States.

ⁱ Estimated by accumulating flows since 1990.

^j Estimated by using the country's inward stock in the United States and China.

^k Estimated by accumulating flows since 1991.

^l Least developed countries include: Afghanistan, Angola, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, Cape Verde, Central African Republic, Chad, Comoros, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Haiti, Kiribati, Lao People's Democratic Republic, Lesotho, Liberia, Madagascar, Malawi, Maldives, Mali, Mauritania, Mozambique, Myanmar, Nepal, Niger, Rwanda, Western Samoa, Sierra Leone, Solomon Islands, Somalia, Sudan, Togo, Tuvalu, Uganda, United Republic of Tanzania, Vanuatu, Yemen, Zaire and Zambia.

^m Oil-exporting countries include: Algeria, Angola, Bahrain, Bolivia, Brunei Darussalam, Cameroon, Congo, Ecuador, Egypt, Gabon, Indonesia, Islamic Republic of Iran, Iraq, Kuwait, Libyan Arab Jamahiriya, Malaysia, Mexico, Nigeria, Oman, Qatar, Saudi Arabia, Trinidad and Tobago, Tunisia, United Arab Emirates and Venezuela.

Annex table 5. The ratio of foreign-direct-investment inflows to gross fixed capital formation and the ratio of gross fixed capital formation to gross domestic product, 1981-1993^a

(Percentage)

Hostregion/economy	1981-1985	1986-1990	1991	1992	1993
	(Annual average)				
Alleconomies	2.3	4.1	3.5	3.6	4.3
	21.7	21.8	20.2	19.4	19.8
Developedeconomies	2.2	4.6	3.3	3.0	3.5
	20.9	20.9	20.2	19.7	19.9
Western Europe	2.6	5.8	5.6	5.2	5.6
	20.3	21.0	20.6	19.7	19.3
European Union	2.6	5.9	5.7	5.4	5.8
	20.1	20.6	20.5	19.6	19.2
Austria	1.3	1.7	1.0	2.3	2.7
	23.7	23.9	25.1	24.9	24.0
Belgiumand Luxembourg	7.6	16.1	24.1	25.1	25.4
	16.8	18.5	18.9	19.6	19.4
Denmark	0.4	2.5	7.3	4.7	8.6
	37.6	22.3	16.4	15.2	14.8
Finland	0.7	1.9	-0.9	2.0	6.9
	24.9	25.4	22.4	18.5	15.1
France	2.0	4.1	6.0	8.3	8.7
	20.4	20.7	21.1	20.0	19.1
Germany	1.2	2.0	2.3	1.4	0.5
	20.3	20.0	21.4	21.2	20.0
Greece	6.0	7.9	8.7	8.2	7.5
	21.8	18.7	18.6	18.0	17.5
Ireland	4.0	1.1	1.3	1.3	1.3
	24.6	17.6	16.7	15.8	15.4
Italy	1.1	2.2	1.0	1.3	1.6
	23.1	21.1	20.3	19.1	23.4
Netherlands	6.1	13.3	10.6	11.8	9.4
	18.2	20.8	20.4	20.4	19.4
Portugal	3.0	10.0	13.7	8.5	7.9
	11.0	28.4	26.0	26.2	25.5
Spain	5.3	9.4	8.3	6.4	7.1
	19.9	22.8	23.9	22.0	20.0
Sweden	1.6	4.0	14.2	-0.2	14.4
	17.6	19.9	18.7	16.9	14.1
United Kingdom	5.7	14.6	9.4	9.2	10.3
	16.4	19.1	16.9	15.6	14.9
Other Western Europe	1.9	4.7	4.0	2.6	3.00
	24.7	27.5	23.3	21.6	22.20

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(Annex table 5, cont'd)

Hostregion/economy	1981-1985	1986-1990	1991	1992	1993
	(Annual average)				
Iceland	3.0	-0.5	2.8	1.2	0.8
	22.9	18.6	18.9	17.4	15.4
Norway	1.2	3.7	-0.3	3.7	6.4
	25.3	26.1	18.5	17.7	22.0
Switzerland	2.3	5.3	5.4	2.2	1.6
	24.4	28.5	25.6	23.7	22.4
North America	2.8	6.8	2.9	2.5	4.7
	18.4	16.3	13.5	13.6	14.2
Canada	1.0	5.8	2.4	4.2	5.1
	20.7	21.7	19.8	19.6	18.3
United States	2.9	6.9	3.0	2.2	4.7
	18.2	15.7	12.9	13.1	13.9
Other developed economies	0.7	0.9	0.7	0.7	0.5
	28.1	28.9	30.2	29.4	28.9
Australia	4.6	10.3	7.2	8.2	6.2
	24.6	23.4	20.3	19.5	19.2
Israel	1.5	2.3	2.4	3.5	4.0
	19.7	16.7	24.0	23.3	21.5
Japan	0.1	0.1	0.1	0.2	-
	29.0	30.0	31.8	30.8	30.1
New Zealand	4.8	9.5	24.1	15.2	32.4
	26.2	21.8	16.7	17.3	17.7
South Africa	0.5	-	-	-	-
	26.4	20.0	16.2	15.9	14.5
Developing economies	3.3	3.2	4.4	5.8	7.1
	23.3	24.5	21.0	18.4	19.7
Africa	2.3	3.5	4.5	4.9	4.5
	22.2	22.9	18.4	19.2	19.0
North Africa	1.5	2.2	2.5	3.3	3.5
	29.8	28.6	21.4	22.4	21.3
Algeria	-	-	0.1	0.1	0.1
	35.9	30.4	28.8	28.7	27.5
Egypt	6.9	4.8	3.9	5.3	6.4
	28.2	37.7	30.9	24.3	19.6
Libyan Arab Jamahiriya	-3.2	0.2	1.5	1.5	1.6
	27.4	23.5	16.9	19.8	20.0
Morocco	1.4	2.0	6.2	6.3	7.9
	26.2	21.9	22.3	23.7	24.1
Sudan	0.5	-0.3	-0.1	-	-
	14.5	9.7	3.0	6.8	6.2

