World Investment Report 1997 Transportional Comparations

Transnational Corporations, Market Structure and Competition Policy



United Nations New York and Geneva, 1997

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Preface

The *World Investment Report*, the seventh in this annual series, provides a comprehensive analysis and policy discussion of international investment issues. This year, the *Report* examines the interrelationship between transnational corporations, market structure and competition policy. This issue is particularly relevant because the liberalization of foreign-direct-investment regimes allows a greater presence of transnational corporations in host countries, with important implications for market structures and competition.

Major issues discussed in WIR 97 are:

- Global and regional trends as regards foreign direct investment, including its interlinkages with foreign portfolio equity investment.
- The impact of foreign direct investment on market structure and competition in host economies, as well as globally.
- The implications of the interaction between foreign direct investment, market structure and competition for investment and competition policies at the national, regional and global levels.

As countries liberalize their foreign-direct-investment regimes and firms increase their investment activities across borders, maintaining the proper functioning of markets assumes increasing importance. Competition policy has a key role to play in this respect. By focusing on the relationships between foreign direct investment, market structure and competition, and considering policy implications arising from these relationships, this year's *WIR* rounds out discussions in previous *Reports*. These dealt with the reduction of barriers to foreign direct investment and the strengthening of standards of treatment of foreign investors.

In discussing these issues, *WIR 97* seeks to contribute to a better understanding of the role of foreign direct investment in the world economy and, in particular, its implications for developing countries.

Kofi A. Annan Secretary-General of the United Nations

New York, July 1997

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OVERVIEW

Foreign direct investment (FDI) continues to be a driving force of the globalization process that characterizes the modern world economy. The current boom in FDI flows, which has been accompanied by increasing flows of foreign portfolio equity investments, underscores the increasingly important role played by transnational corporations (TNCs) in both developed and developing countries. This role has been facilitated by the liberalization of FDI policies that has taken place in many countries in recent years, as part of an overall movement towards more open and market-friendly policies. However, reaping the benefits of FDI liberalization requires not only that barriers to FDI are reduced and standards of treatment established -- the focus of most FDI liberalization to date -- but also that competition in markets is maintained. This third component of FDI liberalization -- maintaining the proper functioning of markets in which TNCs invest -- is the special topic of this year's *World Investment Report*, which examines the interaction between FDI, market structure and competition, and looks at policy implications.

Global and regional trends

The growing size and importance of international production ...

With an estimated \$7 trillion in global sales in 1995 -- the value of goods and services produced by some 280,000 foreign affiliates -- international production outweighs exports as the dominant mode of servicing foreign markets. The growth of global sales has exceeded that of exports of goods and services by a factor of 1.2 to 1.3 since 1987. But as far as developing countries are concerned, despite their growing involvement in international production -- of the world's 45,000 parent firms, 7,900 firms were based in developing countries in the mid-1990s, compared to 3,800 in the late 1980s -- exports continue to be the principal mode of delivering goods and services to foreign markets.

The gross product of foreign affiliates, a measure of their output, almost tripled between 1982 and 1994, and its share of world output rose slightly, from 5 per cent in 1982 to 6 per cent in 1994. In developing countries, the output of foreign affiliates has contributed (in 1994) more to gross domestic product than it has in developed countries: 9 per cent compared to 5 per cent.

The global FDI stock, a measure of the investment underlying international production, increased fourfold between 1982 and 1994; over the same period, it doubled as a percentage of world gross domestic product to 9 per cent. In 1996, the global FDI stock was valued at \$3.2 trillion. Its rate

of growth over the past decade (1986-1995) was more than twice that of gross fixed capital formation, indicating an increasing internationalization of national production systems. The worldwide assets of foreign affiliates, valued at \$8.4 trillion in 1994, also increased more rapidly than world gross fixed capital formation.

The upward trend manifested in all of the indicators of international production, in absolute terms as well as in relation to various macroeconomic indicators, suggests that international production is becoming a more significant element in the world economy. Its importance is apparent in the activities in which TNCs are involved. On the technology side, for example, an estimated 70 per cent of the global payments of royalties and fees constitute transactions between parent firms and their foreign affiliates.

... was manifested in 1996 in the \$1.4 trillion worth of investment in foreign affiliates.

Transnational corporations raise capital from a variety of sources at home and abroad: commercial banks, local and international equity markets, public organizations and their own corporate systems in the form of internally generated profits for reinvestment. Taking all these sources of finance into account, investment in foreign affiliates -- the investment component of international production -- was an estimated \$1.4 trillion in 1996. Of this, only \$350 billion, i.e., a quarter, were financed by FDI flows. This means therefore that the weight of international production is also considerably larger: expressed as a ratio of world gross fixed capital formation, about one-fifth was undertaken by foreign affiliates. (This measure does not capture additional investment controlled by TNCs via various non-equity measures, including corporate alliances.)

Foreign-direct-investment flows set a new record level of \$350 billion, in the midst of a new FDI boom, ...

Returning to FDI flows themselves, the boom that began in 1995 continues, with inflows setting a new record of around \$350 billion in 1996, a 10 per cent increase. Fifty four countries on the inflow side and twenty countries on the outflow side set new records in 1996. Unlike the two previous investment booms in 1979-1981 and 1987-1990 (the first one being led by petroleum investments in oil producing countries, and the second one being concentrated in the developed world), the current boom is characterized by considerable developing-country participation on the inflow side, although it is driven primarily by investments originating in just two countries -- the United States and the United Kingdom. There are signs that an even greater number of countries will take part in the present boom as it unfolds on the inward side (e.g., developing countries in Latin America), as well as on the outward side (e.g., France, Germany and Asian developing countries).

During 1995-1996, the share of developing countries in global inflows was 34 per cent. Although this is not much higher than the developing-country share during the investment boom at the beginning of the 1980s, qualitatively it reflects a wide variety of location-specific advantages enjoyed by developing countries over and above natural resources. The composition of the top developing-country recipients has also changed dramatically between these two investment booms, with oil producing countries now featuring far less prominently among the top recipients. Interestingly, the developing-country share of global inflows has been on the rise during the current boom, while during the 1987-1990 boom it declined. That decline went hand in hand with a boom in intra-developed country mergers and acquisitions (M&As), at that time in response to heightened protectionist pressures in key developed countries. As in earlier FDI booms, the bulk of FDI flows goes to a limited number of developing countries.

... with cross-border mergers and acquisitions and inter-firm agreements as the driving force behind TNC activity ...

Even in the current boom, cross-border M&As, especially in the United States and Western Europe, are playing an important role in boosting FDI, although this time there is no ensuing decline in the developing-country share of inflows. The value of such M&As increased by 16 per cent in 1996, to \$275 billion. If majority-held transactions only are taken into account, the value of cross-border M&As in 1996 would be \$163 billion, or 47 per cent of global FDI inflows (though the measured values are not strictly comparable).

Complementing the increases in M&As and FDI flows, the number of cross-border interfirm agreements (equity and non-equity, other than strategic research-and-development (R&D) partnerships) has also increased. In 1995, nearly 4,600 such agreements were concluded, compared with about 1,760 in 1990. These agreements take place primarily between firms based in developed countries: United States firms participated in 80 per cent of them, European Union firms in 40 per cent and Japanese firms in 38 per cent. Recently, firms based in developing countries have also begun to conclude such agreements actively. The number of cross-border inter-firm agreements (other than strategic R&D partnerships) with developing-country firm participation has increased in absolute numbers, as well as a share of the world total (from 27 per cent during 1990-1992 to 35 per cent during 1993-1995). Although there was a decline in 1995, the number of strategic R&D partnerships (in core technologies, such as information technologies and biotechnology), has also been rising steadily since 1990. Again, developing-country firms assumed a bigger role in strategic partnerships (3 per cent in 1989 to 13 per cent in 1995), suggesting that these firms may have attained sufficient technological sophistication and capacity to make them worth having as partners.

... and with an increasing transnationalization of the largest TNCs based in both developed and developing countries.

Despite the growing number of small and medium-sized enterprises with investments abroad, a good part of FDI continues to be concentrated in the hands of a small number of companies. The largest 100 TNCs, ranked on the basis of the size of foreign assets, own \$1.7 trillion assets in their foreign affiliates, controlling an estimated one-fifth of global foreign assets. In the United States, 25 TNCs are responsible for half of that country's outward stock, a share that has remained almost unchanged during the past four decades. For six out of nine developed countries for which such data are available, 25 TNCs account for more than a half of their respective countries' outward stocks.

For the first time, two developing-country TNCs, Daewoo Corporation (Republic of Korea) and Petroleos de Venezuela S.A. (Venezuela), have entered the list of the top 100 TNCs. Daewoo Corporation also tops the list of the 50 largest TNCs based in developing countries for the second year running, while Royal Dutch Shell (United Kingdom/Netherlands) continues to top the list of the largest 100 TNCs for the fifth consecutive year. With foreign sales amounting to \$2 trillion and foreign employment close to 6 million persons in 1995, the largest 100 TNCs are prominent actors in international production. The top 50 TNCs based in developing countries, however, are catching up. While their foreign assets totalled only \$79 billion in 1995, the increase in these assets between 1993 and 1995 was 280 per cent -- compared with 30 per cent for the top 100 firms.

Both the top 100 TNCs worldwide and the top 50 developing-country TNCs are becoming more transnationalized, at a faster rate in the latter case. The food firms in the list of the top 50 developing-country TNCs exhibited the biggest increase in transnationality (measured on the basis

of a combined index of the ratios of foreign assets, foreign sales and foreign employment in their respective totals) -- from 16 per cent in 1993 to 37 per cent in 1995. On the whole, smaller firms tend to be more transnationalized than larger ones; for example, Solvay SA (Belgium) ranked seventy-fourth on the basis of the size of foreign assets, but ranked fifth on the basis of the transnationality index in the list of the top 100 TNCs. And Panamerican Beverages Inc. (Mexico) took the first place in the list of the top 50 developing-country firms on the basis of the transnationality index, as opposed to twenty-first on the basis of the value of foreign assets.

The Triad (European Union, United States and Japan) is home to 87 per cent of the top 100 TNCs and accounts for 88 per cent of their foreign assets. Likewise, China, the Republic of Korea, the Hong Kong Special Administrative Region of the People's Republic of China (hereinafter: Hong Kong, China) and Mexico are home to 56 per cent of the top 50 firms based in developing economies, and account for two-thirds of their foreign assets. Electronics is the most important industry as far as the largest TNCs are concerned, accounting for some 16 per cent of all firms' foreign assets in each of the two lists of top TNCs. Automotive and chemical firms also feature prominently in both lists, but more so in the list of the top 100 firms. Petroleum and mining firms, although few in number, tend to rank high in both lists.

The growth of international production has been facilitated by ongoing liberalization ...

The expansion of international production would not have been possible if it were not for the ongoing liberalization of FDI regimes. The trend towards greater liberalization was sustained again in 1996, with 98 changes in the direction of investment liberalization and promotion of a total number of 114 changes in investment regimes introduced during that year in 65 countries. Over the period 1991-1996, indeed, some 95 per cent of a total of 599 changes in the regulatory FDI regimes of countries were in the direction of liberalization. They mostly involved the opening of industries previously closed to FDI, the streamlining or abolition of approval procedures and the provision of incentives.

The desire of governments to facilitate FDI is also reflected in the dramatic increase in the number of bilateral investment treaties (BITs) for the protection and promotion of investment throughout the 1990s. As of 1 January 1997, there were 1,330 such treaties in the world, involving 162 countries, a threefold increase in half a decade. Around 180 such treaties were concluded in 1996 alone -- one every second day.

The pattern of these treaties has changed considerably in recent years. While virtually all BITs used to have one developed country as a partner, and such countries took part in 83 per cent of all such treaties as of the end of the 1980s, by 1996 only 62 per cent of the world total involved developed countries. Indeed, countries in Central and Eastern Europe and developing countries have begun to conclude BITs among themselves. At the beginning of 1997, 16 per cent of all BITs were among developing countries, rising from 11 per cent at the end of the 1980s. In 1996 alone, nearly a third of all BITs were concluded between developing countries, led by China, Chile, Algeria and the Republic of Korea.

New ground is being broken at the regional and multilateral levels. Negotiations on an investment framework are taking place in the Organisation for Economic Co-operation and Development, with the conclusion of a free-standing Multilateral Agreement on Investment rescheduled for May 1998. In the framework of the discussions on a possible Free Trade Area of the Americas, a Working Group on Investment has been established, as well as a Working Group on Competition Policy. In the meantime, the Ministerial Meeting of the World Trade Organization in

Singapore in December 1996 established two working groups to examine the relationship between trade and investment and between trade and competition policy. Independently of these developments, the ASEAN members are preparing to launch the ASEAN Investment Area. Cooperation among ASEAN members in the area of investment has already progressed with the signing of a protocol (in September 1996) updating the 1987 ASEAN Agreement for the Promotion and Protection of Investment.

... and holds good prospects for being sustained into the next century.

The ongoing globalization of production begs the question of whether the upward trend in FDI flows witnessed to date will continue into the next century. A survey of foreign investors suggests that this may, indeed, be the case. More specifically, foreign sales are expected to increase as a proportion of total sales, especially for Japanese and United States' firms. Production by foreign affiliates is also expected to increase as a proportion of total production by TNCs, while homecountry exports are expected to remain constant. Mergers and acquisitions, joint ventures and other equity and non-equity types of inter-firm agreements are expected to go hand in hand with the growth in FDI. Although smaller firms will be stepping up investments abroad, large firms will continue to account for the lion's share of outward investments. Corporate restructuring in developed countries, aimed at improving efficiency and modernization, is expected to continue, giving rise to efficiency-seeking investment. However, accessing markets will remain the principal motive for investing abroad: survey respondents placed twice as much weight on production for local markets than on labour-cost factors. Countries in developing Asia and, to a lesser extent, in Latin America and Central and Eastern Europe, are likely to be the main beneficiaries of the corporate restructuring. Investment at home generally will be given a lower priority than it has received until now. In contrast, investment in the same region will continue to be significant, while investment in more distant countries is likely to increase, thus broadening the geographical scope of international production. Foreign investors foresee dramatic increases in investments in infrastructure, distribution, non-financial services and automobiles, but slower growth in financial services and real estate. All in all, the growth of FDI is expected to remain brisk over the next five years, both in terms of absolute levels and as a proportion of corporate investment.

The United States is by far the largest FDI recipient and investor abroad,...

Developed countries' investments abroad reached an all-time high of \$295 billion in 1996. The investment picture for developed countries is dominated by the United States, which, with \$85 billion is by far the largest home country (by a margin of \$31 billion over the United Kingdom, the second largest home country), as well as, with \$85 billion, the largest recipient country (by a margin of \$42 billion over China, the second largest recipient) in 1996. Around two-fifths of United States outflows go to the European Union and around 30 per cent to developing countries. Growing consumer markets have encouraged United States investments in the latter, while sluggish growth in the former has led to a decrease in its share of United States outflows. Investment flows into the United States -- mostly in the form of M&As -- were stimulated by its strong and sustained growth performance and potential for high profits.

Western Europe received \$105 billion in inflows and invested \$176 billion abroad in 1996. More European Union investment is now directed to non-European Union countries than in 1992, when the internal market was completed. These countries are investing increasingly outside Western Europe, mostly in North America, developing Asia and, to a lesser extent, Central and Eastern Europe. Nearly a half of the European Union's investment outflows take the form of M&As. The share of

European Union inflows accounted for by M&As, however, is considerably smaller because of regulatory and other barriers in existence in some countries (such as Italy and Germany) on this mode of investment. Japanese investment in the European Union is declining -- to almost \$2 billion in 1994, compared with nearly \$7 billion at its peak in 1990.

Overall, however, the recovery of Japan's outward investment continues, with outflows reaching \$23 billion in 1996, slightly over half their peak level of \$41 billion during 1989-1991. (It should be noted that reinvested earnings, estimated at \$14 billion in the manufacturing sector alone in 1994, are not included in these figures.) Japanese outflows are geared overwhelmingly towards developing Asia and the United States. But in Asia, China is no longer the favourite location and, in fact, its share of Japanese outflows declined in 1996. Brazil is beginning to receive Japanese investment, with Japanese outflows there (on the basis of notifications) tripling in 1996 over 1995. On the inward side, Japan remains a small FDI recipient, with inflows declining to \$220 million in 1996.

... but developed countries are becoming, on the whole, less important hosts.

Although developed countries received a record \$208 billion in FDI flows in 1996, there has been a steady decline in their share of global inflows since 1989. That decline can be attributed partly to the increasing attractiveness of developing countries, especially those that are growing rapidly and have large domestic markets. Furthermore, some developed countries that are large outward investors are small investment recipients, especially in relation to the size of their economies; notable examples are Germany, Italy and Japan. And as the rationalization of production through FDI in response to regional integration arrangements among developed countries (notably, the European Union) has reached a high level, firms are turning increasingly towards untapped markets found mostly in the developing world.

Developing countries -- even some of the least developed ones -- enjoy rapidly growing investments, ...

In light of the above, it is not surprising that developing countries received \$129 billion of FDI inflows in 1996 and invested \$51 billion abroad -- both amounts are all-time highs. Their share of world inflows rose to 37 per cent in 1996 (from 30 per cent in 1995), while their share of outflows was 15 per cent in that year. With \$42 billion, China was the largest developing-country recipient; the country's success can be attributed mostly to its large and growing domestic market, "soft landing" and macroeconomic reforms, as well as to measures to promote investment in provinces other than those in the coastal areas.

Every developing region saw an increase in inflows. Even the 48 least developed countries experienced an increase in inflows of 56 per cent in 1996, to \$1.6 billion. Cambodia was the largest recipient in this group of countries. In addition, and despite the small size of inflows (both in absolute values and as a share of all developing-country inflows), FDI is very important for many of these economies; inflows in as many as eight countries reached 10 per cent as a share of gross fixed capital formation in 1995.

Within the group of the least developed countries, there are significant disparities in performance as regards FDI. The Asian least developed countries are benefiting from the Asian industrializing economies' process of industrial restructuring in the framework of the "flying-geese" model, not only because they offer complementary locational advantages in the form of low-cost labour, but also because of their geographical proximity to them. More than four-fifths and nearly

two-fifths, respectively, of cumulative investments received by Bangladesh and Myanmar over the period 1990-1994, for example, came from developing Asia. Since a similar "in-tandem" restructuring process is not taking place in Africa, the least developed countries in that continent do not have the same opportunity to benefit from the type of intra-regional FDI inflows that is the outcome of this process in Asia.

... with new record levels in South, East and South-East Asia, ...

With \$81 billion in inflows in 1996, South, East and South-East Asia received about two-thirds of the developing-country total in that year. The 25 per cent increase in these inflows over 1995 was also in sharp contrast with the large decline in the rate of growth of exports and, to a lesser extent, of the gross domestic product, in that year. China accounted for over two-fifths of the \$16 billion increase in investment inflows in the region.

Next to China, Singapore was the second largest investment recipient, with inflows worth \$9 billion, exceeding the combined inflows of the other newly industrializing economies (Hong Kong, China, Republic of Korea and Taiwan Province of China). Flows into Hong Kong, China, were \$2.5 billion in 1996. Foreign-investor confidence in Hong Kong, China, after its reversion to China on 1 July 1997 is strong, as indicated by a number of surveys of foreign (and local) companies. Indonesia, Malaysia, Philippines and Thailand together received some \$17 billion in 1996, an increase of 43 per cent over 1995. Together, ASEAN members have, however, seen their share of the region's investment inflows decline, from 61 per cent during 1990-1991 to below 30 per cent during 1994-1996, attributed to domestic capacity constraints, infrastructure bottlenecks and, in particular, stiff competition from other economies. A 34 per cent increase in investment flows to India (to \$2.5 billion) pushed total inflows to South Asia to \$3.5 billion. Investment from other Asian economies in India, especially from the Republic of Korea, are outstripping those of some developed countries, such as the United States and the United Kingdom.

South, East and South-East Asia are emerging as important outward sources of FDI. Indeed, the region is the largest source of FDI in the developing world, with outflows increasing by 10 per cent in 1996, to \$46 billion. Hong Kong, China is the single largest outward investor (\$27 billion in 1996). Recently, the geographical scope of developing Asia's outward FDI has expanded to include non-traditional destinations, such as the European Union, Central and Eastern Europe and Africa. The extent to which Asian developing economies are transnationalized is reflected in the increasing ratios of investment outflows to gross fixed capital formation for the region as a whole, as well as for individual economies. That ratio, for example, is higher for Singapore (14 per cent) and Malaysia (11 per cent) than for Western Europe (10 per cent) and the United States (9 per cent).

... as well as Latin America and the Caribbean, ...

Investment flows into Latin America and the Caribbean increased by 52 per cent in 1996, the highest increase of any developing region, to a record level of nearly \$39 billion. Far-reaching changes in the region's FDI regimes -- both at the national level and through the conclusion of bilateral investment treaties -- have certainly contributed to this performance. Even during the turbulence in portfolio investment flows into that region in 1994 and 1995, FDI flows registered small but steady increases. Latin America and the Caribbean now account for 30 per cent of all developing country inflows. Investment inflows into Argentina tripled in 1996 to \$4.3 billion, propelled by the country's membership in MERCOSUR (which contributed particularly to automobile investments), the liberalization of mining legislation and privatization schemes. But the most noteworthy performance

has been that of Brazil. With nearly \$10 billion, Brazil has surpassed Mexico (with around \$8 billion) as the star performer in Latin America in 1996. (In the first four months of 1997, inflows were over \$4 billion -- two and a half times higher than inflows in the same period in 1996.) This represents a dramatic reversal: in 1992, with \$2 billion, Brazil ranked third in the region (after both Mexico and Argentina). The upswing in Brazil's inflows is the outcome of large investments in automobiles (in the context of intra-regional production rationalization triggered by MERCOSUR) and the reactivation of its privatization programme. Foreign-investor confidence in Brazil (and in the region as a whole) is high: in a recent survey, company executives expressed more confidence in Latin America's prospects now than five years ago, placing Brazil, Mexico and Chile in top places.

The United States remains the foremost foreign investor in the region, with firms investing now more heavily in Brazil than in any other country there. Canada's investment in Latin America and the Caribbean is also sizeable, but concentrated mostly in mining and exploration. Western Europe's investment in Latin America and the Caribbean (largely from Germany and Spain) is on the rise, and is mostly directed towards Brazil, Argentina and Mexico (in natural resources and services). Almost a half of Western Europe's investment into that region has come through privatization schemes, but in 1995 and 1996 greenfield investment has also been prevalent in automobile manufacturing. Japanese investment in Latin America remains small and highly concentrated in tax havens in the Caribbean. Intra-regional investment has increased substantially, with Chile, Brazil and Argentina being the principal source countries, and Argentina, Peru and Venezuela the principal destinations. Developing Asian countries continue to invest in export-related industries, although market-seeking investments spurred by the region's recent integration efforts are also on the rise.

... with signs of revival of FDI flows to Africa ...

Africa continues to receive small levels of investment flows (nearly \$5 billion in 1996), an increase of only 5 per cent, the smallest of any developing region. On average, Africa's share of developing-country inflows has more than halved between 1986-1990 and 1991-1996 -- to 5 per cent in the latter period. Political unrest, armed conflict, low domestic investment levels and frequent changes in economic policies that affect business calculations of expected risks and returns have contributed to this relative decline.

However, Africa's investment performance looks less gloomy when put into perspective. In relation to the size of a number of economies, those investments can be fairly significant. For the region as a whole, the ratio of investment inflows to gross fixed capital formation was 5.4 per cent, compared with 5.5 per cent for Asia and 5.9 per cent for Western Europe during the first half of the 1990s. Putting the size of Africa's FDI stock in relation to the size of Africa's domestic market (GDP) yields a share of 10 per cent -- compared with 14 per cent for Asia, 18 per cent for Latin America and the Caribbean and 13 per cent for Western Europe in 1995. While these figures suggest that the significance of the investment that Africa receives (without the benefit of large intra-regional investment) is certainly not negligible, they do not say anything about Africa's need for investment nor, for that matter, the continent's potential.

Prospects for increased flows to some parts of Africa are encouraging. Favourable growth performances, further investment and trade liberalization and privatization, regional cooperation agreements and the establishment of links with other regions are all likely to increase the region's attractiveness. In addition, South Africa could begin to play a significant role as a "growth pole", contributing to the region's economic development through FDI and trade. As regards the former, South Africa's contribution could be through the provision of investment capital, adding to capital

formation in the recipient economies; the transfer of technology; the development of local human resources; and the opening up of its own market to the exports of foreign affiliates that have invested in neighbouring economies. Indeed, the question has arisen whether South African firms can induce the development of new industries, especially in manufacturing, in its neighbours by establishing an intra-regional division of labour in the framework of which production at home is upgraded to capital- and technology-intensive activities. In this "flying geese" process of industrial restructuring and upgrading, South Africa would play the lead role, similar to the role played by Japan in the context of Asia's development. At this point in time, however, it appears that the necessary conditions for this type of intra-regional restructuring to occur are still far from being met, including -- to stay within the metaphor -- because many of South Africa's neighbours are still in the "nest-building" stage.

... and of growing non-oil investments in West Asia, ...

After large disinvestments in West Asia in 1995 that resulted in negative inflows, particularly in Saudi Arabia and Yemen, inflows attained a level of nearly \$2 billion in 1996. Excluding these two countries, investment flows into West Asia show a much more stable trend. In fact, the volatility of inflows to these two countries -- albeit important ones -- masks considerable improvements in the investment performance of other countries in the region in response to successful efforts to create business-friendly environments.

Over time, the share of West Asia in total developing country investment inflows has been declining -- from 30 per cent during the first half of the 1980s to only 2 per cent during the first half of the 1990s. That shift reflects largely decreasing investment flows to oil producing economies (Saudi Arabia, Oman, Qatar and United Arab Emirates). While petroleum naturally remains the most popular industry in these economies, in the non-oil producing countries (Jordan, Lebanon and Turkey) investments go mainly to manufacturing and services.

... while a slow-down in privatization contributed to a decline in FDI flows to Central and Eastern Europe.

In 1996, FDI flows to Central and Eastern Europe experienced a decline -- to \$12 billion from \$14 billion in 1995, partly reflecting declines in privatization-related investments in Hungary and the Czech Republic. As long as investment flows to that region depend to a large extent on the participation of foreign investors in privatization programmes, a certain degree of "lumpiness" -- year-to-year volatility -- is to be expected. The decline might also stem from other problems related to the transition to a market economy. Foreign investors, for example, might have overestimated the region's ability to absorb investments and might have temporarily shelved their plans for expansion. However, despite the decline, flows in 1996 were still more than twice as high as the annual average during 1992-1994. The estimated FDI stock in Central and Eastern Europe was \$46 billion in 1996 - almost comparable to the 1996 investment flows to China (\$42 billion).

Investment flows to Central and Eastern Europe remain concentrated in the Czech Republic, Hungary and Poland, together accounting for some two-thirds of the region's inflows. Transnational corporations from Western Europe dominate the investment picture, followed by corporations from the United States and, more recently, the Asian newly industrializing economies. A small but growing share of inflows is attributed to corporations based in Central and Eastern Europe itself. This is also reflected in the fact that 16 per cent of the BITs concluded by Central and Eastern European countries has been with other countries in the same region.

Accompanying the FDI boom, foreign portfolio equity investment in developing countries has also accelerated, ...

Substantial flows of foreign portfolio equity investment to emerging markets is a recent phenomenon dating only from the early 1990s. The year 1993 was the watershed for such flows when their level trebled, to \$45 billion, from the previous year. However, the level of these flows fell in the two subsequent years in response to the Mexican peso crisis -- by 27 per cent and 2 per cent in 1994 and 1995, respectively -- but recovered in 1996. The volume of new equity raised on international capital markets by emerging markets in that year increased by 34 per cent, reaching some \$15 billion.

In principle, foreign portfolio equity investment and direct investment are quite distinct. By definition, foreign portfolio equity investment is distinguished from FDI by the degree of management control that foreign investors exercise in a company. Portfolio equity investors usually provide only financial capital without any involvement in a company's management, and typically have a shorter-term investment horizon than direct investors. The latter have a significant and long-lasting management interest in the company in which an investment is made. In general, the dividing line between the two types of investment is the threshold of a 10 per cent equity stake. In practice, however, the distinction between the two categories of investment is often less clear-cut and is subject to a number of qualifications.

The overriding motivation for investment by portfolio equity investors is their participation in earnings of local enterprises through capital gains and dividends. Transnational corporations tend to be more interested in accessing markets and resources and, more generally, in the contribution that an investment can make to the competitiveness of the transnational corporate system as a whole. The contrast in motives between TNCs and portfolio equity investors is not, however, always so stark. In the notable case of venture capital investment, the investment horizon tends to be somewhat longer than for foreign portfolio equity investment, and the existence of significant (and perhaps also long-term) management control is not unusual, although the foremost motivation is to share in the capital gains of the equity of a local enterprise when it is listed eventually on the stock exchange.

... encouraged by the liberalization and globalization of financial markets and the growth of funds in the hands of institutional investors.

Two major factors lie behind the rise in foreign portfolio equity investment flows into emerging markets: the liberalization and globalization of financial markets and the concentration of substantial financial resources in the hands of institutional investors. Investments into emerging markets have been facilitated by the rapid provision of market information made possible by improvements in communications technology and the willingness of portfolio equity investors to bear greater risks in the expectation of reaping higher returns in these new and fast-growing markets. The higher returns have been made possible by the sustained superior growth performance of emerging markets in comparison to that of developed economies during the 1990s. Stock market capitalization in emerging markets has also grown much faster than that in developed countries. However, as in the case of FDI flows, portfolio equity investment flows have remained skewed towards a small group of mostly upper middle-income emerging markets, along with two large low-income countries with impressive growth performances and prospects. (Asia alone accounted for 53 per cent of net foreign portfolio equity investment flows to emerging markets in 1995.) This is not surprising. For many large institutional investors, it is more attractive to invest in more mature emerging markets that tend to have a relatively large market capitalization and provide high liquidity levels, relatively fast and reliable settlement systems and a generally more developed market infrastructure.

There is also a certain level of concentration when it comes to the origin of foreign portfolio equity investment flows. Over the period 1992-1994, it is estimated that more than 35 per cent of flows to emerging markets originated in the United States, 15 per cent in Japan and 11 per cent in the United Kingdom. In recent years, investors from Hong Kong and Singapore have also invested in emerging markets. For the United States, the most important source country, investment flows to emerging markets have followed the global trend, increasing substantially in 1993, decreasing in 1994 and 1995, and rising again in 1996, despite a clear upturn in stock-market returns in the United States.