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(Annex table 5, cont'd)

Hostregion/economy	1981-1985	1986-1990	1991	1992	1993
	(Annual average)				
Tunisia	8.4 30.3	3.3 22.0	4.0 24.3	9.0 26.4	7.1 28.4
Other Africa	3.5 16.1	6.5 15.7	7.8 15.1	7.6 15.3	6.0 16.2
Angola	30.2 7.8	11.8 8.4	107.4 7.4	45.5 7.5	32.7 7.2
Benin	0.2 18.0	0.2 13.3	5.1 13.1	2.4 13.3	3.3 13.9
Botswana	16.1 28.1	10.6 26.2	3.1 35.3	3.1 35.0	2.8 35.4
Burkina Faso	0.3 28.0	0.2 29.2	0.1 33.0	- 21.4	- 22.1
Burundi	2.0 16.1	0.7 15.6	0.4 18.1	0.3 21.1	0.3 17.3
Cameroon	8.6 23.0	-0.3 28.5	-0.9 16.6	-1.5 11.1	-7.4 10.8
Cape Verde	- 47.4	0.5 39.3	1.0 34.8	-0.6 36.6	0.1 38.5
Central African Republic	9.1 8.5	2.4 13.6	-2.8 13.7	-1.9 11.8	-2.3 8.6
Chad	24.0 7.6	10.6 10.8	3.0 10.6	1.8 8.5	1.8 9.4
Comoros	0.1 31.7	6.4 23.4	5.4 19.0	4.4 18.0	3.3 18.0
Congo	3.9 41.3	3.9 19.2	1.8 11.8	0.9 18.1	0.8 15.5
Côte d'Ivoire	2.3 18.2	4.8 10.5	9.0 7.9	6.9 11.0	3.1 10.4
Djibouti	0.1 29.8	0.3 29.6	- 28.8	1.8 28.5	2.2 28.6
Equatorial Guinea	10.5 16.7	15.5 19.0	79.8 40.6	41.0 26.5	61.7 23.9
Ethiopia	0.2 12.4	0.1 14.3	0.1 10.4	2.5 5.0	0.9 20.8
Gabon	5.0 35.4	6.9 27.3	-5.1 19.8	10.5 21.4	8.2 21.6
Gambia	-0.2 19.2	7.3 15.6	20.0 15.8	8.8 19.6	9.4 22.3
Ghana	2.4 5.8	1.4 11.0	2.5 12.7	2.5 12.8	2.2 14.8
Guinea	0.1 15.6	3.3 16.3	7.8 15.3	4.0 17.0	0.5 16.7
Guinea-Bissau	1.1 21.2	1.5 29.7	3.3 16.7	10.0 26.5	-2.9 22.6

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(Annex table 5, cont'd)

Hostregion/economy	1981-1985	1986-1990	1991	1992	1993
	(Annual average)				
Kenya	1.1	2.4	1.2	0.5	0.2
	24.3	19.9	18.6	17.1	15.3
Lesotho	2.8	4.6	1.7	0.5	2.6
	43.3	58.6	70.3	66.8	75.6
Liberia	10.9	220.6	8.2	-11.1	31.1
	17.4	9.3	8.5	8.2	8.2
Madagascar	0.6	3.2	6.2	6.2	4.9
	14.5	15.0	9.1	11.3	11.5
Malawi	3.4	6.8	4.9	0.8	1.5
	21.3	14.8	16.7	16.1	10.7
Mali	2.2	-0.2	0.6	-1.5	-0.7
	16.4	21.6	23.2	18.6	20.4
Mauritania	4.7	1.9	0.9	1.9	2.0
	25.7	20.5	21.5	22.5	24.8
Mauritius	1.5	4.7	2.4	1.7	1.7
	21.3	26.3	29.0	28.6	28.1
Mozambique	0.2	0.8	3.2	3.2	3.1
	12.0	43.0	49.8	64.5	68.8
Namibia	2.0	2.5	44.5	17.5	24.8
	11.0	17.3	11.2	12.5	10.6
Niger	1.1	4.1	0.2	0.3	-
	15.1	12.5	15.7	5.8	6.1
Nigeria	3.6	23.7	19.8	26.3	15.4
	13.7	9.1	10.5	11.1	13.6
Rwanda	6.7	4.9	2.0	0.9	1.8
	15.8	14.6	14.3	15.6	16.9
Senegal	1.8	0.3	2.8	0.1	0.1
	18.0	13.1	14.4	13.4	14.1
Seychelles	25.3	33.3	27.6	23.2	23.0
	26.0	22.6	21.1	21.4	22.9
Sierra Leone	-1.4	-20.8	13.9	38.5	42.1
	12.2	6.7	7.2	7.8	6.6
Somalia	-1.5	-0.7	-0.1	-4.7	-0.9
	12.2	22.7	24.4	22.3	21.8
Swaziland	4.4	37.4	48.3	25.5	23.0
	30.9	20.2	18.3	24.5	19.5
Togo	0.6	0.7	0.6	-0.2	0.1
	137.7	73.1	65.4	65.7	94.9
Uganda	-0.2	-0.2	0.3	0.8	1.6
	6.5	7.6	12.9	11.4	5.3
United Republic of Tanzania	2.6	-0.1	0.9	2.6	3.4
	5.3	13.2	10.1	17.0	28.1
Zaire	-1.7	-1.2	2.2	-0.1	-0.1
	23.7	15.1	6.5	13.7	12.4
Zambia	3.6	39.1	8.9	38.3	60.0
	11.9	7.0	11.4	11.0	6.5

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(Annex table 5, cont'd)

Hostregion/economy	1981-1985	1986-1990	1991	1992	1993
	(Annual average)				
Zimbabwe	- 19.9	-1.2 17.7	0.2 21.4	1.2 21.4	2.2 22.4
Latin America and the Caribbean	4.1 18.4	4.2 19.6	5.9 18.3	7.2 16.1	6.5 17.1
South America	3.8 16.8	3.1 19.4	5.2 16.2	7.0 14.1	6.2 15.3
Argentina	5.0 10.3	11.1 7.4	15.1 8.5	41.7 4.4	56.1 4.4
Bolivia	4.8 14.7	1.4 11.5	6.5 13.8	11.2 15.8	14.8 15.0
Brazil	4.3 18.5	1.7 22.4	1.3 18.9	2.3 17.5	0.8 18.2
Chile	6.7 5.8	20.6 16.7	10.6 17.3	7.3 23.7	7.7 26.5
Colombia	7.7 19.8	6.1 19.7	8.3 16.6	10.5 15.5	9.6 18.7
Ecuador	1.9 23.8	3.6 20.7	3.4 21.5	3.9 19.5	4.5 17.9
Guyana	2.1 26.5	0.5 31.1	23.7 23.9	0.2 32.9	4.1 53.8
Paraguay	1.2 27.6	1.7 28.8	5.9 22.8	9.4 22.5	7.6 21.5
Peru	0.4 27.1	0.4 31.9	-0.1 18.5	2.7 11.3	4.5 18.7
Surinam	4.6 20.3	-29.1 22.2	3.1 17.2	-8.8 17.8	-6.0 18.0
Uruguay	1.4 13.9	4.7 12.2	2.6 12.8	1.0 12.1	4.1 14.2
Venezuela	0.8 22.3	1.5 19.9	19.2 18.7	5.6 20.6	3.2 19.8
Other Latin America	4.8 22.4	7.2 20.3	7.1 23.3	7.5 20.5	6.9 21.6
Bahamas	-0.2 19.9	1.4 21.6	- 20.7	1.1 21.5	-3.6 21.6
Barbados	1.8 21.8	3.4 17.5	2.6 16.8	4.6 19.7	3.0 18.7
Belize	-1.0 19.8	16.0 24.4	12.3 28.5	12.8 28.9	6.9 31.3
Costa Rica	7.1 25.1	8.4 25.6	14.6 22.8	18.7 20.9	17.0 22.1
Dominica	4.6 30.4	15.0 32.6	14.1 41.3	19.5 36.7	13.5 36.6

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(Annex table 5, cont'd)