In light of the vastly increased volume of foreign portfolio equity investment flows to emerging markets, the impact of these flows on host-country economies is likely to be significant. Although such investments can make an important contribution to the financing of equity capital of local companies, concerns have been expressed by host countries particularly as regards the volatility of these flows and their effect on exchange rates. In order to address this issue, it is necessary to investigate the causes of that volatility and the availability of measures or mechanisms to reduce or withstand it.

FOREIGN DIRECT INVESTMENT, MARKET STRUCTURE AND COMPETITION POLICY

As countries liberalize their FDI policies, it becomes important to ensure the efficient functioning of markets ...

As countries liberalize their FDI regimes and firms increase their investment activities across national borders, maintaining the proper functioning of markets assumes increasing importance. Freer flows of FDI mean a greater reliance on market forces to determine the volume and distribution of FDI and its economic impact. Countries, especially developing countries that are liberalizing rapidly, are therefore interested in ensuring that the reduction of regulatory barriers to FDI and the institution of standards of treatment are not accompanied by the emergence of private barriers to entry and anti-competitive behaviour of firms. Competition and competition policy in relation to FDI need, therefore, to be better understood. Part Two of *WIR 97* focuses on the relationships between FDI, market structure and competition, and considers policy implications arising from these relationships, especially as they concern developing countries. The discussion of these issues rounds out, therefore, discussions in previous *Reports*, of FDI liberalization and related regulatory frameworks, including those relating to international investment arrangements.

The ultimate objective of FDI liberalization is to enhance economic growth and welfare in countries. Success in this respect depends not only on increasing FDI flows -- and the capital, technology, managerial know-how and market access associated with them -- but also on ensuring that the industries and markets in which TNCs participate operate efficiently. In market-based economies, the efficient functioning of markets depends on the contestability of markets -- or the ease with which firms can enter and exit them -- and the extent and nature of competition in markets. Foreign-direct-investment liberalization, by removing formal barriers to the entry of FDI, can increase the contestability of national markets and inject greater competition into them. However, because of the ownership-specific assets of TNCs, their transnational organizational structures and the relatively greater competitive strengths that they often have vis-à-vis domestic firms, FDI could also increase concentration, and TNCs could indulge, like dominant firms generally, in restrictive or anticompetitive practices. Government policy and practices aimed at attracting investments that grant exclusivity or allow firms, domestic or foreign, to erect informal impediments to the entry of other firms could contribute to the potential for such practices.

... through the adoption and implementation of competition policies.

Governments rely on several policy tools to ensure that their markets remain contestable and that competition in markets is maintained as far as possible, so that economic growth and welfare are not adversely affected by the inefficient allocation or use of resources. The tools of such policy include trade policy, FDI policy, regulatory policy with respect to domestic economic activity, and competition policy. While the first three comprise rules and regulations that serve several purposes and not only that of maintaining competition with a view to fostering efficiency, the last relates specifically to the rules and regulations -- implemented by competition authorities -- with respect to arrangements among firms/suppliers and the conduct of individual firms/suppliers, generally but not exclusively, in national markets. It is increasingly recognized that consistency and coherence between the different policies -- some of which, as mentioned above, could serve competing objectives -- are important. This is reflected in the fact that, in many developing countries, trade liberalization, FDI liberalization and domestic deregulation are currently taking place simultaneously. This ensures that the contestability and competition introduced by one set of policies are not undermined by another; but it also makes the pain of adjustment to competition, especially for hitherto protected domestic firms, a problem requiring attention and action by governments.

While the relevant markets for many products remain national in scope even in a globalizing world economy, ...

Even as barriers between national markets are reduced and producers can locate anywhere in the world (or in a region) to transact with buyers also located anywhere, the markets for many products remain national in scope. These include markets for products that can only be delivered through the presence of the producer at the location of the buyer -- notably, services -- and markets in countries that have significant restrictions on trade. The interaction of TNCs with the structure of these national markets, the process of competition and the performance of firms and industries within host countries all therefore continue to be of interest, especially for developing countries.

... opening up to inward FDI can contribute towards the contestability of host country markets...

The opening up of economies to inward FDI can contribute directly towards increasing the contestability of -- or potential competition in -- host country markets. Sellers participating in these markets can now include not only domestic producers and (in the case of goods and tradable services) exporters from other countries, but also TNCs from other countries that establish affiliates (as well as contractual arrangements with other firms) to produce in and for local markets. Furthermore, TNCs, with their ownership-specific or competitive advantages, are often better able than domestic firms to overcome some of the cost-related barriers to entry that limit the number of firms in an industry and the market for its products. This potential for increasing competition by allowing FDI entry is particularly important for many service markets, in which competition through arm's length international trade is not possible or is limited.

... even though TNC activity may decrease or increase market concentration in host country markets, ...

Transnational corporations typically participate to a greater extent in industries that are more concentrated, at the national as well as the international level. This is largely due to the fact that industry concentration and the competitive advantages that enable firms to become transnational share common causes. However, inward FDI, when it takes place, can itself affect the concentration

of producers in a host-country industry and, hence, of sellers in the market for its products. The nature of this effect depends, initially, upon whether or not the mode of entry is such as to add to the number of suppliers (and the quantity supplied) in a market and, subsequently, upon several factors related to the relative size, competitive strength and mode of competition of foreign affiliates and domestic and other firms competing in a market. In developed host countries, on balance, these factors are likely to be conducive towards reducing market concentration -- or, at least, not to increase concentration.

In developing economies, the picture is more complex. Although the mode of entry of FDI into developing economies -- generally, greenfield investment -- is conducive to reducing concentration, market concentration has often been found to increase. Several factors may be involved: the disparity in size between foreign affiliates and domestic firms; the greater production efficiency or sales capability of foreign affiliates (which can lead to the exit of domestic enterprises that have yet to build up the necessary capabilities to withstand international competition, or to their merger with foreign firms); the use of modes of competition that are new to host country markets; the introduction of new products for which no other local producers or substitutes are available; and, most importantly in the case of tradable goods and services, restrictions on international trade that give local producers protected markets. If there is a sizeable number of domestic firms that have accumulated some competitive strengths and/or the capabilities to learn from foreign firms, increased concentration is less likely. Similarly, the presence of imports can curb the possible dominance of foreign affiliates in a market. The increasing role of small and medium-sized TNCs and TNCs from developing countries, with sometimes smaller competitive advantages compared with those of large TNCs from developed countries, is also likely to contribute towards lessening the tendency towards greater concentration of host country markets in industries with substantial inward FDI.

... and influence the performance of firms and industries -- and, ultimately, consumer welfare -- accordingly.

The production efficiency of foreign affiliates is often higher than that of domestic firms in host developing countries. The implications of this for welfare in the host economy depend upon whether competition is maintained when FDI takes place, and markets work efficiently. If competition -- between foreign affiliates themselves, between foreign affiliates and importers, and between foreign affiliates and domestic firms -- is lacking, and foreign affiliates operate in highly concentrated markets with low contestability, the benefits to consumers from the entry of more efficient TNCs, in the form of lower prices, improved quality, increased variety, as well as innovation and the introduction of new products, may be limited. In addition, there may be scope for TNCs to engage in anticompetitive business practices that serve to keep new entrants out or result in inefficiencies and reduced consumer welfare.

In particular, if a host country market remains, or becomes, concentrated after the entry of TNCs, there may be a potential for TNCs to engage in business practices, including restrictive business practices, that could have anticompetitive consequences, especially in markets that are characterized by low contestability. The main types of anticompetitive behaviour include, as in the case of purely domestic firms, collusion among producers/sellers of the same product; monopolizing mergers and acquisitions; exclusionary vertical practices; and predatory behaviour. In the case of TNCs, these practices may sometimes be specifically related to, or facilitated by, the cross-border relationships and contacts that are specific to operating in more than one country.

Consumer welfare in host country markets may also be affected adversely if market-power inducements are granted by host country governments to TNCs in order to attract investments by the latter. These inducements include guaranteed exclusive rights of production and/or exclusive rights of sale of a product in the host country market, often supported by protection in the form of prohibitive tariff or non-tariff restrictions on trade. The granting of these inducements has direct anticompetitive effects, with adverse implications for efficiency and the benefits from FDI. Such inducements, like other incentives, are based on the objective of maximizing the long-term benefits (in the form of capital, technology, management know-how, and market access) that FDI is expected to bring; but, given the potential for adverse effects on the efficient functioning of markets, a careful assessment of costs and benefits is necessary if the granting of these inducements is to be justified.

In regional and global markets, competition and efficiency can go hand in hand with greater concentration ...

In a liberalizing and globalizing world economy, TNCs operate increasingly in markets that are no longer national but regional or global in scope, with transactions between sellers and buyers of a given product from several different countries taking place across national boundaries. In various industries, TNCs take advantage of the widening scope of markets to restructure their operations and/or integrate their value-added activities internationally, either within their corporate systems or through inter-firm alliances and agreements, achieving efficiencies in production through functional specialization and economies of scale and scope.

The efficiency gains that some TNCs are able to reap through integrated international production enables them to lower prices, to introduce better quality products, or to introduce new products to capture a greater market share. This leads some industries (and markets) to become more concentrated at the regional or global level, a trend that affects all countries.

However, concentrated markets at the regional or global levels need not necessarily affect competition, industry performance or consumer welfare adversely. For one thing, such markets are, by definition, more contestable or open as regards entry (and exit) than segmented national markets, simply because sellers (and buyers) from a number of locations can participate in them. Furthermore, when integrated international production (including at the R&D stage of the value chain) for regional or global markets enables firms to overcome the high costs of, and reap the economies of scale and scope associated with innovation in industries with rapidly changing technology, it could actually enhance competition (through innovation), although the number of independent firms that perform a particular function may diminish. Consumers located in different national economies benefit when buying in those regional or global markets.

Particularly high degrees of concentration in regional and global markets would, of course, raise competition concerns. Business practices by regionally or globally dominant firms, including TNCs, could affect the continued contestability of the relevant markets and the sustainability of the benefits that the greater openness to FDI and trade is expected to bring.

... and can be further enhanced by a quick supply response through FDI.

In today's world economy, a number of factors facilitate the ease and speed with which TNCs can provide a supply response to a change in market conditions -- signalled, for example, by a non-transitory price increase -- through the establishment of new production facilities to enter a market. These factors are based on the reality that nearly all countries seek to attract FDI, many firms already have foreign affiliates in place, technological developments make the establishment of new affiliates relatively easy and competitive pressures often make the exploitation of new opportunities irresistible. More specifically, the supply response of many TNCs could be rapid, rivalling that of

domestic producers and importers in a country because of the scanning capabilities of TNCs; their experience in trade and FDI; their access to resources within and outside their corporate systems, and access to markets; their ability to spread risks and enter into alliances to overcome entry barriers such as those of R&D; and their ability to draw upon existing affiliates for assistance. If supply response through FDI and non-equity arrangements by TNCs is relatively fast -- with, say, not more than one to two years elapsing between the identification of an opportunity and the servicing of a market -- it would be deserving of attention when considering the degree of competition in a given market. This is particularly important with respect to competition in markets for services, many of which cannot be traded across borders. All this suggests that the speed of the supply response through FDI must therefore be considered routinely -- by competition authorities in developed and developing countries alike -- when defining the relevant market for a product, or assessing the implications for competition of certain changes occurring in a market.

The possibility that new FDI will provide a viable supply response underlines the growing importance of FDI as a factor influencing contestability. Markets may not, however, always continue to remain contestable and competitive. This has several policy implications.

While FDI liberalization can be a means of promoting competition ...

The liberalization of FDI regimes facilitates market entry and, therefore, can increase the contestability of markets. As the liberalization process advances, non-traditional barriers that may inhibit FDI are attracting the attention of policy makers. While some of these barriers are due to government measures (e.g., in the case of public monopolies), others -- and these are receiving increasing attention -- concern anticompetitive private business practices (or restrictive business practices). Some of the latter are normally prohibited *per se* (e.g., some horizontal cartels or vertical price fixing). The situation becomes more difficult when the practices concerned may have anticompetitive effects but are not considered illegal under the laws of the country in which they occur. While such practices do not necessarily discriminate between domestic and foreign firms, they may nevertheless constitute barriers to competition.

Furthermore, care must be taken that, in their eagerness to attract FDI, governments do not agree to market-power inducements which, by their very nature, restrict competition and reduce contestability. To avoid such situations, the trade-offs between the benefits associated with new FDI on the one hand, and the immediate costs of such inducements in terms of reducing economic welfare due to their anticompetitive effects, on the other hand, need to be identified as clearly as possible. Once a decision has been made that market-power inducements are required, another difficult task is to determine how much market power needs to be given away, for how long and for what range of activities, in order to attract a particular investment. A number of options exist that can be utilized to minimize negative effects:

- creating pre-entry competition (auctioning);
- circumscribing exclusivity in terms of time;
- circumscribing exclusivity through alternative sources of competition;
- ensuring fair and non-discriminatory access to essential facilities;
- breaking-up national monopolists into regional firms;
- periodically reviewing inducements by competition authorities; and
- regulating prices under certain circumstances.

In sum, the inherently anticompetitive nature of market-power inducements calls for their cautious scrutiny.

... the specific task of competition policy is to promote efficiency in a given market,...

By 1997, some 60 countries worldwide had competition laws. Their main objective is to preserve and promote competition as a means of maximizing the efficient allocation of resources in an economy, resulting in the best possible choice of quality, the lowest prices and adequate supplies for consumers. Most competition laws deal with enterprise *behaviour* by prohibiting restrictive business practices such as competition-restricting horizontal agreements and abuses of dominant positions, as well as certain restrictive vertical distribution agreements. Moreover, an increasing number of competition laws deals with alterations in the *structure* of markets through the control of mergers and acquisitions, as well as joint ventures, with the aim of avoiding the creation of dominant positions or even oligopolies. Usually such cartel practices as price fixing, collusive tendering and market allocation are prohibited without need for market analysis, while distribution, joint ventures and M&As agreements are assessed in a market context and under a rule-of-reason standard in terms of efficiencies likely to be achieved and passed on to consumers.

Competition laws normally apply to all firms operating in given national territories, whether through domestic sales, imports, foreign affiliates or non-equity forms of FDI. (They may also, sometimes controversially, be applied when extra-territorial operations have an effect on those given territories.) They do not, in principle, discriminate between national and foreign firms or between firms from different national origins. In this manner, competition law monitors the competitive behaviour of TNCs having effects in host countries, with a view to ensuring that these firms (like other firms) do not abuse market power. On a wider geographical scale, competition law is intended to prevent inefficiencies stemming from market-allocation agreements designed to lessen trade or investment.

Some of these agreements take the form of international market-allocation investment cartels that include promises not to invest in certain markets or not to compete when investing. By their very

nature, such cartels directly restrict competition through FDI, typically to the detriment of host countries, and therefore require the attention of competition authorities.

... with the main interface between competition law and FDI taking place at entry through merger review ...

Usually, however, the main interface between competition law and FDI occurs when foreign entry is accomplished by means of a significant merger, acquisition or joint venture. Indeed, countries are increasingly adopting merger-control regulations. Because M&As are dependent on current stock values and are difficult to unscramble once consummated, merger control of such transactions requires a carefully calibrated system of prior notification, rapid analysis, temporary injunctions and prompt decisions. Most countries use turnover or other thresholds to exempt transactions unlikely to have anticompetitive effects in order to minimize unnecessary interference and limit the number of cases screened by the competition authorities.

Most interventions by competition authorities occur in the case of horizontal M&As between competitors. Typical scenarios likely to raise competition issues are:

• The acquiring firm was exporting to a market before it acquired a competing firm in the

- market, or a foreign firm that already controls one firm in the market acquires another.
- A foreign firm uses FDI to set up a major plant in a market, another firm does the same, and then the two agree to merge (or one takes over the other), thereby eliminating local competition between their two affiliates.
- When a foreign firm enters a market by means of a joint venture with a local firm, the issue arises
 as to whether the foreign firm would have been likely to have entered the market separately and
 competed with the local firm in the absence of the joint venture.
- The possibility that the acquiring firm will have an incentive to suppress rather than develop the competitive potential of the firm to be acquired.
- The merger of two foreign parent firms can sometimes create competition issues in countries other than the home or host countries of the merging firms, i.e., third countries.
- A parent firm acquires an enterprise abroad which, as an independent entity, is (or could be) a source of competition for the domestic market.
- Investments likely to lead to, or augment, worldwide dominant positions. Such cases typically arise in situations in which a transaction affects product markets in which firms compete at the regional or global level.

...and in the context of post-entry competition issues.

While the liberalization of FDI and trade regimes can be a means of promoting competition, the possibility of anticompetitive practices by firms requires the continuous attention of competition authorities. In fact, even in a national framework in which investment and "trade" are fully liberalized, the possibility of such practices provides one of the rationales for the existence of competition laws. Therefore, while an FDI entry may be unobjectionable from a competition point of view, or even beneficial in itself, it may raise competition issues in the longer term, depending on the behaviour of the firm.

For example, competition problems may arise because of restraints that are ancillary to the basic transaction, e.g., when tied purchasing is involved. Joint ventures are particularly susceptible to the combination of a pro-competitive basic transaction and ancillary restraints. Another example, which relates to secondary effects, concerns potential competition problems that can arise if a foreign investor assumes control of an essential facility; competition authorities may have to intervene to require dealing on reasonable terms. Moreover, as transfer pricing can be used for predatory purposes, competition authorities may have to monitor events in this area as well; given the nature of this practice, international cooperation is often required.

Finally, corporate non-equity alliances pose new challenges. Certain types of research-and-development alliances, in particular, are attracting increasing attention. Such alliances can have elements of cartelization and, as such, might be subject to competition-law scrutiny. Competition authorities may intervene as regards the structure of a research-and-development arrangement, particularly if parties envisage the joint exploitation of the results. At the same time, such arrangements can have important positive implications for an economy. Many countries therefore exempt certain technological alliances from competition regulations. Where this is not the case, a rule-of-reason standard on a case-by-case basis seems to be increasingly the prevailing approach in judicial reviews, to balance long-term efficiency gains against possible short-term anticompetitive effects.

There is a direct, necessary and enlarging relationship between FDI liberalization and the importance of competition policy ...

While FDI liberalization can help to enhance the contestability of markets, it is not a sufficient condition: in so far as FDI liberalization creates more space for firms to pursue their interests in markets, competition laws become necessary to ensure that former statutory obstacles to contestability are not replaced by anticompetitive practices of firms, thus negating the benefits that could arise from liberalization. This need increases as liberalization becomes more widespread and extends to new areas.

If anything, this underlines that the principal dimensions of the FDI liberalization process (identified in the *World Investment Report 1994*) are, indeed, inextricably linked: the reduction of barriers to FDI and the establishment of positive standards of treatment for TNCs need to go hand in hand with the adoption of measures aimed at ensuring the proper functioning of markets, including, in particular, measures to control anticompetitive practices by firms.

This also underlines something else, namely, that the culture of FDI liberalization that has grown worldwide and has become pervasive, needs to be complemented by an equally worldwide and pervasive culture of competition (which, of course, needs to recognize competing objectives as well). Clearly formulated competition policies and their effective enforcement can contribute significantly to the growth of such a competition culture. In this respect, the trend towards adopting or strengthening competition laws suggests that a competition culture is, indeed, emerging in many parts of the world. However, for countries that are new to this practice, the transition to a more open, competition-oriented system cannot be achieved overnight and involves difficult political choices, the balancing of interests among many stakeholders and the resolving of a host of practical problems.

Moving from the plane of competition culture to the plane of policy, this means that competition policy should receive increased attention when it comes to the ideal mix of relevant policy instruments.

This should also be the case because, as countries liberalize their investment regimes, they may become concerned that they are moving, for example, from a system of screening all take-overs by foreign firms of national firms to screening none; they may also see risks of foreign firms acquiring dominant positions. Therefore, there is a need to assess the competitive effects of foreign firms at the time of entry and after entry, and that function is increasingly assumed, where appropriate, by competition authorities. Competition policy thus has a major role to play in the process of liberalization, notably by ensuring that markets are kept as open as possible to new entrants, and that firms do not frustrate this by engaging in anticompetitive practices. In this manner, the vigorous enforcement of competition law can provide reassurance that FDI liberalization will not leave governments powerless against anticompetitive transactions or subsequent problems.

When formulating their competition policies, countries need, of course, to keep in mind that competition policy is not a substitute for FDI policy and trade policy, but rather that all three are mutually supportive in the pursuit of efforts to ensure that markets function properly. Nevertheless, to the extent that contestability and competition considerations gain in importance in guiding policies, and the more liberal trade and FDI policies become -- but, by themselves, do not always lead to contestable markets — competition policy emerges as *primus inter pares* among policy instruments used to maintain contestability and competition.

To make a difference, competition policy needs to be effectively implemented. This requires a strong competition law and an effective competition-enforcement agency, with broad powers to investigate enterprise behaviour and to analyse the competitive effects of concentrative forms of FDI and the competition implications of market-power inducements. Once the basic political decision has been made to adopt and enforce competition policy, the agency should be consulted in relevant contexts, and its enforcement decisions should not be subject to indiscriminate political intervention.

Still, it must be recognized that few countries have strong, well-functioning and well-funded competition authorities. And it may well take other countries many years to develop appropriate policies and the institutional set-up to implement them fairly and effectively. This means that, where contestability and competition are the objectives, many countries will need to continue to rely, for the foreseeable future, primarily on FDI and trade liberalization to meet these objectives in the context of closer integration into global markets.

Traditionally, competition laws, especially in developing countries, have focused mostly on protecting competition among domestic firms within the local market. When imports became important, they were included in competition analysis as well. As FDI has become more important than trade in terms of delivering goods and services to foreign markets, markets are increasingly regionalized or globalized, and national production systems are becoming more integrated through the activities of TNCs, attention now needs to expand to include the competition effects of FDI and corporate integrated international production systems, including corporate alliances. These developments have important policy implications:

- The regionalization and globalization of markets and their underlying production structures make it increasingly difficult to define and measure market concentration and to determine the emergence of dominant positions (and the possibilities of abuse of market power inherent in this) in terms of *individual national* markets alone.
- Closely related is that the efficiency gains that can be associated with corporate integrated international production systems (including alliances) need to be balanced against any anticompetitive effects of the relevant transactions for the markets supplied by these systems.
- When confronted with non-trivial and non-transitory price increases, competition authorities need to give more attention to a possible supply response through new FDI by foreign producers not yet servicing a market (in addition to supply responses by established domestic producers and imports). Competition authorities are only beginning to consider explicitly and systematically such new FDI as a normal possible source of supply response. The FDI supply response is particularly important because, in terms of its magnitude, world sales by foreign affiliates are larger than world imports. Perhaps more importantly, FDI is often the only international supply response possible in the services sector.

... which, increasingly, also requires that competition authorities cooperate among themselves...

There are numerous reasons why -- in an era of globalization -- competition issues as they relate to FDI increasingly involve more than one country and, therefore, require international policy responses. Indeed, they are grounded in the very nature of the transnational character of the firms involved, and relate especially to such issues as access to information and the implementation of decisions.

However, a number of obstacles make international responses difficult. With respect to the *exchange of information*, the largest single obstacle is that of the confidentiality obligations of many competition authorities -- which they need to have -- regarding information submitted to them by various parties. Closer *competition-enforcement cooperation* is often impeded by basic substantive and procedural differences between the competition-law regimes of different countries; in fact, activities being investigated in one jurisdiction may have been encouraged by a government in another jurisdiction. Moreover, many governments simply may not see it in their country's interest to facilitate a foreign state's investigation of one or more of their companies.

Precisely because of such obstacles, issues relating to competition are increasingly being addressed at the international level, either in the form of separate arrangements relating to some aspects of competition policy or in the context of broader investment and trade arrangements:

Bilateral cooperation among competition authorities is growing, although formal agreements are limited to a relatively small number of countries. Most of these efforts involve cooperation on the exchange of information. A number of bilateral agreements go further by establishing ground rules for notification of competition investigations, consultations and cooperation on competition-law enforcement, including commitments for comity (e.g., to take into account whether significant interests of any foreign sovereign would be affected).

Cooperation efforts **at the regional level** often take place in the context of regional integration schemes, which allow approaches and trade-offs that are more difficult to pursue in other settings. The most integrated in this respect is the European Union, in which the member countries have agreed to common competition rules and have a common competition authority. In the OECD, efforts to cooperate on restrictive business practices are not new, with recent recommendations strengthening previous provisions and setting out guiding principles for cooperation. Efforts are also being made within the context of other regional agreements, such as NAFTA, MERCOSUR and the Energy Charter Treaty.

At the **multilateral level**, the UNCTAD Set of Principles and Rules for the Control of Restrictive Business Practices is so far the only multilateral instrument covering all aspects of the control of restrictive business practices. Various WTO agreements also touch upon aspects of anticompetitive practices by firms, including in the context of the General Agreement on Trade in Services, the Agreement on Trade-Related Aspects of Intellectual Property Rights and the Agreement on Trade-Related Investment Measures;

the last of these Agreements provides for consideration to be given to whether the Agreement should be complemented with provisions on investment policy and competition policy.

Still, the question arises whether, to sustain the regionalization and globalization of markets and production structures, something more than expanded bilateral and regional cooperation is required. Indeed, recent international discussions reflect a growing recognition by the international community of the links between FDI policy, trade and competition policy. This is underlined in particular by the decision taken at the Ministerial Conference of the World Trade Organization in Singapore in December 1996 to establish one Working Group to examine the relationship between trade and investment, and another to study issues raised by members relating to the interaction between trade and competition policy, including anticompetitive practices, in order to identify any areas that may merit further consideration in the WTO framework. As furthermore stated in the Ministerial Declaration, these Working Groups are to draw upon each other's work if necessary and also to draw upon the work in UNCTAD and other appropriate intergovernmental fora.

...while recognizing that the pursuit of contestability does not necessarily always lead to desired outcomes, especially where development considerations weigh heavily.

While FDI liberalization can increase competition in markets and thereby contribute to economic efficiency, growth, development and, ultimately, consumer welfare, there are limitations to competition. They arise in particular when markets tend naturally towards high level of concentration and when market outcomes conflict with other policy objectives.

In the first instance, limitations can arise from the fact that such natural factors as economies of scale, high sunk costs and high risk-related costs can make some markets, to a greater or lesser degree, difficult to contest (although technological developments can change the importance of some of these natural factors). One of the antidotes to these natural limits to contestability involves an increase in the size of the relevant market, especially through investment and trade liberalization. Where market enlargement is difficult to achieve, regulations can help to prevent abuses of dominant positions of market power.

Limitations also arise because governments in all countries are often (if not always) faced with having to choose between competing objectives, and a number of these can conflict with the market outcomes that would be generated by reasonably competitive markets. Improving economic efficiency by making markets more competitive is subject to the same need to make choices. Competing objectives include safeguarding national security; protecting labour rights; safeguarding culture; promoting positive externalities; protecting property rights; avoiding negative externalities; protecting consumers; and promoting development.

For developing countries, of course, the promotion of development takes pride of place. Given the particular characteristics of developing countries -- low income levels, skewed distribution of wealth, insufficient infrastructure, low levels of education, asymmetries in information, to mention but a few -- the incidence of conflicts between market outcomes and competing objectives is often more frequent, especially when dynamic efficiency considerations are taken into account. Where such conflicts occur, their resolution may require creating a mix of policies that limit contestability for a given period of time and that include fade-out provisions, on the one hand, and measures to assist and encourage the building up of domestic capabilities, on the other hand. Indeed, the key issue is to help domestic firms to develop their potential, so that they can participate effectively in international competition and move up the value-added chain.

While limits to contestability may be needed to promote development, it is very difficult indeed to define general criteria on the basis of which such limits could be established. In any event, the main emphasis should remain on establishing, where possible, functioning markets. When limits are placed upon contestability, there is a need to achieve the right balance between efficiency and non-efficiency objectives in a dynamic context. Exceptions or exemptions to contestability and competition need to be tempered by the recognition that they often entail trade-offs with efficiency. Moreover, when governments choose to circumscribe competition, the means by which they do so should be the least damaging from an efficiency perspective; should be transparent; and should be subject to review in the light of changes in markets and the original rationale for such policies.

PART ONE

TRENDS

CHAPTER I

GLOBAL TRENDS

A. Overall trends

1. Trends

Foreign-direct-investment (FDI) flows set a new record in 1996, as transnational corporations (TNCs) responded to economic growth and continued liberalization in much of the world by further expanding their operations abroad. Inflows increased by 10 per cent, to \$349 billion, while outflows rose 2 per cent, to \$347 billion. Increases in FDI inflows exceeded the growth in the nominal value of world gross domestic product and international trade, which expanded by 6.6 per cent and 4.5 per cent in 1996, respectively (table I.1).

Flows into 54 countries and outflows from 20 countries set new records during the year (annex tables B.1 and 2). Many countries with large FDI inflows also had large outflows. That suggests that the factors that make a country attractive to FDI are linked to the conditions and competitive advantages which encourage firms based in that country to expand by investing abroad. But while more countries are becoming significant hosts as well as homes to FDI -- and the size of investment flows of some of these countries in both directions is converging (figure I.1) -- many others remain marginalized in the competition for FDI.

The stock of FDI reached about \$3.2 trillion in 1996, rising from \$2 trillion in 1993 and \$1 trillion in 1987. Sales and assets of TNCs are growing faster than world GDP, exports and gross fixed capital formation. About 44,000 TNCs with almost 280,000 foreign affiliates are active today (table I.2). The growth of their international production reflects rapid changes in their corporate structure and is being pursued through a wide variety of equity and non-equity link-ups and investment channels.

Reinvested earnings, which had been negative in the early 1990s, accounted for about a tenth of total FDI inflows in 1995, the latest year for which data are available (figure I.2). Their recovery was partly due to stronger economic growth in many parts of the world. But it is also

Table I.1. Selected indicators of FDI and international production, 1986-1996

(Billions of dollars and percentage)

	Value at cur (Billion			Annual grow (Per cent		
Item	1995	1996	1986-1990	1991-1996	1995	1996
FDI inflows	317	349	24.4	17.1	32.6	10.3
FDI outflows	339	347	27.0	11.8	34.9	2.4
FDI inward stock	2 866	3 233	18.7	11.7	18.2	12.8
FDI outward stock	2 811	3 178	19.8	11.1	15.1	13.1
Cross-border mergers and acquisitions ^a	141	163	21.0 b	27.1	28.8	15.5
Sales of foreign affiliates	5 933 °	6 412 d	17.3	4.0 e	12.5 ^c	8.1 d
Gross product of foreign affiliates	1 363 °	1 557 ^d	19.1	3.3 e	- 2.9 c	14.2 d
Total assets of foreign affiliates	7 091 °	8 343 d	19.9	11.2 e	13.1 ^c	17.7 ^d
Memorandum:						
GDP at factor cost	28 264	30 142	10.7	6.4	9.5	6.6
Gross fixed capital formation	6 088		10.7	4.5 f	12.4	
Royalties and fees receipts	48		21.9	12.0 f	16.4	
Exports of goods and non-factor services	5 848	6 111	14.3	7.4	16.2	4.5

Source: UNCTAD, based on FDI/TNC database and UNCTAD.