Hostregion/economy	1981-1985	1986-1990	1991	1992	1993
	(Annual average)				
Dominican Republic	2.8	8.4	20.2	10.1	15.8
	26.6	20.2	10.1	22.9	13.9
El Salvador	1.8	2.2	3.1	1.5	1.3
	14.3	14.3	13.7	15.7	16.2
Grenada	6.5	17.8	16.6	31.6	..
	38.3	38.4	43.7	33.3	..
Guatemala	5.7	13.3	7.7	5.8	8.0
	13.4	13.3	12.5	15.5	16.4
Haiti	2.4	2.3	4.0	2.3	2.9
	16.6	15.2	13.1	13.3	13.2
Honduras	3.0	4.9	7.0	6.4	4.6
	16.7	23.5	24.8	22.4	22.9
Jamaica	-1.4	5.4	12.1	12.7	7.0
	22.9	25.3	30.2	35.6	29.2
Mexico	5.0	7.5	6.8	7.2	6.4
	22.8	20.4	24.4	20.8	22.3
Nicaragua	-	-0.1	3.5	4.4	11.2
	21.8	44.6	18.3	18.4	19.2
Panama	3.1	-1.2	-3.0	0.3	-4.9
	21.6	12.6	18.2	11.2	13.2
Saint Kitts and Nevis	..	42.6	25.9	16.7	33.3
	..	48.3	49.0	46.9	43.1
Saint Vincent and the Grenadines	5.4	16.4	17.6	36.5	22.0
	29.1	28.6	28.3	27.0	27.9
Trinidad and Tobago	7.3	7.6	17.8	20.3	42.5
	25.0	19.0	18.1	16.8	19.7
Asia	3.1	2.8	3.7	5.4	7.6
	26.4	27.0	22.5	19.2	21.1
West Asia	6.0	0.7	1.5	1.5	1.0
	23.4	21.6	9.7	7.1	11.5
Bahrain	4.6	7.9	-0.8	-0.9	0.7
	39.2	24.5	20.9	21.7	20.6
Cyprus	9.3	6.3	5.3	7.0	7.0
	31.9	27.2	26.7	25.9	23.6
Iran, Islamic Republic of	-0.1	-	0.1	-	0.2
	21.4	21.8	4.1	2.6	7.5
Jordan	3.9	2.2	-1.4	2.8	-2.1
	36.1	21.4	21.4	30.3	30.1
Kuwait	-	-	-	0.5	0.2
	20.5	18.9	51.6	38.8	27.0
Lebanon	0.5	1.6	0.2	1.6	1.4
	21.2	11.4	20.2	20.4	32.4

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(Annex table 5, cont'd)

Hostregion/economy	1981-1985	1986-1990	1991	1992	1993
	(Annual average)				
Oman	6.4 27.1	6.8 18.4	8.7 16.8	6.1 12.3	6.6 13.1
Saudi Arabia	17.0 25.4	0.8 20.5	0.9 17.2	0.5 15.3	0.5 15.7
Syrian Arab Republic	0.2 23.7	1.6 17.6	1.4 16.1	0.5 11.1	- 14.0
Turkey	0.8 20.0	2.1 23.8	3.5 22.7	3.4 23.1	2.6 22.3
United Arab Emirates	0.2 28.0	0.9 24.1	0.4 21.2	1.6 23.2	2.2 23.2
Yemen	1.7 21.9	1.1 12.2	0.7 20.0	0.6 21.2	0.7 19.8
South, East and South-East Asia	1.9 27.8	3.5 29.6	4.2 30.0	6.1 28.2	9.1 26.2
Bangladesh	- 13.2	0.1 12.0	0.1 11.5	0.1 12.1	0.4 13.3
China	0.9 32.4	2.1 38.8	3.3 34.9	7.8 33.0	20.0 25.2
HongKong	6.9 27.3	12.9 27.2	2.3 28.3	7.7 27.8	7.1 24.5
India	0.1 23.5	0.3 23.5	0.3 20.8	0.5 19.1	1.1 20.2
Indonesia	0.9 28.0	2.1 33.0	3.6 35.1	5.1 27.3	4.8 29.1
Korea, Republic of	0.5 29.2	1.2 32.6	1.0 37.6	0.5 36.6	0.4 35.5
Malaysia	10.8 34.0	11.7 27.7	24.0 35.3	26.0 34.3	23.7 34.1
Maldives	-2.1 29.9	9.1 57.8	11.3 39.0	10.9 41.2	11.3 41.5
Myanmar	- 18.7	2.1 11.0	2.9 6.9	3.5 5.7	4.4 5.8
Nepal	- 18.5	0.3 20.0	0.4 17.7	- 18.7	- 18.8
Pakistan	1.3 18.1	2.3 18.6	3.3 18.3	3.5 19.9	3.5 20.4
Philippines	0.8 24.7	6.7 19.7	6.0 20.0	2.0 21.7	5.9 24.0
Singapore	17.4 46.6	35.0 37.6	32.7 35.4	36.2 38.3	43.3 28.6
Sri Lanka	3.1 25.9	2.5 22.1	2.3 23.1	5.2 24.2	7.5 25.4
Taiwan Province of China	1.5 23.0	3.7 22.4	3.0 23.9	2.4 17.9	2.4 17.5

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(Annex table 5, cont'd)