- ^a Majority-held investments only.
- b 1987-1990.
- c 1993.
- d 1994.
- e 1991-1994.
- f 1991-1995.

Note: not included in this table are the value of worldwide sales by foreign affiliates associated with their parent firms through non-equity relationships and the sales of the parent firms themselves.

attributable to improved returns on investments made in earlier years, as these became more profitable. The importance of equity in total FDI flows has also increased recently, partly as a consequence of the growing role played by mergers and acquisitions. As a percentage of the total value of FDI flows in 1996, these (including minority-held investments) accounted for 78 per cent.

Both reinvested earnings and equity capital are sensitive to the economic environment of host countries, while intra-company loans are affected by business conditions in both home and host countries. Low interest rates during 1995-1996, compared with interest rates during the FDI recession of the early 1990s (annex table A.1), may have induced TNCs to borrow more funds for investing abroad. On the demand side, particularly in developing countries, a shortage of savings to finance investments implies that these countries have to rely on foreign funds -- including FDI -- to finance that gap.

Other notable FDI trends in 1996 for each region include (for details, see chapter II):

• Developed countries invested \$295 billion abroad and received \$208 billion in 1996, compared to \$291 billion and \$205 billion, respectively, in 1995. The United States absorbed one of every four dollars spent on FDI in the world, and was by far the largest investor abroad, followed by the United Kingdom, Germany, France and Japan (figure I.1). The European Union remained the largest host and home region, accounting for a half of FDI inflows to developed countries.

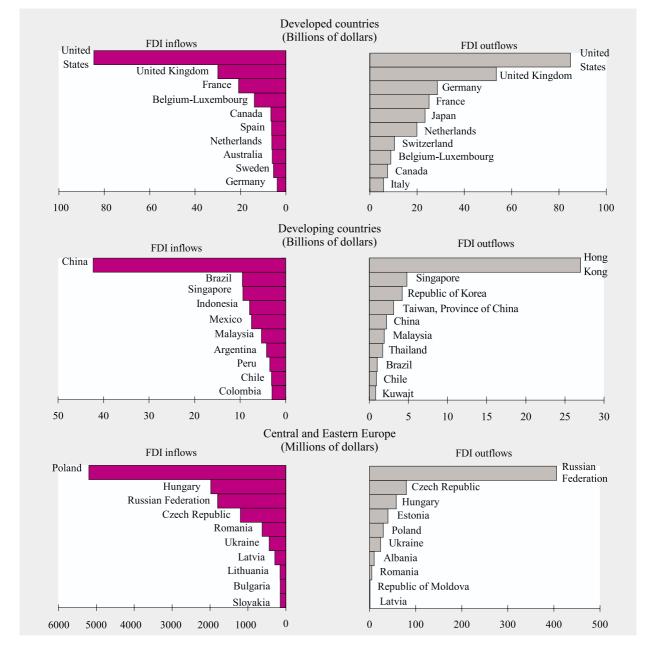


Figure I.1. Top ten largest host and home countries for FDI, among developed countries, developing countries and Central and Eastern Europe, 1996

Source: UNCTAD, based on UNCTAD FDI/TNC database.

• Developing countries invested \$51 billion abroad and received \$129 billion in 1996, compared to \$47 billion and \$96 billion, respectively, in 1995. Their share of total world outflows rose to 15 per cent that year, almost the same share as in 1995, while their share of inflows grew to 37 per cent, from 30 per cent the previous year. China was again the largest host country after the United States, while Hong Kong¹ had the largest investment outflow and outward FDI stock of any developing economy.

Area/economy	Year	Parent corporations based in country	Foreign affiliates located in economy
Developed countries		36380 b	93628
Western Europe		26161	61902
European Union		22111 b	54862
Austria	1994	877	2205
Belgium	1996	152	2000 c
Denmark	1992	800	1289 ^d
Finland	1996	1200	1200
France	1995	2126	8682
Germany	1994	7292 ^e	11581 ^f
Greece	1991	1292	798
Ireland	1995	 80	1050
Italy	1995	966	1630
Netherlands	1993	1608 ^g	2259 ^g
Portugal	1996	1657	6671
Spain	1995	236	6232 ^h
Sweden	1996	3650	5371
United Kingdom ⁱ	1992	1467 ^j	3894 ^k
		40.50 h	70.40
Other Western Europe	400#	4050 b	7040
Iceland	1995	50	40
Norway	1994	1000	
Switzerland	1985	3000	4000
Japan n		1995 3967	1 3405
United States	1994	3470 ⁿ	18608 °
Other developed	2782	9713	
Australia	1996	875 ^p	2961 ^p
Canada	1995	1691	4583
New Zealand	1996	216	2169
South Africa	1978	••	1884
Developing countries		7932 b	129771
Africa		30	134
Swaziland	1996	30	134
Latin America and the Caribbean	1006	1099 ^b	24267
Bolivia	1996		257
Brazil	1994	797	9698
Chile	1995		2028 ^q
Colombia	1995	302	2220
El Salvador	1990	••	225
Guatemala	1985	••	287
Mexico	1993		8420
Paraguay	1995	••	109
Peru	1996		922
Uruguay	1994		101
Developing Europe		112	3900
Former Yugoslavia	1991	112	3900
South, East and South-East Asia		6242 b	99522
China	1993	379 ^r	45000
Hong Kong, China	1996	500 ^d	4604
India	1991	187	926 ^{gs}
Indonesia	1995	313 ^t	3472 ^u
Korea, Republic of	1996	4806	3878
Pakistan	1993	57	758
Philippines	1995		14802 v
	1771	••	14002
Singapore	1994		19160

(Table I.2, cont'd)

Area/economy	Year	Parent corporations based in country	Foreign affiliates located in economy ^a
Taiwan Province of China	1990		5733
Thailand	1992		1050
West Asia		449 b	1948
Oman	1995	92 ^u	351 ^u
Saudi Arabia	1989		1461
Turkey	1995	357	136
Central and Eastern Europe		196 ^b	53260 b
Albania	1994		118
Belarus	1994	••	393
Bulgaria	1994	26	918
Czech Republic	1995	••	20337
Czech and Slovak Federal Republic	1994	26	
Estonia	1994		1856
Hungary	1994	66	15205
Poland	1994	58	4126
Romania	1994	20	••
Russian Federation	1994		7793
Ukraine	1994		2514
World		44508	276659

Source: UNCTAD.

- a Represents the number of foreign affiliates in the economy shown, as defined by it (see section on definitions and sources in the annex).
 - b Total does not include countries for which data are not available.
 - c Estimated by Banque Nationale de Belgique.
 - d 1991.
- 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 1989.
 - h 1992.
- i 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 FDI abroad, and FDI into the United Kingdom conducted by the Central Statistical Office. On that basis, the numbers are probably understated because of the lags in identifying investment in greenfield sites and because some companies with small presence in the United Kingdom and abroad have not yet been identified.
 - Represents a total of 24 bank parent companies and 1,443 non-bank parent companies in 1991.
 - k Represents 518 foreign affiliates in banking in 1992 and 3,376 non-bank foreign affiliates in 1991.
- 1 The number of parent companies not including finance, insurance and real estate industries in March 1995 (3,695) plus the number of parent companies in finance, insurance and real estate industries in December 1992 (272).
- m The number of foreign affiliates not including finance, insurance and real estate industries in March 1995 (3,121) plus the number of foreign affiliates, insurance and real estate industries in November 1995 (284).
- n Represents a total of 2,658 non-bank parent companies in 1994 and 89 bank parent companies in 1989 with at least one foreign affiliate whose asset, 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.
- o Represents a total of 12,523 bank and non-bank affiliates in 1994 whose assets, sales or net income exceeded \$1 million, and 5,551 bank and non-bank affiliates in 1992 with assets, sales and net income under \$1 million, and 534 United States affiliates that are depositary institutions. Each affiliate represents a fully consolidated United States business entreprise, which may consist of a number of individual companies.
 - p As of June 1996.
 - q Number of foreign companies registred under DL600.
 - r 1989.
 - s 1988.
 - t As of October 1993.
 - u As of May 1995.
- v This number covers all firms with foreign equity, i.e., equity ownership by non-resident corporations and/or non-resident individuals, registred with the Securities Exchange Commission from 1989 to 1995.
 - w Data are for the number of investment projects.

Note: the data can vary significantly from preceding years, as data become available for countries that had not been covered before, as definitions change, or as older data are updated.

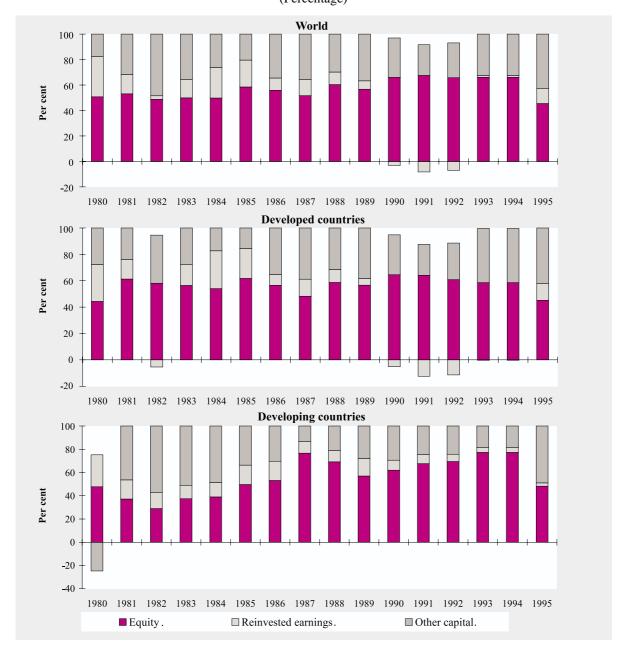


Figure I.2. Components of FDI inflows, 1980-1995 (Percentage)

Source: UNCTAD, based on UNCTAD FDI/TNC database.

- South, East and South-East Asia and Latin America attained record FDI inflows, with a number of countries breaking past records in 1996.² Better economic performance and continued liberalization -- factors that have characterized Asian economies for some time -- helped to increase investment flows to Latin America. Flows to South, East and South-East Asia increased by 25 per cent, to more than \$80 billion, while those to Latin America were nearly \$39 billion in 1996, about \$13 billion more than in 1995.
- Africa attracted little FDI in 1996, though more than in 1995. Investment flows as a

percentage of gross fixed capital formation reached around 7 per cent in 1995, approaching the level in South, East and South-East Asia and surpassing that of Western Europe (annex table B.5).

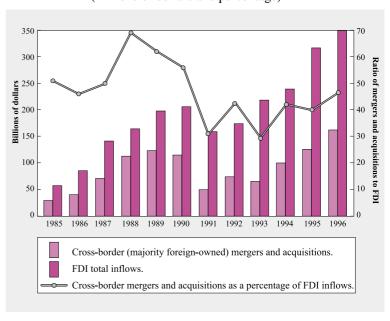
- After divestments in 1995 (-\$763 million) due to large capital withdrawals from Saudi Arabia, flows into *West Asia* turned positive in 1996 (\$1.9 billion). Flows to the non-oil sector in oil producing countries and non-oil producing countries are increasing in relative importance.
- Flows into *Central and Eastern Europe* declined in 1996, after more than doubling in value in 1995.
- The *least developed countries* received a mere 0.5 per cent of world FDI flows in 1996.

In all regions of the world, but especially in the United States and Western Europe, mergers and acquisitions played an important role in driving FDI. Cross-border mergers and acquisitions rose during the past six years, to a record \$275 billion (including some minority-held transactions classified as portfolio investments) in 1996, an increase of 16 per cent over the 1995 level (\$237 billion) (annex tables B.7-9). If only majority-held transactions are considered, the 1996 figure would be \$163 billion, or 47 per cent of global FDI inflows, compared to \$140 billion and 44 per cent, respectively, in 1995 (figure I.3). In 1996, there were 45 deals worth more than \$1 billion (annex table A.2), compared to 35 deals in 1995 (UNCTAD, 1996a, table I.5), almost all between developed-country firms. Transnational corporations based in the United States and the United Kingdom were the biggest players, accounting for 40 per cent of the value of purchases in majority-held mergers and acquisitions and 57 per cent of sales in 1996.

In contrast to the 1950s and 1960s, when greenfield FDI was the most popular mode of market entry, cross-border mergers and acquisitions have been used increasingly as a major means of entering foreign markets since the mid-1980s (UNCTAD, 1996a, pp.7-14). In the case of the United States, greenfield investments accounted for 55 per cent of all outward FDI projects during 1990-1994 (Mataloni and Fahim-Nader, 1996), compared to 62 per cent during 1951-1960 (Curhan, Davidson and Suri, 1977, p. 21). On the inward FDI side, the share of expenditures associated with acquisitions in total investment expenditures in the United States has also been increasing, especially since 1991 (figure I.4). Though Japanese TNCs still prefer greenfield

Figure I.3. Relationship between cross-border mergers and acquisitions and FDI, 1985-1996

(Billions of dollars and percentage)



Source: UNCTAD, based on data obtained from KPMG for 1987-1996 and IFR Securities Data Company (London and New York) for 1985-1986.

investments as their mode of entry,⁵ even they have been shifting recently to mergers and acquisitions (JETRO, 1997).

Characteristics of foreigndirect-investment booms

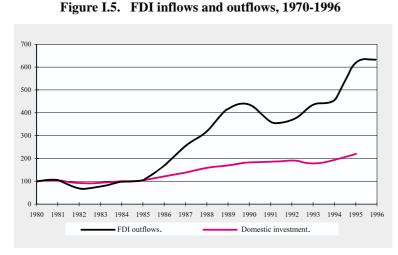
The level of FDI flows in the past few years suggests that the world is in the midst of another FDI boom, with a boom defined as beginning the year in which, after a decline in FDI flows, they have fully recovered to the previous level (figure I.5 and annex table A.3). However, this boom differs from the two previous ones in several respects:

Source: UNCTAD, based on United States, Department of Commerce (various issues). The 1979-1981 FDI

Investment outlays.

boom. This short-lived boom, after the second oil crisis at the end of the 1970s, was led by major oil producing countries on the inward side. Saudi Arabia was the second largest FDI recipient after the United States during that period. The boom of FDI outflows was led by the Netherlands, the United Kingdom and the United States, home countries to the major petroleum TNCs. However, volumes of FDI were small and accounted for only 2 per cent of worldwide gross domestic capital formation (less than half the size of the 1995 share).

The 1986-1990 FDI boom. Many countries emerged as important sources of FDI, most notably Japan, which became the largest outward investor. Investment flows were



Source: UNCTAD, FDI/TNC database.

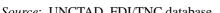
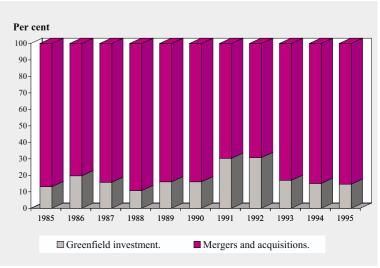


Figure I.4. Greenfield investment and mergers and acquisitions in the United States inward FDIa, 1985-1995



influenced by heightened protectionist pressures, but also by the beginning of widespread FDI liberalization, rapid economic growth in developing countries and the development and adoption of information telecommunication technologies by firms. These technologies enable firms better to coordinate far-flung international production activities, manage foreign affiliates and conduct international transactions. The 1986-1990 FDI boom was a developed-country phenomenon: FDI flows into these countries grew faster than to developing countries

(annex table A.3). Mergers and acquisitions were a major mode of investing. Among the developing countries, China began to emerge as a large recipient for FDI flows.

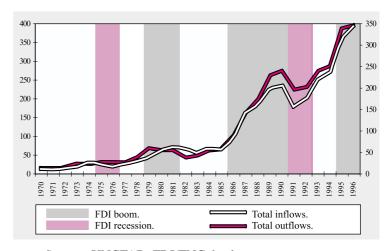
• The current FDI boom (since 1995). Although a number of countries have registered record levels thus far, much of the global FDI inflow increase is attributable to only two countries, China and the United States. Together, they absorbed about one-third of global FDI inflows during 1995-1996. The United States and the United Kingdom drove the increase in outflows, together accounting for 40 per cent of global outflows during this period. The geographical distribution of FDI flows may become more balanced before this boom is over. Indeed, there are already signs that other countries (France, Germany and a

number of developing countries on the outflow side, and Latin American countries on the inflow side) are becoming more active as home and host countries.

These FDI booms do not necessarily parallel the growth of domestic investment (figure I.6). In addition, the importance of developing countries as recipients of FDI inflows during these FDI booms has varied. The share of developing countries in global FDI inflows has been increasing since 1990, reaching 37 per cent in 1996. But that is no higher than

Figure I.6. Growth of domestic and foreign direct investment, 1980-1996

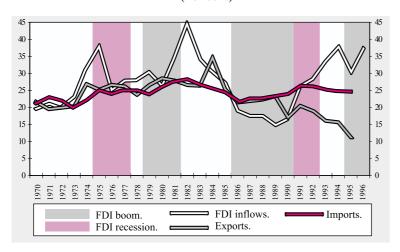
(Index, 1980=100)



Source: UNCTAD, FDI/TNC database.

Figure I.7. Share of developing countries in FDI inflows, exports and imports, 1970-1996

(Per cent)



Source: UNCTAD, FDI/TNC database.

shares at the beginning of the 1980s (figure I.7). Qualitatively, however, the recent developing-country shares reflect a variety of locational advantages. In the early 1980s, by contrast, their equally high shares were mainly the outcome of sudden increases in flows to a few oil producing economies.

During previous FDI recessions and booms, the developing-country share of global inflows has not moved consistently in the same direction (figure I.7). During the FDI recession of 1975-1977, for

example, their share in global inflows fell. Firms shifted their investments to developed countries at that time because they wanted to use their limited FDI funds to support their affiliates there during that period of deep recession. During the most recent FDI recession (1991-1993), however, TNCs invested heavily in East and South-East Asia, the most dynamic host region, boosting the developing-country share of global FDI inflows even at the time of recession. During the FDI boom of 1986-1990, the developing-country share of FDI inflows fell because most FDI took place through mergers and acquisitions by TNCs based in developed countries and such investment was directed to developed countries. In contrast, during the FDI boom of 1979-1981, TNCs invested heavily in developing countries -- mostly in oil producing economies -- which offered investment opportunities not taken up by domestic firms. Many TNCs escaped the effects of the second oil crisis and invested abroad. Although the recent high shares of developing countries in FDI inflows do not set new records, the composition of the major FDI recipients among developing countries has changed dramatically, with oil producing countries no longer being important hosts. These countries accounted for a half of FDI flows to developing countries during 1979-1981, compared to one-fifth during 1995-1996.

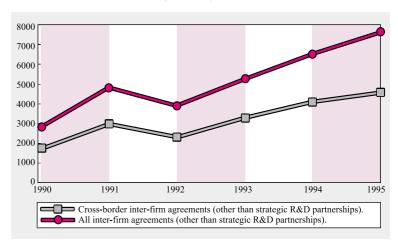
(b) Cross-border inter-firm agreements and cross-border strategic research-and-development partnerships

Cross-border agreements between firms based in different countries have become increasingly important complements to traditional FDI activities, with the range of such agreements growing ever wider. They include arrangements involving joint ventures, licensing, subcontracting, franchising, marketing, manufacturing, research-and-development (R&D) and exploration agreements. These agreements may be equity-based (e.g., joint ventures), or may entail no equity participation (e.g., franchising). The number of these agreements (apart from strategic R&D partnerships, discussed separately) concluded annually increased from 1,760 in 1990 to 4,600 in 1995 (figure I.8). Their share of all inter-firm agreements -- including those between firms based in the same country -- remained stable (on average) at about 61 per cent between the periods 1990-1991

and 1994-1995. This rapid growth in the number suggests that TNCs have increasingly used such arrangements instead of, as well as in addition to, FDI to undertake international production.

Most cross-border interfirm agreements concluded during the period 1990-1995 involved firms from the Triad members: European Union participated in 40 per cent of them, Japanese firms in 38 per cent and United States firms in 80 per cent.⁶ Developing countries becoming increasingly involved in such agreements, especially in those that are equity-based. The number of new cross-border interfirm agreements with developingcountry participation increased

Figure I.8. Number of cross-border inter-firm agreements^a and number of all inter-firm agreements, a 1990-1995 (Number)



Source: UNCTAD, based on IFR Securities Data Company, London and New York; and Hagedoorn, 1996.

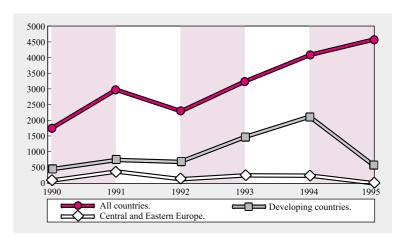
a Other than strategic R&D partnerships.

from around 440 in 1990 to some 2,120 in 1994 (but appears to have fallen to around 560 in 1995) (figure I.9). Their share of the total number of cross-border inter-firm agreements increased (on average) from 27 per cent during 1990-1992 to 35 per cent during 1993-1995. (In contrast, the corresponding share of Central and Eastern European participation was halved between the same periods.)

Throughout the 1980s, the environment of technological innovation evolved drastically, from being reasonably predictable and stable to being more dynamic and variable. Several factors accounted for this change. In many

Figure I.9. Cross-border inter-firm agreements (excluding strategic R&D partnerships), 1990-1995

(Number)



Source: UNCTAD, based on IFR Securities Data Company, London and New York.

industries, it became ever harder for individual firms to go on making the R&D and capital investments required to stay competitive. Firms faced demands for ever more competing capital-hungry projects and had to choose between them. Intangibles, such as know-how and innovation capacity -- also known as created assets (Dunning, 1995) and critical competencies (Mytelka, 1994) -- were recognized as crucial for improved efficiency in new product development. Inter-firm competition, moreover, was becoming increasingly globalized, as markets and international production systems were integrated regionally or globally. These factors led firms, initially, to turn to mergers and acquisitions as a means of creating the critical mass of resources needed to remain competitive. However, mergers and acquisitions proved insufficiently flexible to cope with changing patterns of demand and decreased product life cycles which resulted from faster technological innovation and shorter product development times, as well as from the use of flexible manufacturing techniques. The difficulty for traditional types of inter-firm arrangements to address fully the challenges posed by these developments engendered heightened economic uncertainty in firms.

These developments prompted firms to seek new ways to identify and appropriate developments in critical technologies (Mytelka and Delapierre, 1996; Safarian, 1993), sometimes prompted and sponsored by governments (Fransman, 1990; Mytelka, 1991; Lawton, 1997; Spencer, 1997). Many firms therefore turned to strategic partnerships to achieve objectives that they had once sought to achieve exclusively through FDI. These advantages included concentrating on critical competences (Hagedoorn, 1996), obtaining ownership and internalization advantages and exploiting host-country locational advantages. Strategic partnerships provide access to complementary technologies, reduce costs and risks and create synergies and spillovers. In advanced-technology industries, the aims of such partnerships typically include greater technological synergies, faster innovation, accessing tangible and intangible resources and reducing the costs and risks associated with R&D. For firms from developing countries, strategic partnerships provide an opportunity to strengthen technological capabilities and move more rapidly towards higher value-added products. For small and medium-sized enterprises, partnerships are an important means of overcoming size disadvantages in R&D, as well as in accessing markets and sometimes production.

Three principal characteristics distinguish strategic partnerships from more traditional types of inter-firm agreements (figure I.10):

- they are two-way relationships based on the joint creation and sharing of knowledge for such purposes as the development of new technologies, production processes and distribution techniques;
- they tend to be contractual in nature, with little or no equity involvement by the participants; and

Figure I.10. Inter-firm agreements and strategic R&D partnerships

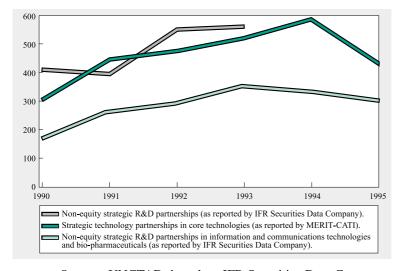
	R&D	Production	Distribution
upstream			downstream
Inter-firm agreements "One-way substitutable members"	Licensing Cross-licensing Early efforts to commercialize public-sector R&D	Subcontracting Original equipment manufacturer (OEM) Acquisition Joint ventures	Franchising
Strategic partnerships "Knowledge production and sharing between partners"	R&D consortia Customer-supplier networks Inter-firm technological collaboration University/industry partnerships	Co-production Use of common components Modularization Joint ventures	Joint marketing System-products Standardization of interfaces

Source: adapted from Mytelka (1993, p. 109).

• they are part of the long-term planning horizon of firms.

The number of cross-border strategic R&D partnerships (technology partnerships in core technologies, e.g., biotechnology, new materials and information technologies) increased from nearly 280 in 1991 to 430 in 1993 (Hagedoorn, 1996, p. 602) (figure I.11).⁸ The upward trend continued in 1994, but seemed to have faltered in 1995.⁹ The reasons for this decline in 1995 are not clear. It may simply reflect a broader tendency towards consolidation and the refocusing of

Figure I.11. Number of cross-border strategic R&D partnerships, 1990-1995 (Number)



Source: UNCTAD, based on IFR Securities Data Company, London and New York; and Hagedoorn, 1996.

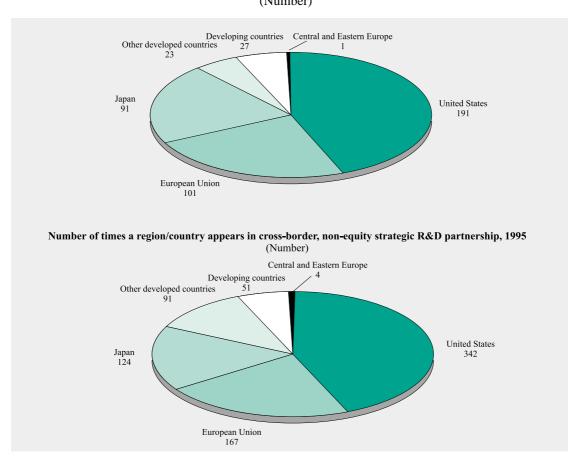
activities on core businesses. However, the explanation may also be that firms have their hands full managing the complex partner networks in which they are already engaged and are reluctant, at least temporarily, to expand them further. Accelerated mergers and acquisitions or membership in competing alliances might also have reduced the number of available partners.

Most cross-border, nonequity strategic R&D partnerships have been between firms from developed countries. In 1995, out of the total number of such agreements for which the countries of the participating firms are known, 86 per cent had at least one United States partner, 42 per cent had at least one European Union partner and 31 per cent had at least one Japanese partner (figure I.12). However, developing-country firms are also becoming more involved in these partnerships (box I.1): the participation of developing countries in the total number increased from 3 per cent in 1989 to 13 per cent in 1995 (figure I.12). This suggests that some developing-country firms have attained enough sophistication and have deepened their technological capacity sufficiently to partner with developed country firms.

Strategic partnerships may also develop into market-spanning knowledge-based networks (Mytelka, 1994) that can lead to the creation of *de facto* industry standards. To the extent that such networks supplant the role once played by a stable market leader in industrial development, their ability to shape product markets and set technological standards carries with it a potential to erect new entry barriers (Mytelka, 1997a). This may have implications for national, regional and global market structures, as well as worldwide market contestability (see chapter IV). Hence, the development of knowledge-based networks needs to be taken into consideration in the design and development of national and international competition policies.

Figure I.12. Number of times a region/country appears in cross-border, non-equity strategic R&D partnerships, 1990

(Number)



Source: UNCTAD, based on IFR Securities Data Company, London and New York.

Note: the number of partnerships for which the regional or country participation breakdown is available is 222 for 1990 and 398 for 1995. The total number of such agreements was 304 for 1990 and 432 for 1995.

Box I.1. The Computel-Boston Technology strategic partnership

Computel (Brazil) is a software company specialized in voice processing, i.e., voice-mail and voice recognition. In 1994, it had about 80 employees, most of whom were engineers and software analysts, and a turnover of some \$30 million. As a small firm in Latin America, Computel found it difficult to keep up as the pace of innovation accelerated in the late 1980s. Its voicemail systems were sold mainly to foreign-based TNCs, such as NEC, Equitel/Siemens, Ericsson and Alcatel, for use as add-ons to their PABX (a telephone switching system). But Computel's volume of output was not generating the revenues needed to support the growing amount of R&D required if the firm were to remain competitive. Moreover, penetrating foreign markets for a small largely unknown company was difficult. Computel worked its way around these problems through a strategic partnership with Boston Technology (United States) that includes both a technology and a marketing partnership. As part of that partnership, Computel and Boston Technology share technical information. By using a mix of locally developed and imported technology, Computel is now able to develop new products that interface with those of Boston Technology. This has made possible a marketing partnership in voicemail platforms. Computel sells Boston Technology's large platforms in Brazil and Boston Technology sells Computel's small platforms in the United States and abroad.

Source: UNCTAD, based on company interviews (conducted in 1995).

2. International production

All indicators of the size of international production -- worldwide FDI stock, gross product, sales and exports (including intra-firm exports) of foreign affiliates -- have to be estimated and should be treated with caution. The most recent year for which data are available for such indicators is 1994 (except for FDI stock).