Hostregion/economy	1981-1985	1986-1990	1991	1992	1993
	(Annual average)				
Thailand	3.0 24.9	6.5 29.3	5.6 36.9	4.9 39.1	3.6 38.7
The Pacific	14.4 24.9	17.8 21.6	18.6 24.0	29.1 20.9	17.9 18.8
Fiji	10.6 24.0	14.5 15.4	8.2 12.4	27.0 12.0	13.9 12.4
Papua New Guinea	15.1 26.4	18.5 23.4	19.0 28.2	28.5 23.8	17.2 20.4
Vanuatu	.. -	20.8 34.3	48.1 29.5	46.3 30.7	44.6 31.9
Developing Europe	8.4 29.2	6.8 29.5	12.4 25.0	6.1 23.9	7.9 24.9
Malta	8.4 29.2	6.8 29.5	12.4 25.0	6.1 23.9	7.9 24.9
Central and Eastern Europe	- 28.8	0.1 31.0	8.8 12.6	12.6 14.2	15.3 14.2
Bulgaria	- 33.4	- 33.3	2.8 4.2	2.0 4.4	2.5 5.0
Czechoslovakia (former)	- 29.0	0.3 23.1	....	....	....
Hungary	- 27.0	- 25.3	21.2 20.8	20.3 20.0	33.6 18.4
Poland	- 25.2	0.1 31.7	2.0 18.8	4.8 16.7	11.5 17.2
Romania	- 34.2	- 50.0	1.0 14.4	2.2 15.9	2.8 13.4
Memorandum:					
Least developed countries: ^b in	1.8 15.6	3.4 14.0	5.7 11.8	3.4 12.2	3.3 12.6
Africa	2.5 15.3	4.5 15.0	8.4 12.3	4.7 13.6	4.4 14.1
Latin America and the Caribbean	2.4 16.6	2.3 15.2	4.0 13.1	2.3 13.3	2.9 13.2
Asia	0.4 16.3	0.9 12.3	1.1 11.0	1.2 10.5	1.6 11.0
West Asia	1.7 21.9	1.1 12.2	0.7 20.0	0.6 21.2	0.7 19.8
South, East and South East Asia	- 15.2	0.9 12.3	1.3 9.6	1.5 8.8	1.9 9.3

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(Annex table 5, cont'd)

Hostregion/economy	1981-1985	1986-1990	1991	1992	1993
	(Annual average)				
The Pacific	..	20.8	48.1	46.3	44.6
	..	34.3	29.5	30.7	31.9
Oil-exporting countries: ^c	4.8	2.9	6.3	6.6	5.5
in	24.1	23.4	15.7	12.0	16.2
Africa	2.6	3.5	4.7	5.5	4.5
	24.2	26.7	20.5	20.8	20.1
Latin America and the Caribbean	3.9	6.1	8.3	7.0	6.4
	22.7	20.1	23.2	20.6	21.7
Asia	6.5	1.4	5.3	6.7	5.2
	25.0	23.5	11.7	8.0	13.2
West Asia	7.9	0.3	0.6	0.4	0.4
	23.4	21.4	6.8	4.6	9.1
South, East and South-East Asia	3.8	4.5	9.6	12.8	11.3
	29.5	31.5	35.2	29.5	30.7
The Pacific	..	..	..	..	..

Developing economies minus China	3.7	3.4	4.5	5.4	5.0
	22.1	22.7	19.6	16.9	19.0

Source: UNCTAD, Division on Transnational Corporations and Investment, based on the Division's FDI database and data provided by the UNCTAD Secretariat.

^a All economies and regional data for the ratio of gross fixed capital formation to gross domestic product in this table are not necessarily the same as those in annex table 6 as these data include only the countries for which data are available.

^b Least developed countries include: Afghanistan, Angola, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, Cape Verde, Central African Republic, Chad, Comoros, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Haiti, Kiribati, Lao People's Democratic Republic, Lesotho, Liberia, Madagascar, Malawi, Maldives, Mali, Mauritania, Mozambique, Myanmar, Nepal, Niger, Rwanda, Western Samoa, Sierra Leone, Solomon Islands, Somalia, Sudan, Togo, Tuvalu, Uganda, United Republic of Tanzania, Vanuatu, Yemen, Zaire and Zambia.

^c Oil-exporting countries include: Algeria, Angola, Bahrain, Bolivia, Brunei Darussalam, Cameroon, Congo, Ecuador, Egypt, Gabon, Indonesia, Islamic Republic of Iran, Iraq, Kuwait, Libyan Arab Jamahiriya, Malaysia, Mexico, Nigeria, Oman, Qatar, Saudi Arabia, Trinidad and Tobago, Tunisia, United Arab Emirates and Venezuela.

Note: Figures in the first line in each region or economy indicate the ratio of FDI flows to gross capital formation. Those in the second line, in *italics*, indicate the ratio of gross fixed capital formation to gross domestic product.

Annex table 6. The ratio of foreign-direct-investment outflows to gross fixed capital formation and the ratio of gross fixed capital formation to gross domestic product, 1981-1993^a
(Percentage)

Homeregion/economy	1981-1985	1986-1990	1991	1992	1993
	(Annual average)				
Alleconomies	2.1	4.7	4.5	4.0	4.4
	21.5	21.7	20.4	19.5	19.9
Developedeconomies	2.7	5.6	5.4	4.7	5.2
	20.9	20.9	20.2	19.7	19.9
Western Europe	4.3	8.8	7.7	7.2	7.6
	20.3	21.0	20.6	19.7	19.3
European Union	4.3	8.8	7.5	7.2	7.4
	20.1	20.6	20.5	19.6	19.2
Austria	0.9	2.1	3.1	4.1	3.2
	23.7	23.9	25.1	24.9	24.0
Belgium and Luxembourg	1.3	14.7	15.8	25.0	9.6
	16.8	18.5	18.9	19.6	19.4
Denmark	0.9	4.7	8.7	10.4	6.9
	37.6	22.3	16.4	15.2	14.8
Finland	1.9	7.8	-0.5	-3.8	13.4
	24.9	25.4	22.4	18.5	15.1
France	2.5	8.5	9.5	11.8	8.6
	20.4	20.7	21.1	20.0	19.1
Germany	3.4	6.8	6.7	4.2	5.1
	20.3	20.0	21.4	21.2	20.0
Ireland	2.2	7.1	8.5	6.4	7.8
	24.6	17.6	16.7	15.8	15.4
Italy	1.8	2.3	3.1	2.5	3.2
	23.1	21.1	20.3	19.1	23.4
Netherlands	15.5	21.1	22.9	22.1	16.7
	18.2	20.8	20.4	20.4	19.4
Portugal	0.2	0.5	2.6	3.1	0.6
	11.0	28.4	26.0	26.2	25.5
Spain	0.9	1.7	2.8	1.0	2.7
	19.9	22.8	23.9	22.0	20.0
Sweden	7.7	23.0	16.2	0.6	5.4
	17.6	19.9	18.7	16.9	14.1
United Kingdom	12.0	18.7	9.4	11.7	18.4
	16.4	19.1	16.9	15.6	14.9
Other Western Europe	4.7	9.0	10.4	7.6	11.9
	24.7	27.5	23.3	21.6	22.2
Iceland	-	0.4	0.9	0.5	0.5
	22.9	18.6	18.9	17.4	15.4
Norway	3.8	5.5	9.3	1.8	4.1
	25.3	26.1	18.5	17.7	22.0

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(Annex table 6, cont'd)

Homeregion/economy	1981-1985	1986-1990	1991	1992	1993
	(Annual average)				
Switzerland	5.4	10.8	11.0	9.9	15.5
	24.4	28.5	25.6	23.7	22.4
North America	2.0	3.0	4.6	4.8	7.6
	18.4	16.3	13.5	13.6	14.2
Canada	4.9	4.9	4.9	3.5	5.9
	20.7	21.7	19.8	19.6	18.3
United States	1.7	2.8	4.5	4.9	7.8
	18.2	15.7	12.9	13.1	13.9
Other developed economies	1.5	4.2	3.1	1.5	1.1
	28.1	28.9	30.2	29.4	28.9
Australia	2.4	7.0	4.9	-0.3	2.0
	24.6	23.4	20.3	19.5	19.2
Israel	1.8	1.1	3.0	4.3	6.6
	19.7	16.7	24.0	23.3	21.5
Japan	1.5	4.1	2.9	1.5	1.1
	29.0	30.0	31.8	30.8	30.1
New Zealand	1.7	9.4	20.9	5.5	-15.7
	26.2	21.8	16.7	17.3	17.7
South Africa	1.1	0.2	-	-	-
	26.4	20.0	16.2	15.9	14.5
Developingeconomies	0.4	1.2	1.0	1.4	1.2
	23.6	25.0	21.5	18.7	20.0
Africa	1.8	1.5	1.2	0.6	1.5
	24.2	25.9	21.0	21.3	20.8
North Africa	0.1	0.2	0.3	0.1	0.2
	30.7	30.0	24.0	24.4	23.3
Algeria	0.1	-	0.4	0.2	0.2
	35.9	30.4	28.8	28.7	27.5
Egypt	0.1	0.1	0.7	-	0.3
	28.2	37.7	30.9	24.3	19.6
Libyan Arab Jamahiriya	0.1	0.8	-	-	-
	27.4	23.5	16.9	19.8	20.0
Morocco	-	-	-	-	0.5
	26.2	21.9	22.3	23.7	24.1
Tunisia	-	-	0.1	0.1	0.1
	30.3	22.0	24.3	26.4	28.4
Other Africa	5.9	7.6	4.0	2.8	5.8
	16.2	16.1	15.0	14.5	15.2
Cameroon	0.3	0.6	1.1	2.9	2.0
	23.0	28.5	16.6	11.1	10.8

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(Annex table 6, cont'd)