- **Stock.** Between 1982 and 1994, worldwide FDI stock increased fourfold, and doubled as a percentage of world GDP (annex table B.6). The developing countries' share of the worldwide FDI inward stock increased over the past ten years, to reach 28 per cent by 1996. The investment stock in South, East and South-East Asia surpassed that in Latin America in 1988 and, since then, the disparity has widened. The United States' share of world outward stock declined from more than 40 per cent in 1982 to one-quarter in 1996. Developing countries increased their share from 3 per cent to 9 per cent between 1982 and 1996.
- *Gross product (value added) of foreign affiliates.* According to this value-added measure, foreign affiliate output accounted for 5 per cent of world GDP in 1982, 7 per cent in 1990 and 6 per cent in 1994 (the latest available year) (annex table A.4). Between 1982 and 1994, the gross product of foreign affiliates almost tripled. One dollar of FDI stock generates value added worth 64 cents. ¹⁰ In small economies in Africa and developing Oceania, the value added generated by TNCs, though small, is significant compared with the size of the economy. In general, foreign affiliates have contributed more in terms of the share of their value added in the GDP of developing countries than that of developed countries. This trend continued in the 1990s.
- **Sales of foreign affiliates.** Firms rely increasingly on sales from international production, rather than on exports, to service foreign markets (table I.3). Sales of foreign affiliates increased by 8 per cent annually between 1982 and 1994 (table I.3). In each developed

region, sales by foreign affiliates outweigh exports, but in developing regions, as expected, exports are still the dominant mode of servicing foreign markets. Foreign affiliates in North America and non-European Union member states, such as Switzerland, serve foreign markets through international production more than foreign affiliates in other regions. Sales of foreign affiliates in South, East and South-East Asia were higher than those in Latin America in the 1990s. During the past decade, sales by TNCs based in developing Asia have been rising. Sales of foreign affiliates are also increasing rapidly relative to imports. In Latin America (as well as in developing Oceania) sales of foreign affiliates are more than twice as large as imports (table I.3). By the mid-1990s, sales of foreign affiliates were higher than imports of South, East and South-East Asia.

Exports of foreign affiliates. Although exports of foreign affiliates more than doubled between 1982 and 1994, exports' share of total sales of foreign affiliates declined from 31 per cent to 28 per cent between those years (annex table A.5). This suggests that FDI has become somewhat more domestic-market oriented, which partly reflects the fact that it

Table I.3. Sales of foreign affiliates^a and their ratios to exports and imports of goods and non-factor services, by region, 1982 and 1994

(Billions of dollars and ratios)

	Sales of affiliates	in the	Sales of a abroad at to the re TNCs	tributed egion's	Sales of a abroad (percent exports of and non serve	(B) as a age of of goods	Sales of affiliates percent imports of and non servi	s (A) as age of of goods -factor
Region	1982	1994	1982	1994	1982	1994	1982	1994
Developed countries	1 770	4 528	2 351	5 929	1.61	1.65	1.19	1.28
Western Europe	787	2 513	1 063	3 163	1.21	1.50	0.88	1.22
European Union	719	2 338	970	2 821	1.19	1.42	0.86	1.21
Other Western Europe	68	175	93	342	1.53	2.40	1.18	1.42
North America	777	1 616	1 106	1 871	3.06	2.07	2.10	1.63
Other developed countries	206	398	182	896	0.83	1.59	0.93	0.83
Developing countries	656	1 832	75	479	0.10	0.38	1.05	1.47
Africa	66	132	10	38	0.13	0.44	0.66	1.22
Latin America and the Caribbean	257	666	24	55	0.07	0.29	2.50	2.87
Developing Europe	2	3					0.10	0.22
Asia	326	1 022	41	386	0.12	0.40	0.85	1.14
West Asia	133	150	6	23	0.04	0.15	0.85	0.93
Central Asia		2			••			
South, East and South-East Asia	193	871	35	363	0.19	0.45	0.85	1.18
The Pacific	5	8	-	-	0.08	0.06	1.93	1.86
Central and Eastern Europe	0.5	52	-	4	0.01	0.02	0.01	0.34
World	2 426	6 412	2 426	6 412	1.05	1.35	1.12	1.30

Source: UNCTAD.

^a Worldwide sales are estimated by extrapolating the worldwide sales of foreign affiliates of TNCs from Germany, Japan and the United States for 1982 and France, Germany, Italy, Japan and the United States for 1994 (for France, 1992 data) on the basis of the shares of these countries in the worldwide inward FDI stock. Regional sales are estimated by applying the share of each region in the worldwide inward stock to the estimated worldwide sales. Sales attributed to the region's TNCs are estimated by applying the share of each region in the worldwide outward stock to the estimated worldwide sales.

has increasingly flowed into the services sector. At the same time, the share of exports directed to affiliated firms (parent firms and other foreign affiliates) in total exports of foreign affiliates increased. Complex integration strategies pursued by TNCs and the proliferation and deepening of regional integration schemes have facilitated trade among affiliates of the same TNC system. More than a half of foreign affiliate exports of Japanese and United States TNCs are conducted on an intra-firm basis (Japan, MITI, 1994; and United States, Department of Commerce, 1997). More than 40 per cent of the exports by parent firms of these TNCs are shipped to their foreign affiliates. 11 All in all, around one-third of world trade takes place within transnational corporate networks (UNCTAD, 1995a). The ratio of non-arm's-length transactions to those of an arm's-length nature increased from 1.6 in 1982 to 1.9 in 1994. This implies that about two-thirds of international transactions are associated with the international production of TNCs. In the case of the United States, arm's-length transactions accounted only for one-fifth of all transactions (UNCTAD, 1995a, p. 39) in 1992, rising from 14 per cent in 1982. For Japan, intra-firm transactions associated with international production relative to arm'slength transactions (4.7 times as large as arm's-length trade in 1994) have become even more important than in the United States (3.5 times as large as arm's-length trade in 1994). A decade earlier, Japan's share of intra-firm transactions was less than twice as large as arm's-length trade, and considerably lower than the share for the United States.

3. Recent changes in regulatory frameworks

Liberalization continues to facilitate FDI growth. In 1996, 98 liberalizing changes were made in the regulatory FDI frameworks of 65 countries (10 developed and 55 developing countries), comparable to the number of changes recorded in each of the previous three years (table I.4). In developing countries, these changes included the opening of industries previously closed to FDI, the streamlining or abolition of approval procedures, the provision of incentives and the establishment of specialized liberalization schemes. While incentives introduced by developing countries in 1996 were more targeted towards regional development, they were also rationalized and reduced in number. As a result, the share of changes aimed at reducing incentives accounted for 7 per cent of the total number of regulatory changes in 1996 (figure I.13), higher than in 1995 (5 per cent). In developed countries, the major legislative activity involved the introduction of more liberal operational conditions and the revision of intellectual property frameworks. Numerous special economic zones and special regional packages were introduced in 1996, both in developed and developing countries.

Table I.4. Regulatory changes, 1991-1996 (Number)

Item	1991	1992	1993	1994	1995	1996
Number of countries that introduced changes						
in their investment regimes	35	43	57	49	64	65
Number of regimes	82	79	102	110	112	114
Of which:						
In the direction of liberalization or promoting ^a	80	79	101	108	106	98
In the direction of control b	2	-	1	2	6	16

Source: UNCTAD, based on national sources.

^a Including measures aimed at strengthening market supervision, as well as incentives.

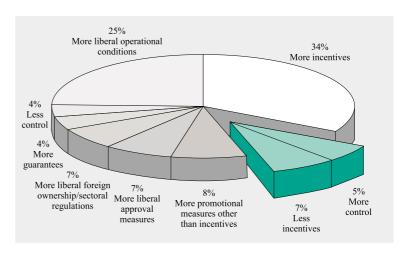
b Including measures aimed at reducing incentives.

The desire of governments to facilitate FDI flows is also reflected in a dramatic increase in the number of bilateral investment treaties (BITs) for the protection and promotion of investment during the 1990s. As of 1 January 1997, there was a total of 1,330 such treaties in the world, involving 162 countries (annex table B.10), compared with less than 400 at the beginning of the 1990s. More than two-thirds of these treaties came into existence during the 1990s, around 180 in 1996 alone -- a rate

of almost one every other day.

The pattern of BITs has changed considerably. Historically,

Figure I.13. Types of changes in FDI laws and regulations, 1996^a



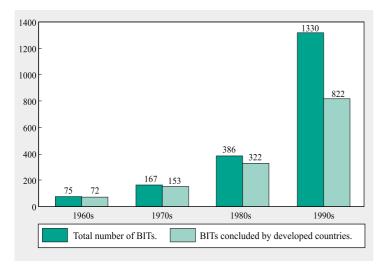
Source: UNCTAD.

There were 138 changes in 114 measures that were implemented in 65 countries.

virtually all BITs had one developed country as a partner, and such countries accounted for 83 per cent of all BITs at the end of the 1980s. But, by 1996, only 822 BITs, or 62 per cent of the worldwide total, involved developed countries (figure I.14).

The countries of Central and Eastern Europe have adopted this treaty practice energetically since the late 1980s, concluding many such treaties among themselves, as well as with developed and developing countries. Indeed, Romania has 82 BITs, more than any other non-OECD country. Of some 530 BITs concluded by countries of this region by 1996, 16 per cent were with one another, and 39 per cent with developing countries. The trend reflects a readiness to protect FDI and to fill a gap in investment protection legislation while reforms of national laws are being undertaken.

Figure I.14. Growth of BITs, 1959-1996 (Cumulative)

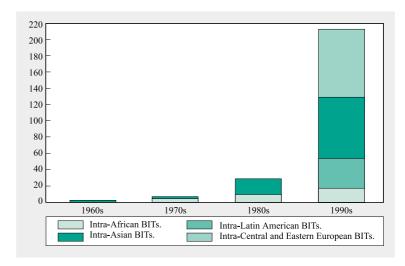


Source: UNCTAD, BITs database.

Developing countries, too, began to conclude BITs with one another, increasingly with other developing countries in the same region (figure I.15). To date, 16 per cent of all BITs are among developing countries, up from 11 per cent at the end of the 1980s. In 1996 alone, nearly one-third of all BITs concluded were between developing countries, led by China, Chile, Algeria and the Republic of Korea. This development reflects the emergence of firms from developing countries as outward investors. Thus, developing countries accounted for 15 per cent of world FDI outflows in 1996, compared with only 3 per cent in 1980. In Asia, for example, some 40 per cent of all FDI flows into the developing countries in the region originate in other Asian developing countries.

developing Among countries, China has concluded the most treaties, followed by the Republic of Korea, Argentina and Egypt. African countries recently concluded BITs at a slower pace than in previous decades. date, they have concluded 267 BITs, with 45 African developing countries having at least one treaty. Developing countries in Latin America and the Caribbean have been actively adopting this treaty practice only recently. By 1996, 31 countries in that region

Figure I.15. Growth of intra-regional BITs in developing countries and economies in transition, 1960s through 1990s^a (Cumulative number)



Source: UNCTAD, BITs database.

^a Up to 1996.

had concluded one or more BITs, totalling 261, of which 37 are between countries in the region. There has also been a sharp rise in the number of BITs concluded by Asian and Pacific countries in the 1990s. Currently, 33 countries in that region have concluded a total of 491 BITs (compared with 146 by the end of the 1980s), with the number of intra-regional BITs increasing to 75.

4. Trends in technology flows

Global payments of fees and royalties for technology quadrupled to an estimated \$48 billion between 1983 and 1995. If data for the United States and Germany are indicative, some four-fifths of these payments take place between parent firms and their foreign affiliates (table I.5). This phenomenon underscores the close relationship between FDI and intangible technology flows, as well as the strong proprietary asset base of FDI.

But technology flows also take place independently of FDI. This is reflected in the payments for intellectual property rights and related specialized services and the growing strategic partnerships between unaffiliated firms. Thus, although much of the trade in technology takes place between affiliated companies in different countries, there has also been a significant increase in technology flows and linkages between unaffiliated firms. For the United States there has been an increase of 175 per cent in United States-sourced technology flows among unaffiliated firms between 1986 and 1995 (United States, Department of Commerce, 1996a). In Japan, while royalty and fee receipts for technology and technical services take place largely on an intra-firm basis -- from foreign affiliates to parent firms -- payments for technology for patents are made mostly to unaffiliated foreign companies in the United States and Europe (Japan, Bank of Japan, 1996; and Japan, MITI, 1989 and 1994). Technology flows through unaffiliated companies are also important for some developing countries, such as India, the Republic of Korea and Malaysia, in which large national firms have entered into arm's-length technology agreements with foreign firms (Singh, 1991).

Table I.5. Receipts and payments of technology-related flows in selected developed countries, 1995	
(Millions of dollars)	

	France	Ja	apan	Ge	rmany	United Kingdom	Unite	ed States
Item		Total	Intra-firm	Total	Intra-firm		Total	Intra-firm
Receipts								
Royalties (patents								
and licence fees)	2 2 1 6	6 026	2 366 a	2 780	2174	5 271	26 953	21619
Technical services	6 355			3 641				
R&D expenditures				3 490				
Total	8 571	6 026	2 366 a	9 911	2174	5 271	26 953	21619
Payments								
Royalties (patents								
and licence fees)	2 837	9 442		5 444	3581	3 997	6 312	5148
Technical services	4 902			4 220				
R&D expenditures				2 998				
Total	7 739	9 442		12 662	3581	3 997	6 312	5148

Source: UNCTAD, based on France, Banque de France, 1996; Japan, Bank of Japan, 1996 and MITI, 1994; Deutsche Bundesbank, 1996; United Kingdom, Central Statistical Office, 1996; and United States, Department of Commerce, 1996a.

a 1992 (fiscal year).

Salient features of recent technology flows include:

- The dominance of United States firms in royalty and fees receipts. In 1995, United States firms received an estimated \$27 billion in royalties and licence fees (table I.5), accounting for 56 per cent of total global receipts, compared with \$6 billion and 50 per cent in 1983 (IMF, 1996b).
- A high degree of concentration of royalty and fees receipts among a few developed countries. Technology exchanges in terms of patents, royalties and licence fees between the United States on the one hand, and Japan, Germany, United Kingdom, France and the Netherlands on the other hand, have been large and increasing. Some 20 per cent of United States firms' 1995 receipts were accounted for by transfers from Japanese firms alone. Germany, the United Kingdom, France and the Netherlands together accounted for another 33 per cent (United States, Department of Commerce, 1996a). In most countries other than the United States, increases in technology receipts have not been enough to offset payments. Technology transactions of German firms have been mostly with companies in developed countries, although there has also been a substantial increase in affiliate and non-affiliate licensing to certain developing countries (Deutsche Bundesbank, 1996). For French firms, transactions with developing countries in the form of non-affiliate licensing and technological services have been increasing steadily since the 1980s (France, Ministère de l'Économie et du Budget, various issues). Outflows of technology from Japan, often accompanying FDI, have tended to concentrate on the United States and certain Western European countries, as well as in the newly industrializing economies of South-East Asia (Japan, Bank of Japan, 1996).
- Small technology flows to developing countries. While most regulatory measures as regards
 foreign technology agreements have been liberalized substantially, the boom in FDI flows
 to developing countries has not always been accompanied by a boom in technology

flows. In China, technology payments did not increase in line with FDI inflows during the mid-1990s. This can be partly explained by the gap between when an investment takes place and when payments for technology are made (although it is also possible that foreign affiliates do not always pay fully for the technology they receive or that perhaps they are not always permitted to do so). In the Republic of Korea, Singapore and Taiwan Province of China, however, technology imports and technology payments have tended to be high. This reflects the fact that technology flows are concentrated in high-technology industries, such as micro-electronics or new materials. In developing countries, royalty payments for manufacturing technology generally reach their peak only 3-4 years after the initial investment has taken place. Thus, higher technology payments associated with the large investment flows to developing countries in the 1990s are likely to materialize only in the second half of the 1990s. In the case of royalties for patents that can be absorbed rapidly in new products and processes, as is often the case for patent-related transactions among developed-country firms, the time gap between the initial investments and payments receipts for technology may be much smaller.

• Differences in the pattern of technology flows between developed and developing countries. A high proportion of technology payments by, for example, Japanese and Western European companies relates to royalties for the use of patents. In few cases are royalties paid for unpatented know-how. These payments cover a wide range: from biotechnology, new materials and information technologies, to industrial automation, software, telecommunications, space and aeronautics. They also cover new patents in chemicals, food and beverages, machinery and equipment. In the case of developing countries, technology flows are directed to high-technology industries, mainly in the Asian newly industrializing economies, Brazil and Mexico. By contrast, much of technology flows to other developing countries, including China and India, relates to industrial know-how.

In sum, the liberalization of regulatory policies on foreign technology agreements has not been sufficient to bridge the technology gap between developed and developing countries. Whether the implementation of the Uruguay Round Agreement on trade-related intellectual property rights would lead to increased technology flows to developing countries is still unclear (UNCTAD, 1996b). The evidence for developed countries so far suggests that, while stronger intellectual property rights are important for FDI in some industries (e.g., pharmaceuticals) and can influence the speed of investment and technology flows, their effects on FDI often depend on such factors as the size of the domestic market, the structure of production factors, technological infrastructure and the macroeconomic policy environment.

B. Estimating actual investment in foreign affiliates

Estimating actual annual investment abroad by TNCs has two dimensions: calculating the "real" value of FDI by adjusting for inflation and foreign exchange fluctuations; and estimating the size of investment that is not reflected in FDI data as reported in the balance of payments. The growing importance of FDI in international economic transactions, as well as in recipient economies, makes it important to get a picture that reflects these variables. ¹⁴ In the absence of valuation adjustments, for example, exchange-rate fluctuations can alter the value of FDI flows expressed in a particular currency. Likewise, the capital side of international production will be underestimated, unless the data reflect the value of <u>all</u> the capital involved, regardless of its origin, because foreign affiliates can be -- and are -- financed from sources other than funds from direct investors themselves (FDI).

1. Estimating "real" FDI

Expressing nominal FDI in real terms involves adjustments for both exchange-rate fluctuations and changes in price levels in countries that are host as well as home to TNCs. Estimating FDI (and other financial flows) in real terms is made difficult by various statistical and methodological problems:¹⁵

- There are no price and quantity elements in FDI required to construct price indices.
- Since inward and outward FDI involve a variety of different currencies, an index capturing fluctuations between them is difficult to devise.
- Because FDI includes, by definition, funds from at least two countries, at least two different price deflators should be considered.
- Some FDI is used to acquire investments in intangible or financial assets, the value of which is difficult to measure.

All these complexities and difficulties make it difficult to construct a price index for FDI that addresses both exchange-rate and price fluctuations.

What, then, is the most appropriate index to be used? Since inward FDI takes place in a host country, one candidate is the investment deflator (the implicit price index of capital formation in that country's national accounts). However, since FDI is also a cross-border flow, discounting nominal FDI by the investment deflator may result in an overestimation because the exchange rate used to convert foreign-currency denominated FDI into local currency may already reflect the inflation rate of the host country concerned. If either the investment deflator or the GDP deflator is applied to FDI inflows received by some Latin American countries during the period of hyper-inflation, the revalued FDI flows turn out to have unrealistically high levels. ¹⁶

Export- and import-price indexes incorporate, by definition, fluctuations in exchange rates, as well as price changes of the selected goods and services used to construct them. Unlike investment or GDP deflators, these price indexes can avoid overvaluing FDI flows in the case of hyperinflation. However, these indices cover only goods and services -- not assets, which is what TNCs purchase when they invest in a country.

Bearing all these problems in mind, revaluing nominal FDI inflows using a different import-price index of each country and 1987 as the base year makes inflows larger than their nominal level prior to 1990 and smaller after 1990 (figure I.16). Expressed in real terms, FDI flows declined in 1972 and 1990 (and also during 1975-1976, 1982-1983 and 1991). In nominal terms, FDI inflows declined in 1985, but not in real terms. In general, growth rates of real FDI flows are more moderate than those of nominal FDI flows (annex table A.6). Not surprisingly, real FDI flows during the 1970s and early 1980s did not grow as much as nominal flows, or as real flows during the late 1980s. This supports the general view that FDI has grown rapidly only since the mid-1980s. The real value of global FDI inflows in 1996 was only twice as large as the 1987 level, compared with 2.5 times if FDI is expressed in nominal terms. The distribution of FDI inflows between developed and developing countries does not show remarkable differences between real and nominal FDI flows. The relative importance of developing countries remains the same when FDI inflows are expressed in real terms.

Revaluing FDI stocks in real terms is even more complicated. Data on FDI stocks collected by countries are, in most cases, unadjusted book values. They reflect the prices of assets etc., at the time when the investment was made. Before making any attempt to estimate constant-price

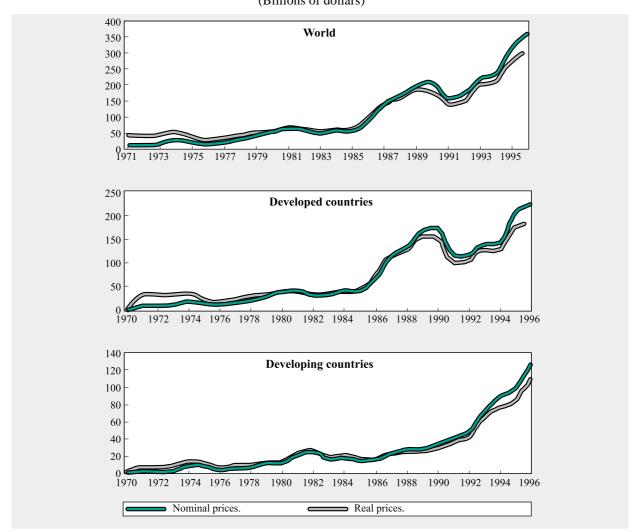


Figure I.16. FDI inflows in nominal and real prices,^a 1971-1996 (Billions of dollars)

Source: UNCTAD, FDI/TNC database.

FDI stock, it is therefore necessary to adjust book values to current-period prices. Australia and the United States have to date estimated FDI stocks in current prices. The United States Department of Commerce has revalued historical-cost (valued in the prices at the time of acquisition) FDI positions on the basis of current costs and market values. This estimation, however, does not show FDI stocks in real prices, but only reflects current-period prices of direct investment positions.

In the absence of a method of estimating real FDI stocks, the accumulation of real FDI flows is used here as a proxy. One way of doing this is to revalue changes in FDI stocks between consecutive years by a market-value index (e.g., a share-price index) and then to adjust these values using constant exchange rates (Gray and Rugman, 1994). The revalued FDI stock is an accumulation of adjusted flows. Another way is to cumulate real FDI flows adjusted by the import-price index as calculated

^a Deflated by the unit value index of imports, with 1987 as the base year.

above. Cumulating real FDI flows for the period 1970-1996 gives rise to a real FDI stock valued at \$2.8 trillion in 1996, only 0.1 per cent lower than the value of the FDI stock calculated by cumulating nominal FDI flows. Neither method, however, takes into account the components of changes in the FDI stock, such as gross investments, retirements and depreciation (Bellak and Cantwell, 1996). Both methods of estimation give only rough approximations of the size of real FDI stocks.

2. The financing of investment in foreign affiliates

International production -- the location of value-added activities in a foreign country under the governance of TNCs -- comprises an integrated package of capital, technology, skills, managerial practices, trade links etc. that TNCs control when they produce abroad. This section attempts to estimate the *actual size* of annual investment abroad by TNCs -- the capital component of international production -- bearing in mind that this is only one element of international production and by itself does not denote the importance of that production in the world economy.

As discussed in the previous section, FDI data -- the commonly used measure of direct investment abroad by TNCs -- suffer from valuation and other data-related problems. They also do not reflect the actual size of investment in foreign affiliates from other, fundamental, perspectives. Specifically, they include funds involving only a TNC (parent firm and foreign affiliates) and exclude funds for investment raised outside the TNC. Given the many external sources of funds available to TNCs, funds used in direct investment projects that have been raised outside a TNC are likely to be quite significant. All this has considerable implications when assessing the importance of the capital component of international production in relation to domestic investment or other economic variables.

Direct investment abroad, as currently measured by FDI data, is estimated on the basis of financial transactions between parent firms and their foreign affiliates in the form of equity or loans, or earnings of affiliates that are not repatriated. Specifically, it comprises equity capital that includes capitalized investment "in kind" (e.g., capital goods), intra-firm loans (loans from parent firms to foreign affiliates or from foreign affiliates to parent firms) and reinvested earnings of foreign affiliates (earnings that are retained and not repatriated, usually, but not necessarily, invested in direct investment projects in the host country). But foreign affiliates can be financed from other sources as well. Among these are: loans obtained by parent firms or foreign affiliates from commercial financial institutions in host or third countries; funds raised by parent firms or foreign affiliates in host or third country capital markets; and loans received by foreign affiliates from home country financial institutions.

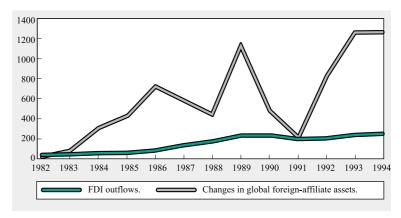
The importance of funds raised from these sources is apparent from an examination of how the total assets of majority-owned (non-bank) foreign affiliates of United States-based TNCs are financed (annex table A.7). In 1994, the latest year for which a complete breakdown is available, parent firms financed slightly more than one-third of the value of the total assets of their foreign affiliates. (That share includes the parent firms' share of their affiliates retained earnings.) Most of these assets were financed by debt instruments: around 30 per cent of the assets was financed by financial institutions located in the country of the foreign affiliate. Retained earnings of foreign affiliates (including the share of owners other than the parent firm) financed 15 per cent of these assets.

This suggests that the value of capital that TNCs mobilize and control abroad annually in direct investment projects can be approximated by looking at year-to-year changes in total assets of foreign affiliates. The value of these assets reflects funds from sources other than the

TNC itself, and as such it gives a more accurate picture of the size of annual investment abroad by TNCs. Changes in worldwide foreign-affiliate assets, estimated on the basis of United States and German data, indicate that annual investment abroad by TNCs are, in some years, considerably above the levels indicated by FDI flows alone (figure I.17). This confirms the picture that emerges from the financial composition of total assets of United States affiliates abroad, namely, that sources of funds other than the TNC itself (parent firm and foreign affiliates) finance nearly two-thirds of foreign-affiliate total assets (annex table A.7).19

Figure I.17. World FDI outflows and changes in global foreign-affiliate assets, a 1982-1994

(Billions of dollars)



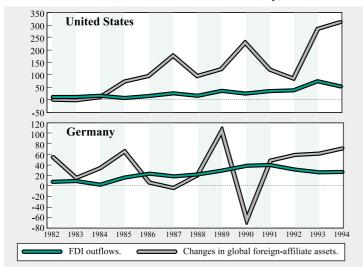
Source: UNCTAD, FDI/TNC database and UNCTAD estimates.

^a Between consecutive years. Global assets are estimated by applying the share of world FDI stock accounted for by Germany and the United States to the foreign-affiliate assets of TNCs based in these countries. The data are for non-bank foreign affiliates only.

For the United States alone, the value of changes in majority-owned (non-bank) foreign-

Figure I.18. United States and German FDI outflows and changes in foreign-affiliate assets^a between consecutive years, 1982-1994

(Millions of national currency)



Source: UNCTAD, based on United States, Department of Commerce, U.S. Direct Investment Abroad: Operations of U.S. Parent Companies and their Foreign Affiliates (Washington, D.C.: USGPO), various issues; and Deutsche Bundesbank, Kapitalverflechtung mit dem Ausland (Frankfurt am Main: Deutsche Bundesbank), various issues.

- ^a Non-bank foreign affiliates only.
- b Data include assets of credit institutions until 1988.

affiliate total assets between consecutive years is considerably higher (and fluctuates more) than the value of FDI outflows (figure I.18). The change in the value of foreign-affiliate assets between 1992 and 1993, for example, was around \$290 billion, almost four times the level of the 1993 FDI outflow. The same ratio applies to Germany, where FDI outflows are considerably smaller than the value of changes in foreign-affiliate assets (figure I.18).

The value of changes in global foreign-affiliate assets between consecutive years, a proxy for the annual value of global investment abroad regardless of how it is financed, suggests that the actual size of investment in foreign affiliates is considerably higher than the size of FDI outflows. This is corroborated further by looking at country-level information on the actual size of funds obtained by

TNCs from various sources for financing their foreign affiliates. (With the exception of limited information available for the United States and Japan, no other country provides such data.) As an illustration for the United States, if all means of financing foreign affiliates are taken into account, the size of investment abroad in 1994 would be more than \$200 billion, around four times higher than the size of FDI outflows (\$51 billion) reported in that year (table I.6). (Virtually the same ratio applies to inward FDI in the United States: the reported inflows of \$50 billion in 1994 compare with \$170 billion of the estimated actual size (United States, Department of Commerce, 1996b).) Interestingly, the value of funds raised in host countries (e.g., loans from commercial banks) is slightly more than the size of all FDI outflows, while the value of funds raised in countries other than the home or host, is more than twice as high as the level of all FDI outflows.

Table I.6. Financing direct investment abroad by United States and Japanese TNCs, 1994 and 1992

(Millions of dollars)

	United States, 1994	Japan, 1992 a
Transnational corporations	51 007 ^b	16 925
Equity outflows	12 666	17 166
Reinvested earnings	31 730	
Intra-firm loans	6 611	- 238
Other home-country sources	-22 808 ^c	4 088 ^d
Host-country sources	59 394 ^c	3 041 ^e
Sources in other countries	117 647 ^c	43 222 ^f
Total	205 240	67 276

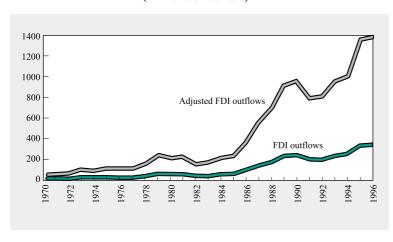
Sources: UNCTAD, based on United States, Department of Commerce, 1997; Japan, MITI, 1994; and UNCTAD, FDI/TNC database.

- ^a Fiscal year.
- b "In kind" capital contributions of parent firms to their affiliates and conversions of intra-company debt to equity are included in the equity component of FDI. Excluding the finance industry of the Netherlands Antilles.
- ^c Calculated as changes in financial position of foreign affiliates between consecutive years. The data are for majority-owned non-bank foreign affiliates only. Therefore, the data are not strictly comparable to those in the first four lines which are based on all foreign affiliates.
 - d Long-term loans from non-Japanese parent firms.
- ^e Long-term loans from local banks and affiliates of Japanese banks in host country.
- f Debentures and corporate bonds in home, host or other country plus long-term loans in other countries.

This underlines the importance of sources other than those captured by FDI data.

Figure I.19. Actual flows of investment abroad by TNCs, 1970-1996

(Billions of dollars)



Source: UNCTAD, FDI/TNC database.

Likewise, the capital mobilized by Japanese TNCs for their foreign affiliates in 1994, at around \$67 billion, is about four times bigger than the FDI outflow figure suggests. Although the country of origin of sources of investment is less clear cut than for the United States, funds raised in host countries are nearly twice as large as the value of FDI outflows. Sources of funds other than those in the home and host country are also significant, although for Japan their value might be misleading in that they include funds sourced in the home or host country.