Homeregion/economy	1981-1985	1986-1990	1991	1992	1993
	(Annual average)				
Central African Republic	0.5	2.1	2.0	3.6	4.1
	8.5	13.6	13.7	11.8	8.6
Chad	0.2	6.6	7.6	12.4	7.2
	7.6	10.8	10.6	8.5	9.4
Gabon	0.4	1.1	1.4	2.1	0.5
	35.4	27.3	19.8	21.4	21.6
Kenya	0.6	0.1	-	-	-
	24.3	19.9	18.6	17.1	15.3
Mauritania	-	0.3	-	-	-
	25.7	20.5	21.5	22.5	24.8
Mauritius	-	0.1	1.4	4.9	3.8
	21.3	26.3	29.0	28.6	28.1
Namibia	-	0.1	2.5	0.6	1.3
	11.0	17.3	11.2	12.5	10.6
Nigeria	9.4	28.3	10.8	5.2	12.4
	13.7	9.1	10.5	11.1	13.6
Senegal	1.6	0.2	-	-	-
	18.0	13.1	14.4	13.4	14.1
Seychelles	14.9	8.6	3.7	2.8	3.7
	26.0	22.6	21.1	21.4	22.9
Swaziland	1.3	6.6	19.2	4.0	9.0
	30.9	20.2	18.3	24.5	19.5
Zimbabwe	-	-0.4	-	-	-
	19.9	17.7	21.4	21.4	22.4
Latin America and the Caribbean	0.2	0.9	1.0	1.2	-0.1
	18.0	19.1	18.3	16.1	17.0
South America	0.3	0.6	1.1	0.7	1.3
	16.1	18.7	15.9	14.0	15.1
Argentina	-0.1	0.4	-0.3	0.6	-0.2
	10.3	7.4	8.5	4.4	4.4
Bolivia	-	0.2	0.2	0.2	0.2
	14.7	11.5	13.8	15.8	15.0
Brazil	0.4	0.4	1.3	0.2	1.1
	18.5	22.4	18.9	17.5	18.2
Chile	0.1	0.2	2.1	3.9	3.7
	5.8	16.7	17.3	23.7	26.5
Colombia	0.5	0.4	0.3	0.7	0.3
	19.8	19.7	16.6	15.5	18.7
Uruguay	0.3	0.3	0.2	-2.0	1.7
	13.9	12.2	12.8	12.1	14.2
Venezuela	-	2.0	1.5	1.6	3.6
	22.3	19.9	18.7	20.6	19.8
Other Latin America	0.2	1.8	0.9	1.9	-2.8
	22.9	20.3	24.1	20.6	22.1

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(Annex table 6, cont'd)

Homeregion/economy	1981-1985	1986-1990	1991	1992	1993
	(Annual average)				
Bahamas	-6.9	51.8	56.2	87.0	-240.8
	19.9	21.6	20.7	21.5	21.6
Barbados	0.6	0.8	0.5	0.3	0.9
	21.8	17.5	16.8	19.7	18.7
Belize	-	-	1.2	1.6	1.3
	19.8	24.4	28.5	28.9	31.3
Costa Rica	0.5	0.3	0.4	0.3	0.3
	25.1	25.6	22.8	20.9	22.1
Mexico	0.2	0.4	0.2	0.7	-0.1
	22.8	20.4	24.4	20.8	22.3
Panama	5.0	43.3	12.4	50.5	-69.8
	21.6	12.6	18.2	11.2	13.2
Trinidad and Tobago	0.2	0.1	-	-	-
	25.0	19.0	18.1	16.8	19.7
Asia	0.3	1.3	1.0	1.5	1.7
	26.6	27.3	22.8	19.4	21.3
West Asia	0.1	0.6	0.1	1.2	0.5
	23.4	21.6	9.7	7.1	11.5
Bahrain	0.4	0.4	-0.2	0.2	-2.2
	39.2	24.5	20.9	21.7	20.6
Cyprus	-	0.1	1.0	0.8	0.7
	31.9	27.2	26.7	25.9	23.6
Iran, Islamic Republic of	-	-	-	-	-
	21.4	21.8	4.1	2.6	7.5
Jordan	0.2	-0.2	1.6	-0.2	-3.4
	36.1	21.4	21.4	30.3	30.1
Kuwait	1.6	11.2	4.3	14.6	12.8
	20.5	18.9	51.6	38.8	27.0
Lebanon	1.3	0.4	-0.7	-0.6	-0.3
	21.2	11.4	20.2	20.4	32.4
Oman	-	-	-0.1	-0.1	-
	27.1	18.4	16.8	12.3	13.1
Saudi Arabia	0.1	1.9	-1.3	0.2	-0.6
	25.4	20.5	17.2	15.3	15.7
Syrian Arab Republic	-	-	-	-	-
	23.7	17.6	16.1	11.1	14.0
Turkey	-	-	0.1	0.2	0.1
	20.0	23.8	22.7	23.1	22.3
United Arab Emirates	0.1	0.1	-	0.3	0.1
	28.0	24.1	21.2	23.2	23.2
Yemen	0.1	-	-	-	-
	21.9	12.2	20.0	21.2	19.8
South, East and South-East Asia	0.3	1.5	1.1	1.6	2.0
	28.1	30.1	30.7	28.9	26.7

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(Annex table 6, cont'd)