The ratio of annual investment in foreign affiliates, using all capital sources of FDI outflows for both Japan and the United States, to FDI flows as reported in balance of payments, has been stable over time, at approximately 4 to 1. On the assumption that this ratio applies to all countries, the actual value of investment made by TNCs abroad -- the capital component of international production -- can, therefore, be estimated to be in the neighbourhood of \$1.4 trillion in 1996 (figure I.19). This estimate is in line with the earlier estimate calculated on the basis of changes in total foreign-affiliate assets between consecutive years (figure I.17).

Although estimates of the size of actual investment in foreign affiliates, regardless of how it is being financed, suffer from various drawbacks (e.g., valuation issues in the case of foreign-affiliate assets; the recognition that developing-country TNCs may rely more on their parent firms for capital than on sources located in the host country or other countries), they point to the fact that the level of investment in foreign affiliates by TNCs is significantly higher than that reflected by FDI outflow data alone. This implies that foreign investment by TNCs is more important in today's world economy than that shown by the various conventional indicators (see section A.1).

C. The largest transnational corporations

1. Highlights of the world's top 100 and the top 50 developing-country transnational corporations

For the fifth consecutive year, Royal Dutch Shell (United Kingdom/Netherlands) topped the list of the largest 100 TNCs worldwide ranked by foreign assets (table I.7).²⁰ Daewoo Corporation (Republic of Korea) led the largest 50 TNCs originating from developing countries for the second consecutive year (table I.8). The largest TNCs control the bulk of FDI stock in many major home countries: in most of the countries for which data are available, the top 25 outward investors control over a half of the outward FDI stock (table I.9). For smaller home countries the share controlled by the top 50 TNCs may be over 70 per cent.

For the first time, the list of the top 100 TNCs includes two TNCs from developing countries -- Daewoo Corporation, a diversified firm with activities in many industries, and Petroleos de Venezuela S.A., a state-owned petroleum firm. Their rank in the top 100 TNCs list was 52 and 88, respectively. On average, a member of the top 100 club is about 10 times larger, in terms of total assets, than a member of the top 50 club.

- Foreign assets. Total foreign assets of the top 100 TNCs amounted to \$1.7 trillion in 1995, compared to \$79 billion total foreign assets of the top 50 TNCs based in developing countries. Between 1993 and 1995, ²¹ foreign assets of the top 100 TNCs increased by 30 per cent; the corresponding increase for the top 50 developing-country TNCs was 280 per cent. ²² The ratio of foreign to total assets increased from 0.34 in 1993 to 0.41 in 1995 (the corresponding share for the top 50 developing-country TNCs rose from 0.1 to 0.17), highlighting the continuous trend towards increased transnationality (table I.10).
- Foreign sales. Total foreign sales of the top 100 TNCs amounted to \$2 trillion in 1995 (foreign sales of the top 50 developing-country TNCs were \$120 billion). Foreign sales of the top 100 TNCs increased by 26 per cent between 1993 and 1995. The ratio of foreign-to-total sales increased from 0.43 in 1993 to 0.48 in 1995 and from 0.21 to 0.34 for

Table 1.7. The top 100 TNCs ranked by foreign assets, 1995 (Billions of dollars and number of employees)

Ranking by	ıg by:				Assets	ets	Sa	Sales	Emplo	Employment	
For assets Index ^a	s Index a	Corporation	Economy	Industry ^b	Foreign	Total	Foreign	Total	Foreign	Total	Index ^a
1	17	Shell, Royal Dutch °	United Kingdom/Netherlands	Oil, gas, coal and rel. services	79.7	117.6	80.6	109.9	81000	104000	73.0
2	83	Ford Motor Company	United States	Automotive	69.2	238.5	41.9	137.1	103334 °	346990	29.8
33	87	General Electric Company	United States	Electronics	69.2	228.0	17.1	70.0	72000	222000	29.1
4	22	Exxon Corporation	United States	Oil, gas, coal and rel. services	2.99	91.3	6.96	121.8	44000	82000	8.89
S	98	General Motors	United States	Automotive	54.1	217.1	47.8	163.9	252699	745000	29.3
9	27	Volkswagen AG	Germany	Automotive	49.8	58.7	37.4	61.5	114000	257000	63.4
7	43	IBM	United States	Computers	41.7	80.3	45.1	71.9	112944	225347	54.9
∞	78	Toyota Motor Corporation	Japan	Automotive	36.0	118.2	50.4	111.7	33796	146855	32.9
6	1	Nestlé SA	Switzerland	Food	33.2	38.2	47.8	48.7	213637	220172	94.0
10	71	Mitsubishi Corporation	Japan	Diversified	₽:	79.3	51.0	124.9	3859	9241	39.5
11	18	Bayer AG	Germany	Chemicals	28.1	31.3	19.7	31.1	78000	142900	69.3
12	9	ABB Asea Brown Boveri Ltd.	Switzerland	Electrical equipment	27.2	32.1	29.4	33.7	196937	209637	9.88
13	99	Nissan Motor Co., Ltd.	Japan	Automotive	26.9	63.0	24.9	56.3	• 56209	139856	43.5
14	40	Elf Aquitaine SA	France	Oil, gas, coal and rel. services	26.9	49.4	27.8	42.5	40650	85500	55.8
15	32	Mobil Corporation	United States	Oil, gas, coal and rel. services	26.0	42.1	48.4	73.4	26300	50400	0.09
16	20	Daimler-Benz AG	Germany	Automotive	26.0	66.3	45.6	72.1	20689	310993	41.5
17	∞	Unilever f	United Kingdom/Netherlands	Food	25.8	30.1	42.7	49.7	276000	307000	87.1
18	6	Philips Electronics N.V.	Netherlands	Electronics	25.2	32.7	38.4	40.1	221000	265100	85.4
19	10	Roche Holding AG	Switzerland	Pharmaceuticals	24.5	30.9	12.0	12.5	40422	50497	85.1
20	54	Fiat Spa	Italy	Automotive	24.4	59.1	26.3	40.6	95930	248180	48.2
21	59	Siemens AG	Germany	Electronics	24.0	57.7	35.5	62.0	162000	373000	47.4
22	33	Sony Corporation	Japan	Electronics	ə	47.6	30.3	43.3	00006	151000	59.1
23	30	Alcatel Alsthom	France	Electronics	22.7	51.2	24.2	32.1	117400	191830	60.3
24	53	Hoechst	Germany	Chemicals	21.9	36.7	13.4	36.3	100035 °	161618	48.3
25	89	Renault SA	France	Automotive	21.2	44.6	19.1	36.8	40066	139950	42.7
26	62	Philip Morris	United States	Food/tobacco/beverages	19.5	53.8	27.7	66.1	88201	151000	45.5
27	24	British Petroleum	United Kingdom	Oil, gas, coal and rel. services	19.3	28.9	34.8	57.0	41350	58150	66.3
28	29	Du Pont (E.I.) De Nemours	United States	Chemicals	17.8	37.3	20.6	42.2	35000	105000	43.3
50	36	BASF AG	Germany	Chemicals	17.6	29.3	23.5	32.3	42850	106565	57.7
30	4	Seagram Company Ltd.	Canada	Beverages	17.5	21.4	9.5	6.7	14447 °	16100	89.7
31	23	B.A.T. Industries Plc	United Kingdom	Tobacco	17.5	55.1	29.3	36.3	155162	170412	6.79
32	42	Mitsui & Co., Ltd.	Japan	Diversified	16.6	68.5	9.99	163.3	3696 °	11378	32.5
33	28	Rhone-Poulenc SA	France	Chemicals/pharmaceuticals	16.1	27.6	12.4	17.0	47009	82556	62.8
34	38	BMW	Germany	Automotive	15.6	28.5	22.5	32.2	52416 °	115763	26.7
35	46	Honda Motor Co., Ltd.	Japan	Automotive	15.5	33.7	23.5	39.6	50937 °	00896	52.6
36	92	Itochu Corporation	Japan	Trading	15.1	72.0	45.1	186.6	2649	9994	23.9
37	56	TOTAL SA	France	Oil, gas, coal and rel. services	15.0	28.4	19.6	27.2	30215	53536	60.5
38	34	Ciba-Geigy AG	Switzerland	Chemicals	14.9	26.5	7.5	17.5	63674	84077	58.2
39	81	Nissho Iwai Corporation	Japan	Trading	₽:	47.2	29.5	89.1	2103 °	6684	31.5
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Himachi, Ltd. Anjan	Ranking by:	g by:				Ass	Assets	Sa	Sales	Empl	Employment	
News Corporation Ltd.	For assets	Index a	Corporation	Economy	Industry ^b	Foreign	Total	Foreign	Total	Foreign	Total	Index ^a
89 BN Grows Corporation Ltd Assistation Assistation 14.5 24.1 30.0 200.0 36 Chevan Carporation Hulped States Oil, gas, coul and rel. services 1.8 34.2 11.9 36.2 124.4 9.1 Marcheni Carporation United States Chemicals 13.4 7.10 4.28 11.2 36.2 124.3 13.4 11.9 36.2 124.3 36.2 124.3 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 1	40	95	Hitachi, Ltd.	Japan	Electronics	14.7	102.7	20.5	94.7	80000	331673	20.0
89 EM Group Initial states Oil, gas, coal and rel, services 3.5 12.4 37.3 15713 39 Dow Chemical Company United States Oil, gas, coal and rel, services 13.8 23.6 11.2 30.2 2188 31 Hawherlevi Company United States Chemicals 12.2 24.4 17.6 31.5 31.6 11.9 30.2 2188 31 Hawherlevi Company United States Computes 12.2 24.9 17.5 31.4 20.0 21.8 35.5 10.440 22.0 40.0 40.0 40.0 40.0 40.0 40.0 40.0 40.0 40.0 40.0 40.0 40.0 40.0 40.0 40.0 40.0 40.0 40.0 40.0 40.0 40.0 40.0 40.0 40.0 40.0 40.0 40.0 40.0 40.0 40.0 40.0 40.0 40.0 40.0 40.0 40.0 40.0 40.0 40.0 40.0 40.0	41	16	News Corporation Ltd.	Australia	Media	14.5	24.1	9.0	10.3	22062 °	30000	73.5
76 Chemical Company United States Ohl, gas, coal and rel. services 13.8 43.3 11.9 56.3 1244 51 Dow Cherwincid Compount United States Chemicals 13.4 7.10 4.28 114.9 2307 51 Hewielt-Prefacted Compount United States Only gas, coal and rel. services 12.2 24.9 18.2 35.6 10.400 45 Reviet Prefacted Compount United States Only gas, coal and rel. services 12.1 2.7 8.7 31.4 5.30 10.400 10.400 10.400 10.400 10.400 10.400 10.400 10.400 10.400 10.400 10.400 10.400 10.400 10.400 10.400 10.400 10.400 10.400 10.400 10.400 10.400 10.400 10.400 10.400 10.400 10.400 10.400 10.400 10.400 10.400 10.400 10.400 10.400 10.400 10.400 10.400 10.400 10.400 10.400 10.400 10.400 <t< td=""><td>42</td><td>68</td><td>ENI Group</td><td>Italy</td><td>Oil, gas, coal and rel. services</td><td>₽:</td><td>55.9</td><td>12.4</td><td>37.3</td><td>15713 °</td><td>86422</td><td>25.6</td></t<>	42	68	ENI Group	Italy	Oil, gas, coal and rel. services	₽:	55.9	12.4	37.3	15713 °	86422	25.6
91 Manubeni Company United States Chemicals 134 7.0 112 20.2 23185 91 Manubeni Comporation Japan Trading Trading 13.4 17.6 11.2 24.4 17.6 11.8 11.9 14.0 11.8 14.4 17.6 11.6 23.0 23.07 9.0 4.0 4.8 Proceed on Incorporated United States Origins coal and red services 12.1 6.2.4 17.6 24.4 17.6 23.0 23.0 4.0 4.8 Proceed on Incorporation United States Diversified 12.1 6.2.4 18.2 23.0 11.6 23.0 23.0 13.1 6.0 13.1 6.0 19.9 14.0 25.0 19.0 14.0 15.0 19.9 14.0 13.2 13.1 13.0 13.1 13.0 13.1 13.1 13.0 13.1 13.0 13.1 13.2 13.0 13.1 13.2 14.0 14.0 13.1 13.2 14.0 14.0 </td <td>43</td> <td>92</td> <td>Chevron Corporation</td> <td>United States</td> <td>Oil, gas, coal and rel. services</td> <td>13.8</td> <td>34.3</td> <td>11.9</td> <td>36.3</td> <td>12434</td> <td>43019</td> <td>34.0</td>	43	92	Chevron Corporation	United States	Oil, gas, coal and rel. services	13.8	34.3	11.9	36.3	12434	43019	34.0
91 Hambelli Corporation Trading 130 4.2 14.9 2307* 91 Hewleth-bird Corporation Japana Trading 13.4 4.1 4.2 14.9 2307* 98 Hewleth-Deckard Company United States Olt, gas, coal and rel, services 12.2 24.9 18.2 35.6 10.406 48 AVEXT Corp. United States Diversified 12.1 62.7 8.1 51.4 53.5 10.406 55 Davenor Corporation Inpublic of Korea Diversified 11.0 2.2 8.9 8.2 5.0 6.0 21 Saint-gobal Name France Construction 11.7 18.6 9.6 13.0 6.0 21 Saint-gobal Name France Construction 11.1 2.8 8.2 9.6 13.0 4.0473 21 Saint-gobal Name France Construction 11.1 18.6 9.6 13.0 6.0 4.0473 1.0 4.0473 1.0	44	39	Dow Chemical Company	United States	Chemicals	13.5	23.6	11.2	20.2	22185	39500	56.2
51 Hewlett-Packard Compuny United States Computed 1.2 24.4 17.6 31.5 4.040 9.0 98 ATRET Corp. 21.8 Texaco Incorporated United States Onligas. coal and et. services 12.2 24.4 18.2 35.4 51.4 35.0 9.0 4.8 Robert Bosch Gunble United States Diversified 12.1 22.1 8.7 51.4 52.0 66000 1.2 50.0 4.8 Robert Bosch Gunble 2.0 1.0 8.9 8.2 50.0 1.0 50.0 58.4 18.2 5.0 1.0 8.9 8.2 2.0 1.0 8.0 1.0 8.0 1.0 4.0 1.0 8.0 1.0 8.0 1.0 4.0 1.0 8.0 1.0 1.0 9.0 1.1 8.3 1.0 4.0 1.0 9.0 1.1 1.0 8.0 1.0 4.3 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	45	91	Marubeni Corporation	Japan	Trading	13.4	71.0	42.8	144.9	2307 °	9533	24.2
61 Texaco Interception of United States Ohl, gas, coal and ref. services 12.2 24.9 18.2 35.6 10460 98 AfkET Cop. 10 memorporated United States Toda 12.1 62.7 8.7 51.4 52.0 6000 18.8 35.6 10460 33.4 62000 48.8 18.0 36.0 18.0 36.0 18.0 36.0 36.0 18.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 </td <td>46</td> <td>51</td> <td>Hewlett-Packard Company</td> <td>United States</td> <td>Computers</td> <td>13.0</td> <td>24.4</td> <td>17.6</td> <td>31.5</td> <td>42049</td> <td>102300</td> <td>50.0</td>	46	51	Hewlett-Packard Company	United States	Computers	13.0	24.4	17.6	31.5	42049	102300	50.0
98 PATRAT Comp. United States Telecommunications 12.1 62.7 8.7 51.4 543.1 53.4 62000 1.8 4.5 RATRAT Comp. United States Diversified 1.2 28.1 16.8 3.3.4 62000 1.8 4.5 Robert Bosch Comput. 1.2 1.8 1.9 1.4 2.8 3.4 1.5.2 3.4 1.5.2 3.4 1.5.2 3.4 1.5.2 3.4 1.5.2 3.4 1.5.2 3.4 6.000 1.1 3.4 4.8 3.4 6.000 1.1 3.4 4.8 3.4 1.5 3.4 6.000 1.1 3.4 4.8 3.4 4.8 3.4 4.8 3.4 4.8 3.4 4.8 3.4 4.8 3.4 4.8 3.4 4.8 3.4 4.8 3.4 4.8 3.4 4.8 3.4 4.8 3.4 4.8 3.4 3.5 4.9 3.2 4.9 3.4 4.9 3.2 4.9 3.2	47	61	Texaco Incorporated	United States	Oil, gas, coal and rel. services	12.2	24.9	18.2	35.6	10460	28247	45.8
48 Procete & Camble Company United States Diversified 12.1 28.1 16.8 33.4 62000 85 Sumitono Corporation Indiana Automotive "" 19.9 14.0 25.0 6000 86 Sumitono Corporation Republic of Korea Diversified 11.9 8.9 4.0 15.0 60.7 8.4 15.0 60.0 18.0 60.0 18.0 60.0 18.0 60.0 18.0 60.0 18.0 60.0 18.0 60.0 18.0 60.0 18.0 60.0 18.0 60.0 18.0 60.0 18.0 60.0 18.0 60.0 18.0 60.0 18.0 60.0 18.0 60.0 18.0 60.0 18.0 60.0 18.0 60.0 18.0 60.0 18.0 60.0 18.0 60.0 18.0 60.0 18.0 60.0 18.0 60.0 18.0 60.0 18.0 60.0 18.0 60.0 18.0 60.0 18.0 6	48	86	AT&T Corp.	United States	Telecommunications	12.1	62.7	8.7	51.4	54371 °	300000	18.1
45 Robert Bosch CninkH Germany Automotive 19.9 14.0 25.0 60.0 5.6 Suminoor Ocrporation Japan Trading 1.2 50.7 58.4 15.2 6.0 5.6 Dawso Corporation Republic of Korea Diversified 11.9 28.9 8.2 26.0 28100 3 Holderbank Financiere Switzerland Construction 11.5 12.8 6.5 7.0 40473 4 Cable and Wireless Pf United Kingdom Construction 11.1 7.4 8.5 8.5 30466 7 Hauson Pic United Kingdom Construction 11.1 7.4 8.5 15.8 6.4 1073 2.0 6.4 1073 2.0 8.5 10.4 6.7 10.4 6.7 10.4 6.7 10.4 6.7 10.4 6.7 10.4 6.7 10.4 6.7 10.4 6.7 10.4 6.7 10.4 6.7 10.4 6.5	49	48	Procter & Gamble Company	United States	Diversified	12.1	28.1	16.8	33.4	62000	99200	51.9
85 Sumitomo Octoporation Japan Trading 12.0 8.9. 8.2 2.6. 8.9. 21 Sainteono Corporation Republic of Korea Diversified 11.7 18.6 9.6 1.5. 67064 21 Saintegobali SA France Construction 11.7 18.6 9.6 1.5 0.40473 7 Matsushita Electric United Kingdom Telectronics 11.1 75.6 28.9 64.1 107330 2.9 9 Hanson Ple United Kingdom Telectronics 11.1 75.6 28.9 64.1 107330 2.0 15 Volvo AB Sweeden Automotive 10.7 12.4 15.0 16.3 407129 5 Sectrolity AB Sweeden Automotive 10.7 12.4 15.0 16.3 407129 5 BCE Inc. Comparation United States Description of the comparations 10.7 12.4 15.0 11.1 11.4 12.5 11.8	50	45	Robert Bosch GmbH	Germany	Automotive	₽:	19.9	14.0	25.0	00099	158372	52.7
56 Dawcoo Corporation Republic of Korea Diversified 11.9 28.9 8.2 5.0 2810 21 Saint-gobain SA France Construction 11.7 18.6 9.6 13.5 65.7 70.0 40473 14 Cabbe and Wireless Pic United Kingdom Telecommunication 11.2 13.8 5.9 8.5 3.0466 59 Hanson Pic United Kingdom Construction 11.1 75.6 2.9 64.1 107330 2 69 Hanson Pic United Kingdom Construction 11.1 75.6 2.8 64.1 107330 2 15 Neclon AB Sweden Electronics 11.1 75.6 2.8 15.8 27.034 3 3 3 3 3 3 44.1 17.3 3 3 15.8 27.034 3 3 3 3 3 3 4 4 2.0 2.8 1.0 3 3 1.1	51	85	Sumitomo Corporation	Japan	Trading	12.0	50.7	58.4	152.5	o	11200 €	29.5
21 Sainte-gobain SA France Construction 11.7 12.5 6.5 7.0 40473 3 Holderbank Financiere Swizzerland Construction 11.2 12.5 6.5 7.0 40473 3 Holderbank Financiere Swizzerland Construction 11.1 75.6 28.9 64.1 10730 7 Hanson Ple United Kingdom Clostruction 11.1 37.4 8.5 15.8 27.04 5 Hanson Ple United Kingdom Clostruction 10.7 12.4 15.0 16.3 37.31 887.7 5 Kerx Corporation United Kingdom Automotive 10.7 20.7 27.7 7.8 33.0 887.7 8 Misubishi Motors Corporation United Kingdom Publishing and printing 9.6 10.0 5.7 12.4 450.0 45978 9 Misubishi Motors Corporation United Kingdom Publishing and printing 9.5 10.4 2.0 3.0 45978	52	99	Daewoo Corporation	Republic of Korea	Diversified	11.9	28.9	8.2	26.0	28100	39920	47.7
3 Holderbank Financiere Switzerland Construction 11.5 13.8 5.9 8.5 7.0 40473 7.7 Aususchita Electric United Kingdom Telecronnunication 11.1 75.6 28.9 6.5 7.0 40473 7.7 Matsuschita Electric United Kingdom Construction 11.1 75.6 28.9 6.4.1 70530 5.5 Hanson Ple United Kingdom Construction 10.7 12.4 15.0 25.6 407129 5.5 Sector Corporation United States Deteronics 10.2 27.7 21.8 25.6 407179 8.2 Mistabishi Motors Corp. Japan Automotic and printing on the corporation United States Publishing and printing on the corporation 10.1 2.7 7.8 33.0 887.2 9.0 Annoco Corporation United States Orbhishing and printing on the corporation United States Orbhishing and printing on the corporation United States 0.1 2.7 2.8 3.0 8.2 3.	53	21	Saint-gobain SA	France	Construction	11.7	18.6	9.6	13.5	67064	89852	69.7
14 Cable and Wireless PIC United Kingdom Telecommunication 11.1 75.6 28.9 64.1 10730 77 Mausushitz Electric Japan Electronics 11.1 75.6 28.9 64.1 10730 79 Hansus Plc United Kingdom Electronics 11.1 75.6 28.9 64.1 10730 5 Acrox Corporation United States Adunonive 10.7 20.7 21.8 25.6 67179 5 Acrox Corporation United States Adunonive 10.2 28.4 10.7 18.1 46000 11.9 6 BCE Inc. Canada Adunonive 10.2 28.4 10.7 18.1 46000 11.9 7 Acrox Corporation United States Publishing and printing 9.6 10.0 6.7 7.2 40000 9 Amoor Corporation United States Publishing and printing 9.6 10.7 1.4 1.0 1.4 1.0 1.2 1.0 <td>54</td> <td>3</td> <td>Holderbank Financiere</td> <td>Switzerland</td> <td>Construction</td> <td>11.5</td> <td>12.5</td> <td>6.5</td> <td>7.0</td> <td>40473</td> <td>43923</td> <td>92.1</td>	54	3	Holderbank Financiere	Switzerland	Construction	11.5	12.5	6.5	7.0	40473	43923	92.1
77 Matsushita Electric Japan Electronics 11.1 75.6 28.9 64.1 107530 2 69 Hanson Ple United Kingdom Construction 11.1 37.4 8.5 15.8 26.1 10734 ° 7 Electrolux AB Sweden Automotive 10.7 20.7 21.8 25.6 67129 ° 55 Xerox Corporation United States Machinery and equipment 10.7 20.7 21.8 25.6 67129 ° 82 Misubishi Motors Corp. Japan Automotive 10.2 28.4 10.7 11.8 46010 ° 82 Misubishi Motors Corp. Japan Automotive 10.1 20.7 21.8 25.6 40717 ° 82 Misubishi Motors Corp. Japan Automotive 10.1 24.0 5.7 12.8 33.06 88.7 9 Misubishi Motors Corporation United Kingdom Pool/beverages 9.5 11.4 12.6 49.7 12.8 49.7	55	14	Cable and Wireless Plc	United Kingdom	Telecommunication	11.2	13.8	5.9	8.5	30466	39636	75.6
69 Hanson PIC United Kingdom Construction II.1 37.4 8.5 15.8 27034* 15 Electroux AB Sweden Automotive 10.7 12.4 15.0 16.3 9731 1 55 Xerox Corporation United States Machinery and equipment 10.4 26.0 9.2 16.6 40717* 65 BCE Inc. Canada Automotive 10.1 20.7 18.0 93.0 8587* 74 International Paper United States Paper 10.1 24.0 5.5 19.8 30068 1 Thomson Corporation United States Publishing and printing 96 10.0 6.7 7.2 40000 1 9 Amech Corporation United States Polyleverrages 9.1 4.2 1.0 6.7 7.2 45078* 10 Amech Corporation United States Polyleverrages 9.1 4.2 1.0 6.7 1.0 1.2 1.0 1.2 </td <td>56</td> <td>77</td> <td>Matsushita Electric</td> <td>Japan</td> <td>Electronics</td> <td>11.1</td> <td>75.6</td> <td>28.9</td> <td>64.1</td> <td>107530</td> <td>265538</td> <td>33.5</td>	56	77	Matsushita Electric	Japan	Electronics	11.1	75.6	28.9	64.1	107530	265538	33.5
7 Electrolux AB Sweden Electronics 10.7 12.4 15.0 16.3 97351 1 55 Volvo AB Sweden Automotive 10.7 20.7 1.8 2.6 67129 65 BCE Inc. Canada Thedecommunications 10.2 20.7 1.8 2.6 407129 82 Misubisti Motors Corp. Japan Automotive 10.2 27.7 7.8 33.0 8587° 7 Incanadional Paper United States Paper Poblishing and printing 96 1.7 7.2 40000 19 Grand Metropolitan Plc United Kingdom Food/beverages 9.5 17.5 11.4 12.6 45978° 90 Amoco Corporation United States Mechanical rubber goods 9.1 29.8 6.7 11.0 8877 14.0 18.0 8887 13 Grand Metropolitan Plc United Kingdom Pharmaceuticals 8.4 10.3 11.1 12.1 12.0 12.2 <td>57</td> <td>69</td> <td>Hanson Plc</td> <td>United Kingdom</td> <td>Construction</td> <td>11.1</td> <td>37.4</td> <td>8.5</td> <td>15.8</td> <td>27034 °</td> <td>65000</td> <td>41.6</td>	57	69	Hanson Plc	United Kingdom	Construction	11.1	37.4	8.5	15.8	27034 °	65000	41.6
15 Volvo AB Sweden Automotive 107 20.7 21.8 25.6 67129 55 Serox Coporation United States Machinery and equipment 10.4 26.0 9.2 16.6 40717 * 82 Misubishi Motors Corp. Japan Automotive 10.2 27.7 7.8 33.0 8887 * 74 International Paper United States Publishing and printing 9.6 10.0 5.5 19.8 30.068 90 Amoco Corporation United States Publishing and printing 9.6 10.0 5.7 7.2 40000 90 Amoco Corporation United States Publishing and printing 9.6 10.0 6.7 7.2 40000 90 Amoco Corporation United States Oli, gas, coal and rel. services 9.1 29.8 6.7 11.4 10.9 13.0 8872 13 Giaxo Wellcome Plc United States Recreation 8.4 13.2 11.1 12.1 4039	58	7	Electrolux AB	Sweden	Electronics	10.7	12.4	15.0	16.3	97351	112300	88.3
55 Xerox Corporation United States Machinery and equipment 10.4 26.0 9.2 16.6 40717° 85 BCE Inc. Canada Telecommunications 10.2 28.4 10.7 18.1 46000 1 82 Misubishi Motors Corp. Japan Automotive 10.1 27.7 7.8 33.0 887° 74 International Paper United States Publishing and printing 9.6 10.0 6.7 7.2 40000 19 Grand Metropolitian Plc United States Publishing and printing 9.6 10.0 6.7 7.2 40000 90 Amoco Corporation United States Dil, gas, coal and rel. services 9.1 12.0 13.2 13.0 88.72 94 Nipton Steel Corporation United Kingdom Methanical rubber goods 8.7 14.2 15.6 27.5 8203° 8 Fujitsu Limited Japan Electronics 8.4 13.2 11.1 1.1 1.1 1.1	59	15	Volvo AB	Sweden	Automotive	10.7	20.7	21.8	25.6	67129	79050	73.8
65 BCE Inc. Canada Telecommunications 10.2 28.4 10.7 18.1 46000 1 82 Misubishi Motors Corp. Japan Automotive 10.2 27.7 7.8 33.0 8887° 7 International Paper United States Paper 10.0 6.7 7.2 40000 19 Grand Metropolitan Plc United Kingdom Food/beverages 9.5 17.5 11.4 12.6 45978° 90 Amoco Corporation United States Oil, gas, coal and rel. services 9.1 29.8 6.7 31.0 8872 90 Amoco Corporation United Kingdom Mechanical rubber goods 8.7 14.2 10.9 13.2 35.91 1 90 Amoco Corporation United Kingdom Pharmaceuticals 8.4 40.3 10.3 55.0 25.7 82091° 1 13 Glaxo Well-come Plc United Kingdom Recreation 8.4 40.3 10.3 35.1 50.9 12	09	55	Xerox Corporation	United States	Machinery and equipment	10.4	26.0	9.2	16.6	40717 °	85200	47.8
82 Mitsubishi Motors Corp. Japan Automotive 10.2 27.7 7.8 33.0 8887 s (8887 s) 74 International Paper United States Paper 10.1 24.0 5.5 19.8 30068 9. Thomson Corporation United States Publishing and printing 9.6 11.0 6.7 7.2 49000 9. Amoco Corporation United States Oil, gas, coal and rel. services 9.1 29.8 6.7 31.0 8872 94 Amoco Corporation Inited States Mechanical rubber goods 8.7 14.2 10.9 13.2 35091 s 1 94 Nippon Steel Corporation United Kingdom Phermicals 8.7 14.2 10.9 13.2 35091 s 1 94 Nippon Steel Corporation United Kingdom Phermicals 8.4 40.3 10.3 35.1 40.00 1 88 Fujista Limited Japan Chemicals States Electronics 8.3 22.8 17.0	61	65	BCE Inc.	Canada	Telecommunications	10.2	28.4	10.7	18.1	46000	121000	44.4
74 International Paper United States Paper 10.1 24.0 5.5 19.8 30068 2 Thomson Corporation Canada Publishing and printing 9.6 10.0 6.7 7.2 4000 19 Grand Metropolitan Plc United Kingdom Poolbeverages 9.5 17.5 11.4 12.6 45908 90 Amoco Corporation United States Oil, gas, coal and rel. services 9.7 11.4 12.6 45000 35 Michelin France Mechanical rubber goods 8.7 14.2 10.9 13.2 35091 * 1 94 Nippon Steel Corporation United Kingdom Pharmaceuticals 8.7 14.0 5.6 27.5 8203 * 8203 * 8 Fujisu Limited Jana Becreation Becreation 8.4 40.3 10.3 35.1 40392 8 Fujisu Limited United States Electronics 8.2 15.4 40.3 10.3 35.0 12.0	62	82	Mitsubishi Motors Corp.	Japan	Automotive	10.2	27.7	7.8	33.0	8587 °	28383	30.3
2 Thomson Corporation Canada Publishing and printing 9.6 10.0 6.7 7.2 40000 19 Grand Metropolitan Plc United Kingdom Foodbeverages 9.5 17.5 11.4 12.6 45978 ° 35 Machelin France Mechanical rubber goods 8.7 14.2 10.9 13.2 35091 ° 1 94 Nippon Steel Corporation United Kingdom Metal 4 42.0 5.6 27.5 8203 ° 13 Glaxo Wellcome Plc United Kingdom Pharmaceuticals 8.4 13.2 11.1 12.1 40392 88 Fujitsu Limited Japan Recreation 8.4 40.3 10.3 35.1 5000 1 50 Johnson & Johnson United States Electronics 8.3 22.8 17.0 27.0 63200 1 5 Solvay SA Belgium Computers 8.0 23.9 14.1 21.0 36.0 5 Cano	63	74	International Paper	United States	Paper	10.1	24.0	5.5	19.8	30068	81500	35.6
19 Grand Metropolitan Plc United Kingdom Food/beverages 9.5 17.5 11.4 12.6 45978 ° 90 Amoco Corporation United States Oil, gas, coal and rel. services 9.1 29.8 6.7 31.0 8872 90 Amoco Corporation Japan Methal 4 42.0 5.6 27.5 8201 ° 1 94 Nipon Steel Corporation Japan Methal 4 42.0 5.6 27.5 8201 ° 1 8 Fujitsu Limited Japan Bectronics 8.4 43.2 11.1 12.1 40322 8 Fujitsu Limited Japan Recreation Recreation 8.2 15.4 5.3 9.8 125000 1 57 Motorola, Inc. United States Chemicals/pharmaceuticals 8.2 17.9 9.7 18.8 44300 50 Johnson & Johnson United Kingdom Chemicals/pharmaceuticals 8.2 17.9 9.7 18.8 4300 <td>64</td> <td>7</td> <td>Thomson Corporation</td> <td>Canada</td> <td>Publishing and printing</td> <td>9.6</td> <td>10.0</td> <td>6.7</td> <td>7.2</td> <td>40000</td> <td>44400</td> <td>93.3</td>	64	7	Thomson Corporation	Canada	Publishing and printing	9.6	10.0	6.7	7.2	40000	44400	93.3
90 Amoco Corporation United States Oil, gas, coal and rel. services 9.1 29.8 67 31.0 8872 35 Michelin France Mechanical rubber goods 8.7 14.2 10.9 13.2 35091° 1 94 Nippon Steel Corporation United Kingdom Pharmaceuticals 8.4 42.0 5.6 27.5 8203° 13 Glaxo Wellcome Plc United Kingdom Pharmaceuticals 8.4 40.3 10.3 35.1 50000 1 88 Fujitsu Limited United States Electronics 8.4 40.3 10.3 35.1 50000 1 57 Motorola, Inc. United States Chemicals/pharmaceuticals 8.3 22.8 17.0 27.0 63200 1 50 Johnson & Johnson United States Chemicals/pharmaceuticals 8.3 22.8 17.0 27.0 63200 1 5 Canoro Electronics Inc. Japan Chemicals/pharmaceuticals 8.3 24.1	65	19	Grand Metropolitan Plc	United Kingdom	Food/beverages	9.5	17.5	11.4	12.6	45978 °	63533	72.4
35 Michelin France Mechanical rubber goods 8.7 14.2 10.9 13.2 35091° 1 94 Nippon Steel Corporation Japan Metal * 42.0 5.6 27.5 8203° 1 13 Glaxo Wellcome Plc United Kingdom Pharmaceuticals 8.4 13.2 11.1 12.1 40392 88 Fujitsu Limited Japan Electronics 8.4 40.3 10.3 35.1 50000 1 5 Motorola, Inc. United States Electronics 8.2 15.4 5.3 9.8 125000 2 5 Johnson & Johnson United States Chemicals/pharmaceuticals 8.2 17.9 9.7 18.8 44300 1 5 Solvay SA Belgium Computers * 8.9 8.8 9.3 36608 3 3 3608 44300 1 1 1 1 1 1 1 1 1 1	99	06	Amoco Corporation	United States	Oil, gas, coal and rel. services	9.1	29.8	6.7	31.0	8872	42689	24.3
94 Nippon Steel Corporation Japan Metal * 42.0 5.6 27.5 8203 ° 13 Glaxo Wellcome Plc United Kingdom Pharmaceuticals 8.4 13.2 11.1 12.1 40392 88 Fujitsu Limited Japan Electronics 8.4 40.3 10.3 35.1 5000 1 42 McDonald's Corporation United States Recreation 8.2 15.4 5.3 9.8 125000 2 5 Motorola, Inc. United States Chemicals/pharmaceuticals 8.2 17.9 9.7 18.8 44300 5 Solvay SA Belgium Computers 8.9 8.8 9.3 36608 5 Canon Electronics Inc. United Kingdom Chemicals 7.9 15.3 14.1 21.0 35101 26 BTR Plc United Kingdom Chemicals 7.8 21.8 4.4 12.7 12900 12 Northern Telecom Ltd. Canada <td< td=""><td>29</td><td>35</td><td>Michelin</td><td>France</td><td>Mechanical rubber goods</td><td>8.7</td><td>14.2</td><td>10.9</td><td>13.2</td><td>35091 °</td><td>114397</td><td>58.1</td></td<>	29	35	Michelin	France	Mechanical rubber goods	8.7	14.2	10.9	13.2	35091 °	114397	58.1
13 Glaxo Wellcome Plc United Kingdom Pharmaceuticals 8.4 13.2 11.1 12.1 40392 88 Fujitsu Limited Japan Electronics 8.4 40.3 10.3 35.1 5000 1 42 McDonald's Corporation United States Recreation 8.2 15.4 5.3 9.8 125000° 2 57 Motorola, Inc. United States Chemicals/pharmaceuticals 8.2 17.9 9.7 18.8 44300 5 Solvas SA Belgium Chemicals/pharmaceuticals 8.9 8.8 9.3 36608 5 Solvas SA Belgium Computers 7.9 18.9 8.8 9.3 36608 5 Ganon Electronics Inc. United Kingdom Chemicals 7.9 15.3 11.0 14.0 81329° 1 5 BTR Australia Metals 7.8 21.8 4.4 12.7 12900 12 Northern Telecom Ltd. Canada	89	94	Nippon Steel Corporation	Japan	Metal	₽:	42.0	9.9	27.5	8203 °	27583	23.5
88 Fujitsu Limited Japan Electronics 8.4 40.3 10.3 35.1 50000 1 42 McDonald's Corporation United States Recreation 8.2 15.4 5.3 9.8 125000° 2 57 Motorola, Inc. United States Chemicals pharmaceuticals 8.2 17.9 9.7 18.8 44300 50 Johnson & Johnson United States Chemicals Chemicals d 8.9 8.8 9.3 36608 5 Solvay SA Belgium Computers R.0 23.9 14.1 21.0 35101 26 BTR Plc United Kingdom Chemicals 7.9 15.3 11.0 14.0 81329° 1 80 BHP Australia Metals 7.8 21.8 4.4 12.7 12900 12 Northern Telecom Ltd. Canada Telecommunication 7.7 25.4 8.7 30.4 142008° 84 Pepsico, Inc.	69	13	Glaxo Wellcome Plc	United Kingdom	Pharmaceuticals	8.4	13.2	11.1	12.1	40392	54359	76.5
42 McDonald's Corporation United States Recreation 8.2 15.4 5.3 9.8 125000° 2 57 Motorola, Inc. United States Electronics 8.3 22.8 17.0 27.0 63200 1 50 Johnson & Johnson United States Chemicals Chemicals 8.2 17.9 9.7 18.8 44300 5 Solvay SA Belgium Computers 8.0 23.9 14.1 21.0 35101 26 BTR Plc United Kingdom Chemicals 7.9 15.3 11.0 14.0 81329° 1 80 BHP Australia Metals 7.8 21.8 4.4 12.7 12900 12 Northern Telecom Ltd. Canada Telecommunication 7.7 9.4 9.2 10.7 42689 84 Pepsico, Inc. United States Diversified 7.7 25.4 8.7 30.4 142008° 31 Coca-Cola Company Unit	70	88	Fujitsu Limited	Japan	Electronics	8.4	40.3	10.3	35.1	20000	165000	24.9
57 Motorola, Inc. United States Electronics 8.3 22.8 17.0 27.0 63200 1 50 Johnson & Johnson United States Chemicals pharmaceuticals 8.2 17.9 9.7 18.8 44300 5 Solvay SA Belgium Chemicals ^d 8.9 8.8 9.3 36608 52 Canon Electronics Inc. Japan Computers 8.0 23.9 14.1 21.0 35101 26 BTR Plc United Kingdom Chemicals 7.9 15.3 11.0 14.0 81329 ° 1 80 BHP Australia Metals 7.8 21.8 4.4 12.7 12900 12 Northern Telecom Ltd. Canada Telecommunication 7.7 9.4 9.2 10.7 42689 84 Pepsico, Inc. United States Diversified 7.7 25.4 8.7 30.4 142008 ° 31 Coca-Cola Company United States	71	42	McDonald's Corporation	United States	Recreation	8.2	15.4	5.3	8.6	125000 °	212000	55.5
50 Johnson & Johnson United States Chemicals pharmaceuticals 8.2 17.9 9.7 18.8 44300 5 Solvay SA Belgium Chemicals 4 8.9 8.8 9.3 36608 52 Canon Electronics Inc. Japan Computers 8.0 23.9 14.1 21.0 35101 26 BTR Plc United Kingdom Chemicals 7.9 15.3 11.0 14.0 81329 ° 1 80 BHP Australia Metals 7.8 21.8 4.4 12.7 12900 12 Northern Telecom Ltd. Canada Telecommunication 7.7 9.4 9.2 10.7 42689 84 Pepsico, Inc. United States Beverages 7.5 15.0 12.7 18.0 19238 °	72	27	Motorola, Inc.	United States	Electronics	8.3	22.8	17.0	27.0	63200	142000	47.9
5 Solvay SA Belgium Chemicals d 8.9 8.8 9.3 36608 52 Canon Electronics Inc. Japan Computers 8.0 23.9 14.1 21.0 35101 26 BTR Plc United Kingdom Chemicals 7.9 15.3 11.0 14.0 81329 ° 1 80 BHP Australia Metals 7.8 21.8 4.4 12.7 12900 12 Northern Telecom Ltd. Canada Telecommunication 7.7 9.4 9.2 10.7 42689 84 Pepsico, Inc. United States Beverages 7.5 15.0 12.7 18.0 19238 °	73	20	Johnson & Johnson	United States	Chemicals/pharmaceuticals	8.2	17.9	6.7	18.8	44300	82300	50.3
52 Canon Electronics Inc. Japan Computers 8.0 23.9 14.1 21.0 35101 26 BTR Plc United Kingdom Chemicals 7.9 15.3 11.0 14.0 81329 ° 1 80 BHP Australia Metals 7.8 21.8 4.4 12.7 12900 12 Northern Telecom Ltd. Canada Telecommunication 7.7 9.4 9.2 10.7 42689 84 Pepsico, Inc. United States Diversified 7.7 25.4 8.7 30.4 142008 ° 4 31 Coca-Cola Company United States Beverages 7.5 15.0 12.7 18.0 19238 °	74	S	Solvay SA	Belgium	Chemicals	₽:	8.9	8.8	9.3	36608	38616	9.68
26 BTR Plc United Kingdom Chemicals 7.9 15.3 11.0 14.0 81329 ° 1 80 BHP Australia Metals 7.8 21.8 4.4 12.7 12900 12 Northern Telecom Ltd. Canada Telecommunication 7.7 9.4 9.2 10.7 42689 84 Pepsico, Inc. United States Diversified 7.7 25.4 8.7 30.4 142008 ° 4 31 Coca-Cola Company United States Beverages 7.5 15.0 12.7 18.0 19238 °	75	52	Canon Electronics Inc.	Japan	Computers	8.0	23.9	14.1	21.0	35101	72280	49.6
80 BHP Australia Metals 7.8 21.8 4.4 12.7 12900 12 Northern Telecom Ltd. Canada Telecommunication 7.7 9.4 9.2 10.7 42689 84 Pepsico, Inc. United States Diversified 7.7 25.4 8.7 30.4 142008 ° 4 31 Coca-Cola Company United States Beverages 7.5 15.0 12.7 18.0 19238 °	92	56	BTR Plc	United Kingdom	Chemicals	7.9	15.3	11.0	14.0	81329 °	125065	65.0
12 Northern Telecom Ltd. Canada Telecommunication 7.7 9.4 9.2 10.7 42689 84 Pepsico, Inc. United States Diversified 7.7 25.4 8.7 30.4 142008 ° 4 31 Coca-Cola Company United States Beverages 7.5 15.0 12.7 18.0 19238 °	77	80	BHP	Australia	Metals	7.8	21.8	4.4	12.7	12900	48500	32.3
84 Pepsico, Inc. United States Diversified 7.7 25.4 8.7 30.4 142008 ° 4 31 Coca-Cola Company United States Beverages 7.5 15.0 12.7 18.0 19238 °	78	12	Northern Telecom Ltd.	Canada	Telecommunication	7.7	9.4	9.2	10.7	42689	63715	78.4
United States Beverages 7.5 15.0 12.7 18.0 19238°	79	84	Pepsico, Inc.	United States	Diversified	7.7	25.4	8.7	30.4	142008 °	480000	29.6
	80	31	Coca-Cola Company		Beverages	7.5	15.0	12.7	18.0	19238 °	32000	60.1
												:

(Table I.7, cont'd)

Kankii	Ranking by:				Ass	Assets	Sa	Sales	Employment	'ment	
For. assets Index ^a	s Index ^a	Corporation	Economy	Industry ^b	Foreign	Total	Foreign	Total	Foreign	Total	Index ^a
81	47	Rtz Cra ^g	United Kingdom/ Australia	Mining	7.3	15.8	4.7	9.3	31616	51492	52.5
82	20	Petrofina SA	Belgium	Oil, gas, coal and rel. services	7.3	11.5	15.0	18.7	9262	13653	70.4
83	73	Mannesmann AG	Germany	Metals	7.2	15.8	7.6	22.3	42000	122684	37.9
84	58	Carrefour SA	France	Trading	7.2	13.1	11.2	29.5	51200	102900	47.6
85	11	SCA	Sweden	Paper	7.2	10.2	8.3	9.1	27165	34857	7.67
98	25	Pharmacia & Upjohn, Inc.	United States	Pharmaceuticals	7.2	11.5	4.7	6.9	22893 °	35000	65.4
87	100	Chrysler Corporation	United States	Automotive	7.0	53.3	5.9	53.2	25000	126000	14.7
88	64	Petroleos De Venezuela	Venezuela	Diversified/trading	8.9	40.5	24.5	26.0	13420	20009	4.4 4.4
68	63	Groupe Danone SA	France	Food	6.7	19.0	8.6	16.2	32770 °	73823	44.4
06	46	Sara Lee Corporation	United States	Food	6.7	12.4	7.1	17.7	91439	149085	51.7
91	72	American Home Products	United States	Pharmaceuticals	9.9	21.4	5.4	13.4	23196	64712	35.8
92	96	Toshiba Corporation	Japan	Electronics	6.5	51.8	12.7	47.7	36437 °	186000	19.6
93	26	NEC Corporation	Japan	Electronics	6.3	43.8	11.3	41.1	21059	152719	18.6
94	41	Thomson SA	France	Electronics	6.3	17.9	10.7	14.4	55215	00096	55.6
95	66	GTE Corporation	United States	Telecommunication	6.2	37.0	2.6	20.0	15751 °	106000	14.9
96	93	Atlantic Richfield	United States	Oil, gas, coal and rel. services	6.2	24.0	3.4	15.8	5168 °	22000	23.5
26	37	ICI	United Kingdom	Chemicals	6.1	14.7	9.5	15.9	45900	64800	57.4
86	09	United Technologies	United States	Aerospace	0.9	16.0	10.3	22.8	99700	170600	47.0
66	75	RJR Nabisco Holdings Corp.	United States	Food and tobacco	5.8	31.5	4.7	16.0	42066	20009	34.4
100	44	Pechiney SA	France	Metals	5.8	11.4	8.6	13.8	17979	37214	59.9

Source: UNCTAD, in cooperation with Erasmus University.

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

b Industry classification for companies follows the United States Standard Industrial Classification as used by the United States Security Exchange Commission (SEC).

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

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

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

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

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Table I.8. The top 50 TNCs based in developing economies ranked by foreign assets, 1995

(Millions of dollars and number of employees)

Ranking by:	by:				As	Assets	S	Sales	Emple	Employment	
For. assets Index	Index ^a	Corporation	Economy	Industry ^b	Foreign	Total	Foreign	Total	Foreign	Total	Indexa
1	6	Daewoo Corporation °	Republic of Korea	Diversified/trading	11946.0	28898.0	8202.0	26044.0	28140	38920	48.4
2	12	Petroleos de Venezuela SA	Venezuela	Oil, gas, coal and rel. services	0.9679	40502.0	24488.0	26041.0	13420	20009	44.4
8	∞	Cemex SA	Mexico	Construction	4226.7	8407.9	1435.2	2575.8	7300	17212	49.5
4	7	First Pacific Company Ltd.	Hong Kong, China	Electronics Parts	3779.2	6821.2	4694.3	5249.7	33467	45911	72.6
5	13	LG Electronics, Ltd.	Republic of Korea ^d	Electronics	9	15084.8	7100.0	12199.9	14113	34961	40.4
9	7	Jardine Matheson Holdings Ltd.	Bermuda	Diversified	3092.6	11582.7	7417.3	10636.0	140000 g	200000	55.5
7	14	Hutchison Whampoa Limited	Hong Kong, China	Diversified/retailer	2900.0 €	11699.0	1632.2	4531.0	16115	29137	38.7
∞	23	YPF Sociedad Anonima	Argentina	Oil, gas, coal and rel. services	2551.0	11572.0	1960.0	4970.0	2275	9256	28.7
6	4	China State Construction									
		Engineering Corp.	China	Diversified/construction	2379.4	ų	1103.9	ч	ч	Ч	0.0
10	35	Sunkyong Group	Republic of Korea	Energy/trading/chemicals	2258.0	27729.0	8635.0	36085.0	2083	25298	13.4
11	17	Cathay Pacific Airways Limited	Hong Kong, China	Transportation	2133.0	6267.0	1898.0	3904.0	3877	14744	36.3
12	34	Samsung Electronics Co., Ltd.	Republic of Korea ^d	Electronics	9	21894.6	4807.3 f	24083.2	9177 g	71440	14.2
13	45	China Chemicals, Imp. & Exp., Corp.	China	Diversified/trading	2016.5 h	8317.6	ų	ч	ч		0.0
14	42	Petroleo Brasileiro S/A - Petrobas	Brazil	Oil, gas, coal and rel. services	1881.5	31699.8	1274.0	23456.5	23	46226	3.8
15	32	Singapore Telecommunications Ltd.	Singapore	Utilities	1546.2	5661.7	66.2	2840.2	1625	10966	14.8
16	40	Hyundai Corporation	Republic of Korea ^d	Diversified/machinery	1485.2	11480.0	2432.7	15130.7	923	44736	10.4
17	38	Companhia Vale Do Rio Doce	Brazil	Mining	1471.0	14564.0	1407.0	5214.0	06	15573	12.6
18	19	Grupo Televisa S.A. De C.V.	Mexico	Media	1385.0	3215.0	280.0	1149.0	6981 в	20700	33.7
19	18	New World Development Co. Limited	d Hong Kong, China	Diversified/construction	1160.7	12395.6	470.9	2159.3	33550	45000	35.2
20	11	Citic Pacific Ltd.	Hong Kong, China	Diversified/trading/automotive	1069.6	5093.5	693.7	1401.1	2006	11500	46.4
21	1	Panamerican Beverages Inc.	Mexico	Beverages	1003.6	1372.1	1236.3	1608.3	21001 в	28000	75.0
22	8	Gruma S.A. De C.V.	Mexico	Food	992.5	1095.5	537.7	995.1	9834 ⋷	13598	72.3
23	10	Dairy Farm International									
		Holdings Ltd.	Hong Kong, China	Retailing	8.596	2934.8	3979.5	6235.5	24956	51600	48.4
24	36	Companhia Cervejaria Brahma	Brazil	Beverages	962.8	3310.2	173.2	2304.7	541.0	8467.0	
25	9	Fraser & Neave Limited	Singapore	Beverages	957.0	3199.0	1066.0	1809.0	8190	10064	26.7
26	21	Acer Group	Taiwan Province of China Electronics	a Electronics	e	3645.0	2493.6 ^f	5825.0	4324 g	15352	31.7
27	59	Keppel Corporation Limited	Singapore	Diversified	e	11217.7	269.7	1701.6	3420 в	13128	16.5
28	30	San Miguel Corporation	Philippines	Beverages	840.7	3328.4	324.5 f	2953.0	3536	31485	15.9
29	2	Guangdong Investment Limited	Hong Kong, China	Miscellaneous	839.6	1519.7	642.3	1059.1	8009	7434	9.59
30	33	South African Breweries Limited	South Africa	Beverages	819.0	5062.0	1127.0	7663.0	12983	110100	14.2
31	20	Tatung Co.	Taiwan Province of China Electrical	a Electrical	813.0 °	2929.2	1083.0^{f}	3099.9	9543 g	27254	32.6
32	56	Sime Darby Berhad	Malaysia	Diversified	755.9	10631.8	2169.8	4320.5	0069	28635	27.1
33	46	China Metals and Minerals	China	Diversified/trading	754.0	ч	2390.3	ч	ч	д	0.0
34	15	Dong-ah Construction Ind. Co.	Republic of Korea ^d	Construction	738.0	4256.0	1065.0	2850.0	8425	14619	37.4
35	27	Genting Berhad	Malaysia	Hotels and motels	691.5	2282.9	61.5	982.3			18.3

(Table I.8, cont'd)

Ranking by:	; by:				Ass	Assets	Sa	Sales		Employment	l t
For. assets	Index ^a	For. assets Index ^a Corporation	Economy	Industry ^b	Foreign	Total	Foreign	Total	Foreign	Total Index ^a	Indexa
36	47	China Harbours Engineering Group	China	Diversified/construction	596.0	д	442.5	ч	ч		0.0
37	22	Wing on Company International									
		Limited	Hong Kong, China	Retailers	576.0	1344.0	40.0	366.0	1435	4006	29.9
38	24	Barlow Limited	South Africa	Diversified	567.1	2320.5	1525.4	4369.0	7711	30660	29.9
39	48	China Shougang Group	China	Diversified/metals	468.7	ч	1127.0	ч	ч	ч	0.0
40	49	China Cereals, Oils, Food									
		Import and Export	China	Diversified/trading	467.3	ч	6230.0	ч	ч	ч	0.0
41	37	Sadia Concordia S/A Industria	Brazil	Food	445.0	1784.0	397.0	2904.0	135	32767	13.0
42	4	Creative Technology Ltd.	Singapore	Electronics	405.0	661.2	1175.0	1202.0	2048	4185	69.3
43	31	Vitro Sociedad Anonima	Mexico	Miscellaneous	385.0	3129.0	393.0	1878.0	3703	31001	
44	28	Empresas CMPC S.A.	Chile	Pulp and paper	384.0	3110.0	260.0	1292.0	1919	10731	16.8
45	43	Chinese Petroleum	Taiwan Province of Chir	Taiwan Province of China Oil, gas, coal and rel. services	9	15406.0	248.0 f	11765.5	6.0)	3651	2.1
46	16	Grupo Celanese SA	Mexico	Chemicals	343.6	1056.3	559.4	1369.1	2607 ₽	7104	36.7
47	39	Formosa Plastic Group	Taiwan Province of China Chemicals	na Chemicals	e	2325.6	241.0 f	1650.0	bil)	3449	10.4
48	25	Hongkong and Shanghai Hotels Ltd.	Hong Kong, China	Hotel/transportation	319.0	2712.0	55.1	297.0	3014	5772	27.5
49	20	China Foreign Trade Transportation									
		Corp.	China	Diversified/transportion	312.6	д	318.6	ч	ų	ч	0.0
50	41	Ssangyong Cement Industrial									
		Co., Ltd.	Republic of Korea d	Construction	307.3	4001.0	207.6	4170.0	859	4488	9.1

Source: UNCTAD, in cooperation with Erasmus Univesity.

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

Industry classification for companies follows the United States Standard Industrial Classification which is used by the United States Stock Exchange Commission

Consolidated data are provided which include data for Daewoo Electronics and Daewoo Heavy Industries, amongst others.

The accounting standards of the Republic of Korea do not require the publication of consolidated financial statements including for both domestic and foreign affiliates. The figures here are estimates of consolidated financial statements as provided by the companies in response to a survey by UNCTAD.

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

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

No data available.

Within the context of this list South Africa is treated as a developing country. Data for some important South African mining companies were not available.

the top 50 developingcountry TNCs. The top foreign sellers in both lists are TNCs operating in the petroleum industry.

Foreign employment.
Total foreign employment of the top 100 TNCs amounted to some 5,800,000 in 1995 and 470,000 for the top 50 developing-country TNCs.²³ For the top 100 TNCs, the increase in foreign employment between 1993 and 1995 was 4 per cent, while total employment

Table I.9. The share of top TNCs in outward FDI stock, selected countries, 1995

(Percentage)

Country	Top 5	Top 10	Top 15	Top 25	Top 50
Australia ^a	45.0	57.0	66.0	80.0	96.0
Austria	10.0	17.3	22.2	30.5	44.0
Canada	22.6	33.5	40.1	50.1	64.4
Finland	33.0	47.0	56.0	69.0	84.0
France	14.0	23.0	31.0	42.0	59.0
Germany	17.5	29.3	35.0	41.8	51.5
Norway	63.8	75.2	81.1	86.8	92.9
Sweden	23.0	37.0	48.0	59.0	76.0
United Kingdom	28.0	40.0	47.0	57.0	71.0
United States b	19.0	33.0	42.0	51.0	63.0

Source: UNCTAD, based on data provided by national central banks and statitistical offices.

- a 1996.
- b Preliminary estimate on the basis of 1994 data and foreign-affiliate assets.

decreased by 4 per cent. The ratio of foreign to total employment therefore increased slightly from 0.44 in 1993 to 0.48 in 1995.²⁴ Firms in the electronics industry are by far the largest employers abroad, accounting for around 24 per cent of all foreign employment of the top 100 TNCs (and, correspondingly, 16 per cent for the top 50 developing-country TNCs).

• *Trends by country of origin.* The list of the top 100 TNCs is dominated by a few countries in the European Union, the United States and Japan: 88 per cent of the foreign assets and 87 of the listed companies are accounted for by these countries (table I.11). Although the number of entrees of TNCs based in the European Union, Japan and the United States has not changed much over the past five years, the country composition of the list has changed: while the number of the United States TNCs has remained almost the same,

Table I.10. Transnationality index, by industry, 1993 and 1995 (Percentage)

	Top 10	0 TNCs		leveloping- ry TNCs
Industry	1993	1995	1993	1995
All industries	47	51	19	32
Petroleum and mining	54	50	3	18
Food and beverages	61	61	16	37
Construction	72	68	23	28
Metals	45	38	5	-
Chemicals and pharmaceuticals	41	59	-	20
Automotive	60	44	-	-
Electronics	42	49	28	44

Source: UNCTAD, in cooperation with Erasmus University.

the number of Japanese TNCs increased and that of the European Union TNCs declined. The list of the top 50 developing-country TNCs is dominated by the Republic of Korea, Hong Kong, China, Mexico and increasingly China. Some two-thirds of the foreign assets and 28 of the listed companies are accounted for by TNCs from these economies.

• *Trends by industry.* Petroleum and mining as well as electronics were among the largest industries in terms of foreign assets and sales in each of the lists (table I.12).²⁵

Three TNCs of each industrial sector feature among the top 5 firms in both lists. Automotives, as well as pharmaceuticals and chemicals, feature prominently, but more so in the list of the top 100 TNCs than in the list of the top 50 developing-country TNCs (table I.12).

Table I.11. Geographical concentration of TNCs by foreign assets, foreign sales, foreign employment and number of entries

(Percentage of total and number)

Top 100 TNCs

Region/economy	Foreign assets	Foreign sales	Foreign employment	Number of entries
European Union	37	38	46	39
France	9	8	9	11
Germany	12	11	12	9
Netherlands	8	8	10	3
United Kingdom	12	12	15	11
Japan	16	26	10	18
United States	33	27	30	30

Top 50 developing-country TNCs

Region/economy	Foreign assets	Foreign sales	Foreign employment	Number of entries
South, East and South-East Asia	65	63	50	34
of which:				
Singapore	5	2	3	4
Republic of Korea	28	27	14	7
China	9	17	-	7
Taiwan Province of China	3	3	3	4
Hong Kong, China	17	12	28	9
Latin America	29	29	-	15
of which:				
Brazil	6	3	-	4
Mexico	11	4	-	5
Memorandum:				
ASEAN	8	4	6	7

Source: UNCTAD, in cooperation with Erasmus University.

Table I.12. Distribution of foreign assets, foreign sales and foreign employment of the top 100 TNCs and the top 50 developing-country TNCs, by industry, 1995

(Percentage)

	Foreign a	assets	Foreig	n sales	Foreign en	nployment
Industry	Top 100	Top 50	Top 100	Top 50	Top 100	Top 50
Petroleum and mining	18	19	20	32	6	4
Food and beverages	8	8	9	4	16	12
Construction	2	10	1	4	2	11
Metals	2	1	1	3	1	-
Chemicals and pharmaceuticals	13	4	10	8	14	1
Automotive	21	1	17	1	17	2
Electronics	16	15	15	19	24	16

Source: UNCTAD, in cooperation with Erasmus University.