Homeregion/economy	1981-1985	1986-1990	1991	1992	1993
	(Annual average)				
China	0.2	0.5	0.7	2.8	3.2
	32.4	38.8	34.9	33.0	25.2
HongKong	1.1	1.6	1.7	-0.5	0.6
	27.3	27.2	28.3	27.8	24.5
India	-	-	-	-	0.1
	23.5	23.5	20.8	19.1	20.2
Indonesia	-	-	-	0.1	-
	28.0	33.0	35.1	27.3	29.1
Korea, Republic of	0.3	0.6	1.2	0.9	0.9
	29.2	32.6	37.6	36.6	35.5
Malaysia	2.5	3.1	2.5	2.3	6.2
	34.0	27.7	35.3	34.3	34.1
Pakistan	-	0.2	-	-0.1	-
	18.1	18.6	18.3	19.9	20.4
Philippines	0.1	-	-0.3	0.1	-
	24.7	19.7	20.0	21.7	24.0
Singapore	1.7	6.2	3.0	4.0	4.9
	46.6	37.6	35.4	38.3	28.6
Sri Lanka	-	0.1	0.2	0.1	0.3
	25.9	22.1	23.1	24.2	25.4
Taiwan Province of China	0.4	12.7	4.4	4.6	6.4
	23.0	22.4	23.9	17.9	17.5
Thailand	-	0.4	0.5	0.3	0.5
	24.9	29.3	36.9	39.1	38.7
The Pacific	0.4	0.9	-0.3	0.1	0.5
	25.7	21.2	23.8	20.6	18.4
Fiji	0.9	6.0	-2.4	0.9	2.9
	24.0	15.4	12.4	12.0	12.4
PapuaNew Guinea	0.2	-0.4	-	-	-
	26.4	23.4	28.2	23.8	20.4
Developing Europe	-	-	-	-	-
	29.2	29.5	25.0	23.9	24.9
Malta	-	-	-	-	-
	29.2	29.5	25.0	23.9	24.9
Central and Eastern Europe	-	-	0.1	0.12	0.2
	25.2	31.9	18.4	17.4	16.8
Hungary	..	..	0.4	0.4	0.2
	..	..	20.8	20.0	18.4
Poland	-	-	-	0.1	0.1
	25.2	31.9	18.8	16.7	17.2
Romania	..	..	0.1	0.1	0.2
	..	..	14.4	15.9	13.4

/...

(Annex table 6, cont'd)

	1981-1985	1986-1990			
Homeregion/economy	(Annual average)		1991	1992	1993
Memorandum:					
Least developed countries: ^b in	0.1 19.5	0.9 13.1	0.6 18.5	0.7 19.2	0.4 18.5
Africa	0.1 14.2	2.4 14.8	2.5 15.0	3.6 14.0	2.7 13.5
Latin America and the Caribbean	....	....	....	....	....
Asia	0.1 21.9	- 12.2	- 20.0	- 21.2	- 19.8
West Asia	0.1 21.9	- 12.2	- 20.0	- 21.2	- 19.8
South, East and South-East Asia	....	....	....	....	....
The Pacific	....	....	....	....	....
Oil-exporting countries: ^c in	0.7 24.3	1.0 23.5	0.5 15.8	1.1 12.1	1.1 16.3
Africa	2.0 24.5	1.7 27.4	1.4 21.2	0.7 21.5	1.7 20.8
Latin America and the Caribbean	0.1 22.6	0.7 20.1	0.4 23.3	0.8 20.7	0.4 21.8
Asia	0.3 25.2	0.7 23.5	0.4 12.0	1.4 8.4	1.3 13.6
West Asia	0.1 23.7	0.7 21.6	- 7.4	1.9 5.1	0.8 9.7
South, East and South-East Asia	0.7 29.5	0.8 31.5	0.8 35.2	0.9 29.5	2.1 30.7
The Pacific	....	....	....	....	....
Developing economies minus China	0.5 22.4	1.4 23.1	1.0 20.0	1.1 17.1	0.9 19.3

Source: UNCTAD, Division on Transnational Corporations and Investment, based on the Division's data provided by the FDI database and UNCTAD Secretariat.

^a All economies and regional data for the ratio of gross fixed capital formation to gross domestic product in this table are not necessarily the same as those in annex table 5 as these data include only the countries for which data are available.

^b Least developed countries include: Afghanistan, Angola, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, Cape Verde, Central African Republic, Chad, Comoros, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Haiti, Kiribati, Lao People's Democratic Republic, Lesotho, Liberia, Madagascar, Malawi, Maldives, Mali, Mauritania, Mozambique, Myanmar, Nepal, Niger, Rwanda, Western Samoa, Sierra Leone, Solomon Islands, Somalia, Sudan, Togo, Tuvalu, Uganda, United Republic of Tanzania, Vanuatu, Yemen, Zaire and Zambia.

^c Oil-exporting countries include: Algeria, Angola, Bahrain, Bolivia, Brunei Darussalam, Cameroon, Congo, Ecuador, Egypt, Gabon, Indonesia, Islamic Republic of Iran, Iraq, Kuwait, Libyan Arab Jamahiriya, Malaysia, Mexico, Nigeria, Oman, Qatar, Saudi Arabia, Trinidad and Tobago, Tunisia, United Arab Emirates and Venezuela.

Note: Figures in the first line in each region or economy indicate the ratio of FDI flows to gross capital formation. Those in the second line, in *italics*, indicate the ratio of gross fixed capital formation to gross domestic product.

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