• *Transnationality*. Transnational corporations originating from small countries tend to be more transnationalized -- on the basis of a combined index of the ratios of foreign assets, foreign sales and foreign employment to the respective totals -- than TNCs from large countries. Nestlé SA (Switzerland) in food topped the list of the top 100 TNCs, and Panamerican Beverages Inc. (Mexico) topped the list of the 50 top developing-country TNCs on the basis of the transnationalization index. Firms in the list of the top 50 developing-country TNCs operating in the food industry have exhibited the biggest increase in transnationalization compared with other industries in both lists: from 16 per cent in 1993 to 37 per cent in 1995 (table I.10).²⁶

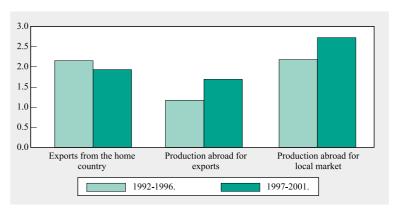
2. Future trends

The unprecedented increase in FDI flows makes it important for recipient countries to have as clear an understanding as possible of the likely pattern of future flows and the factors that determine where such investments will be made. A number of useful pointers are provided by a survey of TNC managers , undertaken in 1996 (UNCTAD, Invest in France Mission and Arthur Andersen, in collaboration with DATAR, 1997). The results suggest the following medium-term trends:

- A rapid rise in the proportion of total sales generated from production abroad. While only 28 per cent of the respondents derived an average of more than 60 per cent of revenues from foreign sales during the past five years, 53 per cent expect to do so in the year 2001.
- A rapid rise in the proportion of production carried out abroad. The survey points to further increases between now and 2001, while home-country exports are expected to remain constant overall (figure I.20).
- A greater reliance on mergers, acquisitions, alliances and joint ventures as vehicles for international expansion (figure I.21). The particularly rapid growth expected for

joint international ventures -- in particular asset-augmenting joint ventures (Dunning, 1995) -- reflects TNCs' desire to share risks and costs, and the need for complementary partners when entering new countries (e.g., China), or developing products requiring expertise in several different areas. Similar considerations apply to strategic alliances, inter-firm agreements and corporate partnering. **Further** corporate

Figure I.20. Future trends: significance of exports and production abroad, 1992-1996 and 1997-2001 (Number)



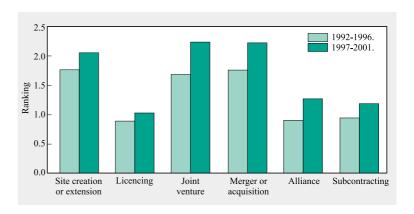
Source: UNCTAD, Invest in France Mission and Arthur Andersen, in collaboration with DATAR (1997).

Note: average of responses, where 0=not used and 4=very frequently used.

restructuring is expected to spur a continued growth of mergers and acquisitions in developed countries.

continued emphasis on developing countries. The survey points to a marked shift in priorities favouring international markets at the expense of domestic markets, with developing economies likely to be the main beneficiaries (figure I.22). Most

Figure I.21. Future trends: main forms of investing abroad, 1992-1996 and 1997-2001 (Number)



Source: UNCTAD, Invest in France Mission and Arthur Andersen, in collaboration with DATAR (1997).

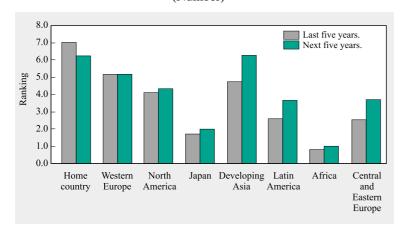
Note: average of responses, where 0=not used and 4=very frequently used.

respondents indicated that an increasing amount of investment would be directed to developing Asia and, to a lesser extent, Latin America and Central and Eastern Europe, while there would be little change in the level of priority attached for investment in Western Europe and North America.²⁷

• *Market access remains the most important motive for the choice of location.* On average, the survey respondents placed almost twice as much weight on production for local markets as on labour cost-driven relocation. Not surprisingly, this preference is

Figure I.22. Future trends: investment priorities, by area of location, 1992-1996 and 1997-2001

(Number)



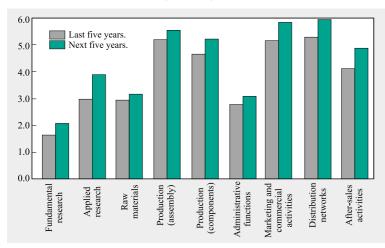
Source: UNCTAD, Invest in France Mission and Arthur Andersen, in collaboration with DATAR (1997).

Note: average of responses, where 0=not used and 4=very frequently used.

particularly marked in the services sector. Market access is rated a higher priority, on average, than access to resources, especially lowcost labour.²⁸ Market size and growth and earnings prospects are identified as the top criteria followed by factors relating to the overall business environment. These include political and social stability, the legal framework, quality of the workforce and infrastructure, local and availability of goods and services.

• All corporate functions will experience greater internationalization, although beginning from different levels (figure I.23).

Figure I.23. Future trends: internationalization efforts, by function, 1992-1996 and 1997-2001 (Number)



Source: UNCTAD, Invest in France Mission and Arthur Andersen, in collaboration with DATAR (1997).

Note: average of responses, where 0=not used and 4=very frequently used.

- The scope for internationalization and the scale of FDI remain positively correlated with the size of the company, although smaller firms will be stepping up investments abroad. European and United States companies with sales below \$1 billion plan to increase the proportion of foreign sales and foreign production. However, size still remains a key determinant of transnationalization.
- Dramatic increases in FDI in infrastructure, distribution, non-financial services and automobiles, but slower growth in financial services and real estate.

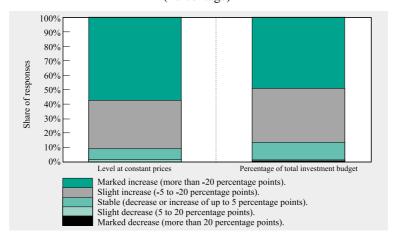
The survey findings show that significant impetus for FDI growth exists in practically all industries. However, there are important differences between groups of industries:

- Industries in which internationalization is still limited, but practically all the factors favouring a surge in FDI inflows are present: a shift in demand patterns favouring developing countries; massive corporate restructuring in developed countries; swift changes in technology and organizational approaches; and removal of FDI barriers allowing rapid international expansion. This category includes such industries as public utilities, especially telecommunications, and some non-financial services, such as media and retailing.
- Industries in which there are powerful factors favouring FDI growth, but internationalization has already progressed to a point at which the scope for further expansion is limited. These industries span all forms of manufacturing, ²⁹ including those involving advanced technology.
- Industries in which obstacles to internationalization remain (e.g., in the form of regulatory constraints, such as in health care) and industries in which attempted international expansion has led so far to disappointing results.

The survey responses point to a general rise in FDI flows over the next five years, with outflows from the four main source regions increasing rapidly, and more so in the case of the newly industrializing Asian economies (figure I.24): fifty per cent of all respondents expect to increase FDI by over 20 per cent up to the year 2001, while 49 per cent consider that FDI will rise by over 20 percentage points as a proportion of their investment budgets. Sixty-nine per cent of companies in the sample based in the latter plan a considerable increase in investment abroad, compared with 57 per cent in Europe, 54 per cent in the United States and 48 per cent in Japan. For Asian TNCs, increased FDI is partly a response to a rise in domestic costs. High domestic costs are also a factor in Europe, as are expected Europe-wide restructurings in a number of

Figure I.24. Future trends: expected increases in FDI flows, 1996-2001

(Percentage)



Source: UNCTAD, Invest in France Mission and Arthur Andersen, in collaboration with DATAR (1997).

major industries and the desire to expand in developing Asian markets. Foreign expansion by United States firms will be driven by renewed competitiveness and sound finances, as well as the desire to increase the contribution of sales abroad.

Notes

- Hong Kong become a Special Administrative Region of the People's Republic of China, on 1 July 1997, hereinafter referred to in this *Report* as Hong Kong, China.
- Countries that attained a record high in FDI inflows in 1996 were: Cambodia, China, India, Indonesia, Republic of Korea, Lao People's Democratic Republic, Malaysia, Maldives, Pakistan, Singapore and Viet Nam in South, East and South-East Asia, and Argentina, Bolivia, Brazil, Chile, Colombia, Paraguay and Peru in Latin America.
- ³ Data reported by KPMG.
- Ross Tieman, "Business draw \$38.5bn from overseas buyers", *Financial Times*, 20 January 1997.
- Shown by the share of FDI projects accounted for by mergers and acquisitions, which has remained stable, at about 12 per cent between 1986 and 1992 (Japan, MITI, 1989 and 1994).
- Data provided by IFR Securities Data Company, London and New York.
- Some mergers and acquisitions were formed to exploit short-term commercial opportunities, while strategic partnerships have longer-term goals in view.
- According to data collected by MERIT-CATI at the University of Maastricht (Netherlands). This trend is corroborated by data provided by the IFR Securities Data Company on the number of cross-border, non-equity strategic R&D partnerships, the type of partnership that comes nearest to the definition of strategic technology partnerships used by MERIT-CATI. The number of cross-border *equity* strategic R&D partnerships increased from 66 in 1990 to 228 in 1995 (IFR Securities Data Company, London and New York).
- According to data provided by IFR Securities Data Company, London and New York. No data are presently available after 1993 from MERIT-CATI to corroborate this finding.
- This figure is calculated as the value of gross product (value added) of United States affiliates divided by the United States FDI stock (United States, Department of Commerce, 1997).
- For example, 42 per cent of exports by United States parent firms in 1994 and 43 per cent of exports by Japanese parent firms in fiscal year 1992 were directed to their foreign affiliates (United States, Department of Commerce, 1997 and Japan, MITI, 1994).

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- Non-arm's-length transactions refer to transactions associated with the international production within TNC systems (here, total sales of foreign affiliates and total intra-firm exports (exports to affiliated firms abroad) of parent firms) and arm's-length transactions refer to external trade only.
- Besides royalties and fees for technology, there are a number of service transactions, several of which are closely related to technology functions and are of an intangible nature, such as research and development, training and management services. However, such data are often aggregated and not separately available for foreign affiliates and unaffiliated companies.
- The growth rates of FDI inflows adjusted only for foreign-exchange changes by expressing them in SDRs, a basket of major countries' exchange rates, compared with the growth rates of nominal FDI inflows (in dollars) are as follows:

Item	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Nominal FDI inflows																	
(dollars)	32	17	-9	-14	20	-4	50	64	17	20	4	-23	10	25	9	34	14
FDI inflows adjusted																	
for foreign-exchange																	
fluctuations (SDRs)		29	-3	-12	25	-3	30	49	12	26	-2	-23	6	27	7	25	15

- Source: UNCTAD, FDI/TNC database and IMF, International Financial Statistics, various issues.
- The World Bank has estimated real global FDI flows by deflating them with the world's import price index (World Bank, 1993, p.51).
- For example, in Brazil, the implicit deflator for gross domestic investment was 0.003 in 1970, 0.011 in 1975 and 308,756 in 1990, with 1987 as the base year (100).
- A caveat needs to be made, namely that not all FDI flows entail the purchase of assets whose real values fluctuate in tandem with prices of imported goods.
- The current-cost method revalues a direct investment position by re-estimating the net stock of direct investment capital (tangible assets on the asset side of the balance sheet) at its current cost, while the market-value method revalues a direct investment position by re-estimating the owners' equity portion of the direct investment position at market value using indexes of stock-market prices. See, Landefeld and Lawson, 1991.
- Strictly speaking, this share is underestimated because parent firms have a claim on only a part of assets of foreign affiliates, perhaps somewhere in the range of 25-30 per cent. In 1994, if the parent financing can be measured by taking the direct investment position as a percentage of total affiliates assets, parent firms financed 26 per cent of affiliate assets (\$621 billion/\$2,360 billion) (United States, Department of Commerce, 1997a).
- Industrial and service TNCs other than financial services (banking, insurance etc.).
- The first year for which data are available for the top 50.
- This percentage increase may be biased upwards reflecting a more complete list of developing-country TNCs in 1995.
- Foreign employment data on Chinese TNCs are not available and therefore not included in the total.
- For the top 50 developing-country TNCs a similar calculation could not be undertaken because of insufficient data.
- Firms that cannot be associated predominantly with a single industry are classified as "diversified". This category appears more frequently in the list of the top 50 developing-country TNCs than in the list of the top 100 TNCs.
- Electronic sector TNCs in the top 50 TNCs outpaced their competitors in the top 100 TNCs considerably in terms of transnationality increases.
- These conclusions are in accordance with those of a similar survey of the top 100 TNCs worldwide (UNCTAD, 1996a).
- Similar conclusions emerge from other studies on the same subject. See in particular UNCTC (1992a) for a review of the literature on factors influencing FDI, and Jun and Singh (1996).
- With the exceptions of automobiles and consumer goods, where investment can be expected to rise rapidly.

CHAPTER II

REGIONAL TRENDS

A. Developed countries

Developed countries invested \$295 billion abroad and received \$208 billion of FDI inflows in 1996. They accounted for 60 per cent of global inflows and 85 per cent of global outflows in that year, shares that have been declining slowly but steadily in the 1990s (annex tables B.1 and 2). Among the developed countries, the United Kingdom regained the second highest position in terms of both FDI inflows and outflows after the United States in 1996 (figures II.1 and II.2). Measured in terms of gross domestic product and gross (domestic) fixed capital formation, the economic contribution of inward FDI was highest in Belgium-Luxembourg, Ireland, the Netherlands, New Zealand and Sweden. On the same basis, the importance of outward FDI was highest in the Netherlands, Sweden, Switzerland and the United Kingdom (figures II.3 and II.4). On the other hand, inward FDI in Germany, Italy and Japan appears low in relation to the size and growth of their markets, though international comparisons of FDI flows are fraught with problems because of differences between the figures reported by host and home countries (box II.1).

The Triad (European Union, Japan and the United States) accounted for around 90 per cent of both inflows and outflows of developed countries in 1996 (annex tables B.1 and 2). In recent years, however, developing countries have become more important, both as FDI recipients from, and investors in, the Triad (figure II.5). Outside the Triad, Australia (discussed below), Canada and Switzerland have also emerged as significant outward investors, as well as FDI recipients (figure II.2).

1. United States

In 1996, the United States was again the largest host and home country of FDI, receiving \$42 billion more than the second largest host country (China) and investing abroad \$31 billion more than the second largest home country (United Kingdom). United States investment inflows and outflows both reached about \$85 billion (table II.1). Inflows increased by 39 per cent. Although outflows

United States United Kingdom France Belgium and Luxembourg Canada Spain Netherlands Australia Sweden Germany 1995. Austria 1996. Italy Norway New Zealand Switzerland Israel Ireland Finland Greece Denmark Portugal South Africa Japan Iceland 0 10 20 30 40 50 60 70 80 90

Figure II.1. FDI flows into developed countries, 1995 and 1996 (Billions of dollars)

Source: UNCTAD, FDI/TNC database and annex table B.1.

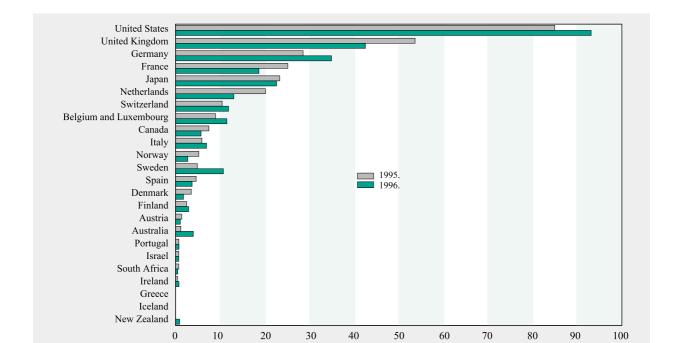


Figure II.2. FDI outflows from developed countries, 1995 and 1996 (Billions of dollars)

Source: UNCTAD, FDI/TNC database and annex table B.2.

Sweden Belgium and Luxembourg Ireland New Zealand Australia Denmark Netherlands United Kingdom Canada France Israel Norway United States Finland Spain Greece Inflows.
Outflows. Switzerland Portugal Italy Germany Austria Iceland South Africa Japan 0 5 10 15 20 25 30 35 45

Figure II.3. FDI inflows as a percentage of gross fixed capital formation in developed countries, 1995 (Percentage)

Source: UNCTAD, FDI/TNC database and annex table B.5.

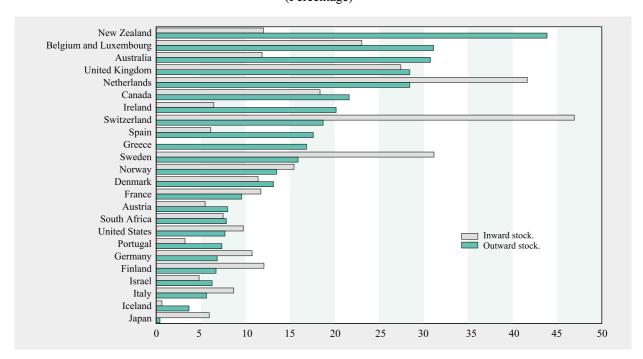


Figure II.4. FDI stock as a percentage of GDP in developed countries, 1995 (Percentage)

Source: UNCTAD, FDI/TNC database and annex table B.6.

Box II.1. Why do FDI flows reported by host and home countries differ?

According to a recent study by the German Bundesbank (Jost, 1997), 18 OECD countries reported FDI outflows to Germany between 1984 and 1994 three times higher than inflows reported in the balance-of-payments data of Germany (\$80 billion and \$21 billion, respectively). One reason for this discrepancy is different thresholds in the definition of FDI. In the German balance-of-payments data, this threshold is set at 20 per cent of the equity capital of the affiliate (before 1989, it was 25 per cent). In contrast, many other investing countries use a threshold of 10 per cent, in accordance with OECD and IMF guidelines (OECD, 1995; IMF, 1993). The higher participation threshold in Germany, however, only explains a minor part of the difference between investors and German FDI data. More important is the treatment of short-term financial operations of foreign affiliates, which until recently were not included under direct investment in Germany's statistics. Diverging valuation principles, particularly as concerns reinvested earnings, is another source of discrepancy. Some countries include unrealized book profits (i.e., valuation gains arising from changes in exchange rates), whereas others do not. The resulting difference can be considerable: the discrepancy between the lower German figures and those reported by the United States was over DM25 billion in 1984-1994 (Jost, 1997).

Italy also applies a 20 per cent threshold, whereas Japan has no definitive minimum threshold. Other reasons for discrepancies in FDI flows reported by host and home countries include differences in the treatment of unremitted branch profits, treatment of unrealized and realized capital gains and losses, methods of data collection and reporting on FDI, and treatment of real estate, construction and indirect investment by the affiliates abroad (UNCTC, 1992b, p. 15).

declined, their level was significantly above the annual average during 1991-1994 (\$50 billion).

European Union countries accounted for almost 68 per cent of United States inflows in 1996, slightly lower than the previous year, but their share of outflows declined more sharply (table II.1). Nonetheless, the European Union received more than twofifths of United States FDI outflows in 1996, more than any other region in the developed world. Japan's share of United States inflows doubled in 1996, but was still far below its annual average share of one-third of these inflows during 1988-1991, the of the period Japanese investment boom in the United States. The share of developing countries in United States FDI outflows increased to 29 per cent in 1996 (table II.1), less than in the early 1990s.

Table II.1. United States: FDI inflows and outflows,^a 1995 and 1996

(Billions of dollars and percentage)

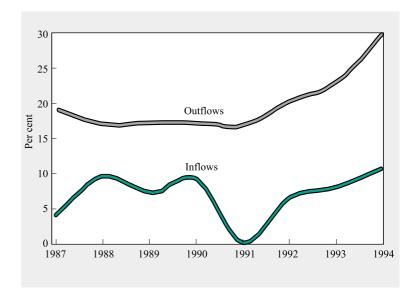
	Infl	ows	Outf	lows
Region/country	1995	1996 ^b	1995	1996 ^b
Total (Billions of dollars)	60.8	84.6	93.3	85.4
Of which (per cent):				
Developed countries	102.0 ^c	99.9	72.4	66.5
Canada	7.4	8.5	8.3	9.4
European Union	71.6	67.6	49.6	43.0
Japan	8.6	16.2	1.7	3.9
Developing countries	-1.9°	0.1	27.4	29.1
Africa	-	-0.5	0.7	1.0
Latin America	-3.6°	0.2	15.7	19.7
South, East and South-East Asia	2.3	-0.5	8.8	7.5
West Asia	-0.5	1.0	1.1	0.7
Central and Eastern Europe	-	-	1.4	1.9

Source: UNCTAD, based on data provided by the United States Department of Commerce.

- a Data for outflows are somewhat different from those in annex table 2 as FDI in the Netherlands Antilles is not adjusted in this table.
 - b Preliminary.
- ^c Negative FDI flows from developing countries, in particular from tax haven economies in Latin America and the Caribbean.

Sustained economic growth in many countries was a major cause of high United States FDI outflows. Favourable growth prospects and large and growing consumer markets in developing countries encouraged increased interest from United States TNCs.¹ By contrast, the European Union's still sluggish economic growth in 1996 and. perhaps importantly, the end of a major phase of adjustment by United **TNCs States** to regional integration in Europe, caused the European Union's share of United States FDI outflows to fall. That share declined to 43 per cent in 1996, from 50 per cent in 1995, a year when United States TNCs engaged in a number of very large mergers and acquisitions in Europe.

Figure II.5. Share of developing countries in the total FDI outflows from, and FDI flows into, the Triad, 1987-1994 (Percentage)



Source: UNCTAD, FDI/TNC database, and OECD, 1996b.

Investment inflows were stimulated by the continued

strength of the United States economy and its favourable impact on profitability. In 1995, some four-fifths of new investment outlays in the United States were for acquisitions, rather than establishment of new affiliates (Fahim-Nader and Zeile, 1996). Although the dollar appreciated against the yen and some European currencies in 1996, the cost of acquiring United States-based firms in foreign-currency terms remained relatively low in 1996. The dollar-ECU exchange rate in 1996, for example, was only 8 per cent higher in 1996 than during 1993-1994.

Equity inflows accounted for nearly two-thirds of United States FDI inflows in 1995 (United States, Department of Commerce, 1996c). Reinvested earnings increased as well (by some \$5 billion, to almost \$14 billion in 1995). The figures for total inflows, however, conceal significant differences in approaches to investing in the United States (annex table A.8). European investors rely more on intra-company loans for financing their investments in the United States. Declining interest rates in several European countries, as well as Japan, encouraged this mode of financing. The share of FDI flows from Europe into the United States accounted for by equity inflows was well below those of other major home countries (annex table A.8). United States FDI inflows from Canada had the highest share of reinvested earnings during 1994-1995, whereas reinvested earnings by Japanese affiliates in the United States during the same period were negative.

More than a half of United States FDI outflows was financed by reinvested earnings during 1994-1995 (annex table A.8), a share that has increased in recent years. This is partly because the profitability of operations in the United States has reduced the need for foreign affiliates to remit earnings back to their parent firms and partly because foreign affiliates are using these earnings to expand their own operations abroad.

2. Western Europe

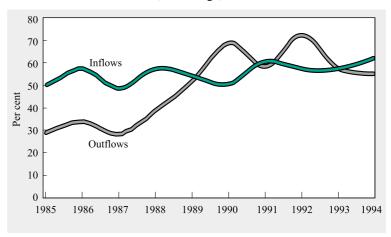
Western Europe received \$105 billion and invested \$176 billion abroad in 1996 (annex tables B.1 and 2). As a region the European Union continues to record the biggest FDI inflows and outflows in the world. However, the structure of European Union FDI changed significantly during the period 1990-1994. After intra-European Union FDI peaked in 1992, the official deadline for completion of the internal market, the share of non-European Union countries in total FDI outflows from the then twelve European Union members increased considerably, from 28 per cent in 1992 to 45 per cent in 1994 (figure II.6).² The shift towards destinations outside the European Union would have been even more pronounced if Austria, Finland and Sweden, which became European Union members in 1995, had not attracted soaring investment flows from European Union countries: indeed, European Union countries accounted for 53 per cent of all inflows received by these three countries in 1994 (\$4 billion), compared with 32 per cent in 1992 (\$800 million).

Among non-European Union destinations, developing countries and the United States received 13 per cent and 10 per cent, respectively, of total European Union FDI outflows (excluding reinvested earnings) in 1994 (Eurostat, 1997). However, the European Union's FDI outflows to the United States, and the United States' share of European Union outflows in 1994, were still well below the levels of the late 1980s. Likewise, the share of Central and Eastern Europe in the European Union's outflows increased only by 1.4 percentage points (to 4 per cent) between 1992 and 1994. Not surprisingly, the growth of European Union FDI in that region during the early 1990s, when "first movers" established themselves there, was not sustained. "Followers" were probably reluctant to invest in the region because of concerns regarding the speed of economic recovery in the region during the transition period. European Union FDI outflows (excluding reinvested earnings) to non-European Union members in Western Europe stagnated at \$2 billion during 1992-1994, or 2 per cent of total outflows (Eurostat, 1997).

More than a half of total European Union inflows have come from European Union members over the past decade (figure II.6). Although some European Union countries continued to attract

large inflows, overall European Union companies (as well as non-European Union firms) invested less in the European Union in 1994 than in the previous four years. This was partly because of slow economic growth, and possibly also because they had already adjusted to the completion of the single market. This fall-off applied especially to Japanese TNCs; European Union FDI inflows (excluding reinvested earnings) from Japan dropped to almost \$2 billion in 1994 compared with almost \$7 billion in 1990 (Eurostat, 1997). The same appears true, though to a lesser extent, of the most recent European Union members: FDI outflows (excluding reinvested earnings) from Austria. Finland and Sweden

Figure II.6. Share of intra-European Union^a FDI in total European Union^a FDI flows, 1985-1994^b
(Percentage)



Source: Eurostat, 1997, p. 65.

- ^a Twelve European Union member States only.
- b Not including reinvested earnings.

to the European Union halved between 1990 and 1994, from \$12 billion to \$6 billion. Most of these trends continued in 1994-1996, as recent data on German FDI inflows and outflows suggest (table II.2).

About a half of both European Union FDI outflows and inflows during 1994-1996 were related to cross-border mergers and acquisitions (annex tables B.1, 2, 7 and 8). However, these figured far less prominently (in particular, in inflows) when compared with the importance of mergers and acquisitions in those of the non-European Union countries. This suggests that it is more difficult for foreign investors to acquire existing firms (e.g., through take-overs) in some European Union countries, such as Germany and Italy, than in other developed countries (notably the United States). On average, the European Union share of merger-and-acquisition sales of all developed countries was considerably below the corresponding share of such purchases. One exception was during the period prior to the start date for the internal market, when many non-European Union companies engaged in mergers and acquisitions in the European Union, although most deals were still among European Union companies.

3. Japan

While the recovery of Japan's FDI outflows continued in 1996 -- \$23 billion (on a balance-of-payments basis) -- they were still only slightly over half their peak level of annual average outflows of \$41 billion during 1989-1991. On a notification basis, FDI outflow increases were 16 per cent in 1995 and 9 per cent in 1996 (fiscal year). When total outflows approached their 1989 peak, FDI outflows in the manufacturing sector alone (based on notifications) exceeded the 1989 peak level. Both balance-of-payments and notification data underestimate FDI outflows because they do not include reinvested earnings. These are estimated to be \$14 billion in manufacturing in 1994, nearly the sum of equity investment and intra-company loans reported as FDI outflows in the balance of payments and nearly twice as large as the reinvested earnings in 1989 (JETRO, 1997, pp. 31-32). If reinvested earnings were added to the reported FDI outflows in manufacturing, investments in manufacturing would in 1994 have exceeded the 1989 peak.

As in 1995, Japan's outflows in 1996 were strongly focused on Asia and the United States. Most Asian host countries increased their share of Japanese FDI outflows. But China's share fell from 9 per cent to 5 per cent, on a notification basis. This was mainly because investors responded to

Table II.2. Germany: recent developments in FDI inflows and outflows, 1994-1996^a (DM billion)

		Inflows		Outflows		
Region	1994	1995	1996 ^b	1994	1995	1996 ^b
Total	2.5	17.2	1.1	27.8	55.2	38.8
European Union	4.7	8.5	1.4	14.5	34.4	18.9
Austria, Finland and Sweden	-1.2	2.3	0.3	1.6	2.8	5.4
Other Western Europe	0.7	2.3	0.8	1.8	2.0	1.3
Japan	-0.5	0.8	-0.7	0.7	0.5	1.6
North America	-1.9	3.0	0.4	4.3	5.7	8.8
Developing countries	-0.2	2.3	0.3	2.6	6.1	3.8
Central and Eastern Europe	-0.1	0.1	-	3.6	4.7	4.4

Source: data provided by Deutsche Bundesbank.

^a The data in this table do not necessarily correspond to those in annex tables B.1 and B.2 as sources of these data are different.

b Do not include reinvested earnings.

fiscal policy changes (elimination of the capital-goods import duty exemption) by advancing to 1995 investments planned for 1996. The United States attracted a rising share of Japanese FDI. Outflows to Brazil in 1996 on a notification basis were more than three times their 1995 level as Japanese investors responded favourably, though with some delay, to economic stabilization and liberalization in Brazil. The engagement of Japanese investors in Central and Eastern Europe (including the Russian Federation) continued to be very weak (about 0.1 per cent of Japan's total outflows). The share of Western Europe declined by 2 percentage points -- to 15 per cent -- in 1996, but there were remarkable differences between countries in that region: Belgium and France received substantially lower investment flows from Japan, whereas the United Kingdom increased its share of Japan's outflows by 1 percentage point.

The geographical pattern of the recent Japanese FDI outflows has changed since the peak

period of Japanese FDI in the late 1980s and early 1990s (table II.3). The most obvious difference is the shift from developed countries towards South, East and South-East Asia. This partly reflects the disposal of some large investments made in the United States during the late 1980s, which proved disappointing (e.g., the sell-offs of MCA, Inc. by Matsushita Electric Industrial Co. and the Rockefeller Group by Mitsubishi Estate Co. in 1995). In 1995 alone, 75 Japanese affiliates in the United States were sold off or closed (and 103 new affiliates were established) (Toyo Keizai, 1996, p. The divestments also reflect changes in Japanese TNCs' strategic priority; their aim now is to maximize production efficiency and profitability, a shift which favours investment in South, East and South-East Asia. In

Table II.3. Geographical distribution of Japanese FDI outflows, peak period and post-recession period (Billions of dollars and percentage)

Region/country	Peak period (1989-1991)	Post-recession period (1994-1996) ^a
All countries (Billion dollars)	41.0	21
Developed countries (Per cent)	83.0	58
United States	51.0	37
European Union	23.0	13
Developing countries (Per cent)	17.0	42
South, East and South-East Asia	11.0	34
China	1.1	12
Central and Eastern Europe		
(Per cent)	0.1	-

Source: UNCTAD, FDI/TNC database.

that region, the ratio of current income to sales of Japanese affiliates is more than twice that in the United States or Europe.

Japan is well known for being a small FDI recipient. Investment inflows peaked at around \$3 billion in 1992, but dwindled thereafter, to only \$42 million in 1995, when large divestments (of \$700 million) by Canadian firms took place. In 1996 inflows increased to \$220 million. European TNCs are the most important investors in Japan, undertaking investments of about \$1 billion in 1996, a half of which originated in Germany. Hong Kong was the second largest investor after Germany in that year. The sharp drop of FDI inflows after 1992 may be attributed to the fact that Japan experienced three years of low economic growth after the burst of the "bubble economy", coupled with the appreciation of the yen until 1995.

Although total inflows are low, foreign affiliates operating in Japan have higher profits than domestic Japanese firms (figure II.7) and some TNCs, especially from the United States, have responded through FDI to profit opportunities. In 1993, investment income of United States affiliates in Japan was less than 6 per cent of their FDI stock (annex table A.9). That share doubled within two years, and the rate of return of United States FDI in Japan is now the same as the average rate of

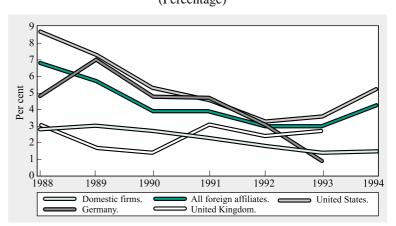
 $^{^{\}rm a}$ $\,$ The distribution share is based on the data for 1994-1995 only.

return in all host countries. Meanwhile, reinvested earnings of United States affiliates in Japan have soared and have even exceeded equity and intracompany loans (the other two FDI components) from the United States to Japan in certain years. The rising share of earnings reinvested in Japan suggests that United States affiliates already present in Japan are becoming more confident of doing business there.

4. Australia

During the early 1970s, Australia, as well as New Zealand, had the highest degree of protection and the most restrictive FDI regimes among the developed

Figure II.7. Profitability^a of foreign affiliates^b in Japan, 1988-1994^c (Percentage)



Source: Japan, MITI, Gaishi-kei Kigyo no Doko (Tokyo, Ministry of Finance Printing Bureau, various issues).

- a Share of current income in total sales.
- b All foreign affiliates and three major investors.
- $^{\rm c}$ $\,$ $\,$ Fiscal year. The 1994 data for Germany and the United Kingdom are not available.

countries (Anderson, 1995). By the mid-1980s, they both adopted far- reaching policies of liberalization, deregulation and privatization.⁴ Investment inflows and outflows for Australia have typically paralleled the global trend: a decline, followed by a strong recovery, followed by a surge in the late 1980s. In 1994 and 1995, respectively, FDI outflows and inflows reached their highest-ever levels (annex tables B.1 and 2). The predominant sources of FDI for Australia are Europe and the United States; in 1995, they accounted for 62 per cent of the total stock (figure II.8 (a)). Japan is the third largest source country, accounting for 15 per cent of the total stock. By contrast, in 1948, the United Kingdom accounted for 95 per cent of all inflows (Australia, Bureau of Industry Economics, 1993). The decline in the importance of the United Kingdom is due to several factors, including the orientation of its investments to other European countries and the rise in investment by United States TNCs in the post-Second World War era. As with most countries, the increase in Japanese investment into Australia was consistent with the general surge in outflows from Japan during the late 1980s.

The United Kingdom is the most important destination for Australia's outward FDI, accounting for 38 per cent of its total stock as of 1995 (figure II.8 (b)). The second largest destination is the United States, followed by New Zealand.

When it comes to sectoral distribution, services and manufacturing each received over a third of Australia's total FDI inflows in 1995 (figure II.9). However, the importance of the services sector, which is soon likely to become the dominant sector for FDI,⁵ is a recent phenomenon. In the late 1950s, mining and agriculture accounted for only 12 per cent of inflows, services for 11 per cent and manufacturing for 77 per cent (Australia, Bureau of Industry Economics, 1993).

The most interesting aspect of Australia's outward FDI, however, is the very low proportion of these investments in East and South-East Asia. The ASEAN countries host only 6 per cent of Australia's outward FDI stock, and Hong Kong, China accounts for 1 per cent of that stock. As recently as 1980, ASEAN countries and Hong Kong together held 46 per cent of Australia's outward stock. This decline is noteworthy for two reasons:

(Billions of dollars) (a) Inward FDI stock (b) Outward FDI stock Other Papua Other 5% New Guinea United States United States 16% 4% 26% New Zealand 16% New Zealand 4% Newly industrializing economies 2% Hong Kong 1% ASEAN 6% Japan 15% Other United Kingdom European Union 24% ASEAN United Kingdom 1% Other European Netherlands 38% Union 6%

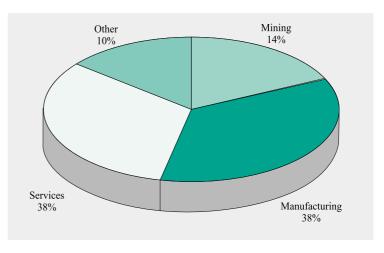
Figure II.8. Australia's FDI inward and outward stocks, by country, 1995

Source: UNCTAD, FDI/TNC database and annex table B.6.

• East and South-East Asia has been the most dynamic host region for world FDI since the late 1980s (Bora, 1996a and 1996b).

The orientation of Australia's trade has changed dramatically away from Europe and towards East and South-East Asia (Anderson, 1995), and the newly industrializing economies of Asia accounted for 23 per cent of Australia's exports in 1995. Japan accounted for another 24 per cent. Altogether, East and South-East Asia accounts for more than half of Australia's exports.

Figure II.9. Sectoral distribution of Australia's FDI outward stock, 1995



Source: UNCTAD, FDI/TNC database.

Foreign direct investment often follows exports as a mechanism to enhance market access (UNCTAD, 1996a). Yet, although East and South-East Asia's markets have opened gradually over the past twenty years, Australian investors seem to be turning away from that region. More puzzling still, recent surveys have found that Australian investors still rank East and South-East Asia high as an investment location in the short- to medium-term (Australia, Bureau of Industry Economics, 1995).

Several possible reasons for this paradox have been advanced. One is that Australian investors have not been aware of the developments and opportunities in the Asia-Pacific region and are risk averse (Australia, East Asian Analytical Unit, 1994). Another is that policies in East and South-East Asia have also discouraged investment by restricting local equity, imposing sectoral restrictions and lacking assurances against expropriation and compensation (Australia, East Asian Analytical Unit, 1994; Australia, Bureau of Industry Economics, 1995). But while investment regimes in South and South-East Asia may not be as open as those in developed countries, they are not discriminatory, in the sense that preferences were granted to non-Australian investors (APEC, 1995a and 1995b). Hence, none of these reasons explains Australia's low FDI in East and South-East Asia.

A more plausible explanation may be the structure of Australia's industrial base. Most Australian firms in manufacturing that are not affiliates of foreign-based TNCs are of small or medium size. Australia's small and medium-sized enterprises have not yet reached a stage of development that would allow them to internationalize significantly via FDI. In addition, they may be discouraged from investing abroad as this appears to be associated with reducing domestic employment. Furthermore, the parent firms of foreign affiliates in Australia historically have sometimes discouraged their affiliates' investments abroad, especially in Asia; instead, parent firms' investments in Asia have been channelled through their existing Asian affiliates.

Another factor that requires closer investigation is the industrial structure of Australia's FDI outflows to East and South-East Asia compared with its factor-content of trade. Preliminary investigations have found that the decline in the share of FDI going to the ASEAN region was almost entirely in the manufacturing sector (Australia, Bureau of Industry Economics, 1995): in 1981, ASEAN members held 68 per cent of Australia's outward FDI stock in manufacturing, a share that collapsed to under 5 per cent by 1987.⁶ The composition of exports to the region is also changing: primary products now account for less than 30 per cent, a share that has been constantly declining over the years (from nearly 40 per cent in 1989). The decline in FDI and increase in exports, however, should be considered within the context of increasing exports aided by tariff cuts. The direction and composition of FDI outflows are also influenced by large investments in one or two countries as the level of Australian outward FDI is relatively low. Yet, the decline in the share of Australian FDI may simply reflect a mismatch between the factors that make East and South-East Asia attractive as a host for FDI and the "ownership" advantages possessed by Australian firms when they seek to invest abroad. For example, a significant portion of FDI into East and South-East Asia has been in labour-intensive manufacturing industries. Australian TNCs, however, do not have many "ownership" advantages in this area; hence they have not been active investors in these industries in the region. In general, compared to the services sector, the manufacturing sector in Australia was not globally competitive until the late 1980s. The services sector is relatively competitive, but many industries in this sector in Asia were not opened to foreign investment until recently. Supply factors are the key to understanding changes in FDI structure. There is some evidence that Australian FDI into Asia's manufacturing sector is increasing, but there is little indication that the region will soon regain its importance as a destination for Australia's investments.

B. Developing countries

1. Least developed countries

(a) Trends

The 48 least developed countries (LDCs) (32 of them in sub-Saharan Africa)⁷ have captured very little of the increase in FDI flows into developing countries during the 1990s. Although their annual average FDI inflows almost tripled between the periods 1986-1990 and 1991-1996, their share of developing-country inflows declined from 2.1 per cent to 1.8 per cent. In comparison, the value of goods imported by LDCs rose by 27 per cent between the periods 1986-1990 and 1991-1995 and their share of developing-country imports fell from 3.4 to 2.3 per cent. Typically, LDCs suffer from a variety of drawbacks that discourage FDI, not all of them readily amenable to policy reforms: the small size of their domestic market (in terms of both population size and per capita incomes),⁸ poor infrastructural facilities, adverse climatic conditions, remote geographical or land-locked positions (in some cases) and political instability (see also UNCTAD, 1995b).

In 1996, flows to LDCs rose by 56 per cent. Cambodia, Angola and the United Republic of Tanzania topped the LDC league in terms of absolute amounts (figure II.10). Vanuatu, Angola and Liberia had the highest ratios of FDI inflows to gross fixed capital formation (figure II.11); as these data indicate, FDI inflows are of great importance for some LDCs, much greater than for many countries. Within the LDC group, FDI flows vary widely across regional groupings or individual

(Millions of dollars) Cambodia United Republic of Tanzania Uganda Lao People's Democratic Republic Myanmar -218 Yemen Zambia Vanuatu 1995 Mozambique Lesotho Mal Solomon Islands Liberia Gambia Madagascar Bangladesh Cape Verde Maldives Ethiopia 50 100 150 200 250 300 350

Figure II.10. FDI flows into the top 20 LDCs, 1995 and 1996

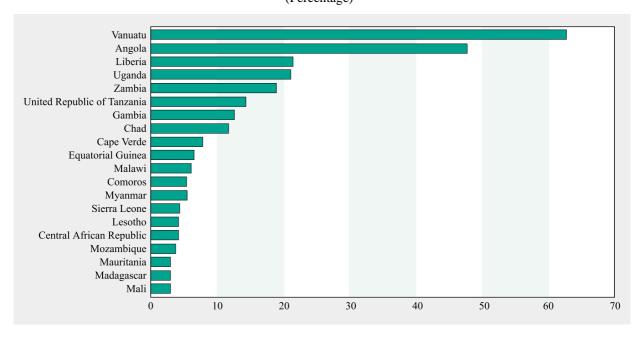
Source: UNCTAD, FDI/TNC database and annex table B.1.

countries, as well as from year to year, with disinvestments or large repatriations of earnings in one year followed by positive investment flows the next. African LDCs are the main recipients of FDI flows in absolute terms, but their share in total LDC inflows of 91 per cent during the period 1986-1990 declined, on average, to 50 per cent during the period 1991-1996. In contrast, the eleven LDCs in South, East and South-East Asia and the Pacific have seen the absolute levels and their share of LDC inflows increase from 8 per cent on average during the period 1986-1990 to 22 per cent during 1991-1996. Cambodia, with \$350 million in 1996, was the star performer among them (box II.2). While all South, East and South-East Asian LDCs, without exception, have captured growing amounts of FDI inflows between the two periods mentioned above, only some two-thirds of the African LDCs have succeeded in attracting more FDI.

The disparity between African and Asian LDCs reflects, in part, the importance for the latter group of intra-regional FDI as a source of investment. In Myanmar, for example, developing Asia accounted for 39 per cent of cumulative FDI inflows during 1990 and 1994. The corresponding figure for Bangladesh was 83 per cent. Asian LDCs' share of intra-Asian FDI, mainly from China, the Republic of Korea, Malaysia and Thailand, averaged 6 per cent during the period 1991-1995, with a peak value of 9 per cent in 1992 due to strong outward flows from Thailand. For example, between October 1988 and end-September 1996 some 204 projects were approved by Myanmar, with Singapore emerging as the leading source of FDI, followed by the United Kingdom, France and Malaysia (EIU, 1996a). With some United States TNCs, such as Pepsi Cola, and European TNCs, such as Carlsberg (Denmark) and Heineken (the Netherlands) pulling out of Myanmar in 1996, the share of Asian investments is likely to increase

Figure II.11. FDI inflows as a percentage of gross fixed capital formation in the top 20 LDCs, 1995

(Percentage)



Source: UNCTAD, FDI/TNC database and annex table B.5.

^a Gross fixed capital formation data are not available for Cambodia, Kiribati, Lao People's Democratic Republic, Maldives and Samoa.

Box II.2. Cambodia

Cambodia has attracted larger FDI flows than any other least developed country in 1996 (see figure II.10). In Cambodia FDI is a relatively recent phenomenon that has emerged on a significant scale only after the conclusion of the United Nations peace-keeping operation in 1993. Upon taking office after the United Nations supervised elections, the Royal Government of Cambodia moved quickly to put in place an appropriate legal framework and to create the necessary institutions to promote FDI.

The Law on Investments adopted by the National Assembly in August 1994 created the Council for the Development of Cambodia (CDC) and the Cambodian Investment Board, which operates as an integral part of the CDC, and serves as a one-stop agency responsible for processing applications and granting incentives to eligible investors. The major investment incentives listed in the law include: eight-year exemption from corporate income tax; 9 per cent rate of corporate income tax; 5 year loss carry-forward; exemption from import duties; repatriation of profits free of tax; and the distribution of dividends free of tax.

Because the sub-decree implementing the Law on Investments has not yet been adopted (it is expected to take effect in mid-1997), the application of the law has not followed a fixed pattern. The CDC has developed a matrix for calculating eligibility for the tax holiday incentive based on the following factors: capitalization, location, technology transfer, training, exports, value added, employment of women, total jobs created, and the employment of the handicapped and veterans. However, some observers are now arguing that the financial incentives are too generous, too much of a burden on public revenue, and in any case larger than what is required to make Cambodia a competitive investment environment.

The rise in FDI inflows since the inception of CDC has been impressive, especially considering that Cambodia is a least developed country. From August 1994 to end-1996, CDC approved 405 projects representing about \$4 billion of proposed fixed capital investment and additional employment of about 145,000. These figures represent investors' stated plans, rather than actual out-turns: the recorded flow of direct investment to Cambodia over this period is significantly lower (see annex table B.1). Data available so far for 1997 indicate that investors' plans remain buoyant: the dollar value of projects approved during the first four months of 1997 was more than twice that of the comparable period a year earlier.

Like almost all least developed countries, Cambodia's internal market is small and characterized by the low purchasing power of consumers. Investment in Cambodia therefore tends to be oriented towards production for markets abroad, making use of Cambodian raw materials and inexpensive Cambodian labour. When ranked by the number of proposed jobs created, the most important and most rapidly growing sectoral destination for investment is garment manufacture. Investors have also shown interest in rubber and palm oil, wood processing and food processing. Although its projected impact on employment is relatively small, investment in the tourist sector accounted for a relatively large part of the total projected dollar value of fixed capital investment.

Because it tends to be oriented towards production for export, direct investment has been, and will continue to be, influenced by trade policies. Cambodia has obtained most-favoured-nation status with most developed countries — most recently with the United States — and this is influencing direct investment, especially in the garment sector. Cambodia has also secured its participation in GSP schemes — again most recently with the United States — and this can be expected to shape direct investment in the period ahead. Finally, if and when Cambodia joins ASEAN, the country will participate in the ASEAN Free Trade Area and the planned ASEAN Investment Area. This can be expected to stimulate a further increase in investment flows from other ASEAN member states.

further. From August 1994 to the end of March 1996, more than a half of the investment in Cambodia came from Malaysia and Singapore, with other economies (such as Canada, China, the United Kingdom, Taiwan Province of China and Thailand) accounting for most of the rest. The "flying geese" model of industrial restructuring (UNCTAD, 1995a and 1996c), observable in the newly industrializing economies of the region, has benefited many neighbouring South, East and South-East Asian LDCs, by stimulating FDI into low-cost, labour-intensive activities in which these LDCs have a locational advantage.

A similar industrial restructuring that would give rise to large and persistent flows of intraregional investment is, however, not observed in Africa at this stage, although southern African LDCs could, potentially, benefit from such a process in the context of FDI from South Africa (see below). Potentially, the North African countries could also begin to move low value added labourintensive production to their neighbours in the south, most of which are LDCs, as part of their own industrial restructuring efforts.

The implication is that the opportunities available to Asian LDCs to integrate themselves into the investment plans of TNCs from the newly industrializing economies of the same region, as the latter upgrade their industrial structures, are not available yet to African LDCs, because such restructuring is not presently taking place in Africa on a significant scale.

(b) Prospects

Least developed countries are trying hard to attract more investment. Several have stepped up their efforts to expand the size of markets by cooperating with neighbouring countries, through such channels as preferential trade areas and speedy customs clearance. COMESA (Common Market for Eastern and Southern Africa), a common market fostering economic growth through investment, production and trade among 20 member States, is one example of such regional integration efforts. The CFA Franc Zone of UEMOA (West African Economic and Monetary Union), of which Guinea-Bissau became a member as of January 1997, 13 is another example. Other regional cooperation initiatives have been undertaken by the countries through which the Mekong river flows (Cambodia, China, Lao People's Democratic Republic, Myanmar, Thailand and Viet Nam), three of which are LDCs. Together, they have planned several projects involving foreign private investors for improving infrastructural facilities in transportation, telecommunications and power generation for the whole region. For instance, some of the hydroelectric dams on the Mekong river and a fibre-optics telecommunication loop for the region have attracted considerable foreign-investor interest. ¹⁴ Finally, if and when Cambodia, Lao People's Democratic Republic and Myanmar become members of ASEAN, these countries can benefit from the common investment regime being created for that area, as well as any common investment promotion activities in the future.

Furthermore, several LDCs, particularly in sub-Saharan Africa, have stepped up their efforts to attract FDI through wide-ranging reforms for greater liberalization, notably by eliminating foreign exchange restrictions applicable to foreign investors; the privatization of state enterprises; the establishment of "one-stop" shops; and policies to improve the overall macroeconomic environment, together with the adoption of stable exchange rates. These efforts have been complemented, on the international side, by the conclusion of 137 bilateral investment treaties as of 1 January 1997, of which 25 are between countries within the same region; however, the density of these treaties is lower for LDCs than for the three developing-country regions as well as Central and Eastern Europe. For Asian LDCs, liberalization policies have already contributed to sizeable increases in FDI inflows, illustrated by the recent FDI performance of Bangladesh.

Privatization is a strong catalyst for drawing in foreign investors to business opportunities in LDCs, particularly in the development of infrastructure. Examples of recent privatizations are numerous. In a move to encourage foreign participation in infrastructure development, 60 per cent of the stake in the Société des Télécommunications of Guinea was sold to Telekom Malaysia in 1996 (EIU, 1996b). Agreements have also been signed between Guinea and Unified Industries (United States) to build, own and operate electricity generation facilities for six years (EIU, 1996c). The partial privatization of Tanzania Breweries in 1993 enabled a South African brewery to acquire a 50 per cent stake and a five-year management contract in the former. ¹⁵ Engen, a South African oil company, was encouraged in October 1996 to build an oil terminal in Dar-es-Salaam with the option to bid for a network of retail fuel stations. ¹⁶ And Uganda's decision in 1996 to allow the sale of some major state-owned enterprises (up to 51 per cent of the equity) to a group of local and foreign investors marks a further step in the privatization process of that country (EIU, 1996d).

With the easing or the end of prolonged conflicts in some African LDCs (e.g., Angola and Mozambique), liberalization and the opening up of state-owned mining enterprises to foreign investors, together with improved world mineral prices since 1994, signs of an FDI revival are beginning to appear. Several major mining projects with foreign participation are planned or are already under way: oil and diamonds in Angola, gold in Mali and the United Republic of Tanzania, bauxite in Guinea and copper in Zambia (UNCTAD, 1995b). And as more welcoming FDI regimes are set up and the domestic economic situation improves, foreign investors are seeking investment opportunities outside mining, such as in fishing, cut flowers, fruits and vegetables, light manufacturing and tourism. For example, Lesotho's proximity with South Africa, the largest market in the region, has prompted TNCs to invest in asparagus processing in the former (EIU, 1996e). In turn, South Africa has invested in Lesotho's cellular telephone development (EIU, 1996e) and in December 1996 Peugeot (France) announced plans to produce components of a car model designed for African markets in Madagascar. South African investors have also expressed interest in Mozambique, in projects such as power links, an aluminium smelter and tourism development.

One obstacle to attracting FDI to LDCs has been the lack of information on investment opportunities in most of those countries. Only 2 per cent of over 200 investment guides -- an important medium for disseminating information on a country's investment environment and business opportunities -- published by the top six international accounting firms cover LDCs. And only 6 of the 48 LDCs provide comprehensive guides to foreign investors. In today's highly competitive FDI market, a low level of awareness of the investment opportunities available, lack of information on investment conditions and legal frameworks and lack of readily available information on contact points in the countries themselves can hamper inward FDI.

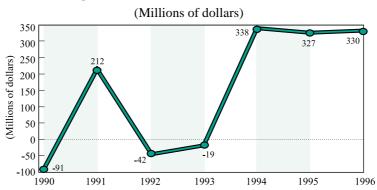
2. Africa

(a) Trends

Foreign-direct-investment inflows into Africa increased 5.3 per cent, ¹⁹ to almost \$5, billion in 1996. (Investment trends for South Africa are discussed in box II.3.) Nigeria, Egypt and Morocco topped the African league of the largest recipients in 1996 (figure II.12). But in relation to gross fixed domestic capital formation, Nigeria, Angola and Seychelles head this league (figure II.13). Africa's share of developing-country inflows was 3.8 per cent in 1996, the lowest share since the early 1980s. On average, Africa's share of developing-country inflows has more than halved, from 11 per cent during 1986-1990 to 5 per cent during 1991-1996. This suggests that Africa has not participated in the surge of FDI flows to developing countries.

Box II.3. South Africa: the "wait-and-see" phase is over

After a period of disinvestments (negative FDI inflows), FDI flows to South Africa reached over \$300 million both in 1994 and 1995 (box figure). A good part of that investment is concentrated in the Gauteng province around Johannesburg, where 80 per cent of all foreign affiliates and more than 75 per cent of all persons employed by foreign affiliates are located (IRRC, 1996, p. 4).



Box figure. South Africa: FDI inflows 1990-1996

Source: UNCTAD, based on annex table B.1.

a Estimates.

United States' firms have made by far the largest investment commitments in South Africa since the April 1994 election. These commitments, valued at 8 billion Rand, are more than twice the level of commitments by German TNCs (3.2 billion Rand), the next most important investors. In terms of employment, United States affiliates account for 60,000 of the 500,000 employees currently employed by all foreign affiliates in South Africa (IRRC, 1996, p. 2). Other important sources of investment are the United Kingdom, Switzerland, France, as well as the Republic of Korea and Malaysia.

The growth of FDI from Asia is an important new phenomenon. Investors from the Republic of Korea plan major investments in the motor and auto-components industry,^a while Malaysian TNCs are concentrating on services (hotels, property and telecommunications) and petroleum. In 1996, Malaysia's Petronas announced plans to spend \$436 million to purchase a controlling stake in Engen, a large South African oil refinery.^b Telekom Malaysia has formed a consortium with SBC International (United States) which acquired a 30 per cent stake (for about \$1.3 billion) in the privatized South African Telkom in 1997.^c

Food and beverages, motors and automobile components, electronics and information technologies, some services and property were the most important recipients of FDI into South Africa between May 1994 and May 1996. Food and beverages, as well as clothing, hotels and leisure, are areas of strong interest to United States TNCs. German TNCs concentrate particularly on the manufacturing sector, with a focus on motors and automobile components, while United Kingdom TNCs invest in a variety of industries, including banking and other financial services, chemicals, beverages, publishing and motor components (Business Map, 1996, p. 11). Between May 1994 and May 1996, 74 per cent of all TNCs entering South Africa invested in the services sector, 24 per cent invested in manufacturing, and only 2 per cent invested in mining (IRRC, 1996).

By establishing investment facilities in South Africa, TNCs also aim to supply the regional and world markets. In particular, some automobile TNCs started to integrate their South African affiliates into their international production networks, and export part of their output back to the home country or to other countries. This puts pressure on other foreign affiliates to integrate their TNC networks as well, in order to enhance their ability to access world markets and become more efficient. For instance, BMW announced in 1995 that it would step up its investment commitments by 1 billion Rand, to make its South African affiliate a full-fledged member of BMW's global manufacturing and distribution network.^d

(Box II.3, cont'd.)

The reversal of the trend in FDI inflows into South Africa (from disinvestments to positive investments) suggests that the "wait-and-see" approach by TNCs to South Africa has come to an end.

- An increasing number of parent firms is buying back their South African affiliates, which they had sold during the period of sanctions (between the end of the 1980s and May 1994). This is particularly the case for TNCs based in the United States. Indeed, the number of United States' parent firms with investments or employees in South Africa rose steadily during the 1990s: from 104 in 1991 to 281 in May 1997 (IRRC, 1997). Between May 1994 and May 1997, more than 120 United States-based TNCs entered the country (IRRC, 1997).
- The number of firms investing in South Africa is growing rapidly. According to some reports (IRRC, 1996, p. 2), on average, nearly four United States' firms per month have been investing in South Africa between May 1994 and May 1996, slowing down slightly in the following 12 months up to May 1997 when only 30 United States' companies entered South Africa (IRRC, 1997). As of May 1996, 350 subsidiaries of TNCs based in Germany had invested in South Africa -- 20 TNCs more than as of May 1994 (Business Map, 1996, p. 11).
- Firms that have already invested in South Africa are planning to expand their investments. A recent survey of 31 affiliates in South Africa of TNCs based in France found that 76 per cent of them (compared with 60 per cent in 1995) plan to extend their investment in the next three years (Moniteur du Commerce International, 1996, p. 39).

In addition, the Rand's depreciation (since the beginning of 1996) has made purchases of South African assets cheaper for foreign firms.^e This has contributed to the growth of merger-and-acquisition purchases of local firms by foreign companies. The number of such purchases has risen sharply -- from 9 in 1991 to 59 in 1996; the ensuing increase in foreign investment (including portfolio equity investment) inflows has risen from 46 million Rand in 1991 to an estimated 4,130 million Rand in 1996.

Some foreign investors, however, remain cautious, as reflected in their preference for various forms of non-equity investment. A recent survey of German-based small and medium-sized TNCs found that most preferred joint ventures with local partners that do not entail capital commitments, their contribution being "in kind", in the form of technology (Blank, 1996, p. 264). Much of the involvement in South Africa by United States-based TNCs takes place through franchising, with capital raised by the local partner rather than brought in by the parent firm (Business Map, 1996, p.11). Another sign of investor caution is that acquisitions, rather than greenfield investments, form the lion's share of investment flows to South Africa from the major source countries, although, where opportunities exist, TNCs quite often prefer mergers and acquisitions as an entry strategy.

Foreign-investor concerns centre on the political situation, social problems (e.g., high crime rates) and the difficulty of market entry (given that a good part of South Africa's economy is controlled by a few industrial conglomerates). h The reduction of these impediments, in conjunction with a strengthening of South Africa's existing locational advantages (e.g., a good business infrastructure, a large and potentially significant domestic market and reasonable rates of return on investment), as well as the expectation that South Africa will become an economic hub in the region, are likely to encourage FDI flows into that country over the next years. Despite these concerns, the sharp increase in FDI flows in 1994 and 1995 suggests that foreign investors' confidence in South Africa as an investment location has revived, and that the "wait-and-see" phase is now over.

- ^a Roy Cokayne, "Daewoo plans R 1 bn vehicle plant for SA", *The Mercury*, 15 March 1996.
 ^b James Kynge, "Petronas takes in global panorama", *Financial Times*, 25 October 1996.
 ^c Roger Mathews and Mark Ashurst, "S Africa sells 30% of Telkom in \$1.25 bn deal", *Financial Times*, 27-28 March 1997.
 - ^d Roy Cokayne, "BMW injection shows confidence in SA", *The Mercury*, 24 January 1996.
 - e "Sliding Rand helped gain direct foreign investment", *Daily News*, 9 October 1996.
- f Data provided by Ernst & Young. Due to definitional differences, the merger-and-acquisition figures reported here do not correspond to FDI inflows reported elsewhere in this box. The figure for 1996 is preliminary.
 - g "Exchange curbs keep investors on wrong side of SA border", Sunday Times, 5 May 1996.
- ^h Some attempts have been made to reduce the size of these conglomerates through demonopolization and rationalization

But these figures have to be put into perspective:

- The decline in the region's share in developing-country inflows is not limited to Africa. Latin America and the Caribbean also experienced a declining share (from 39 per cent in 1986 to 30 per cent in 1996). Apart from difficult business conditions in a number of African countries, this steep decline is partly a result of the rise of China. If China is excluded from the data, Africa's share in developing-country inflows changes from 3.8 per cent to 5.7 per cent in 1996 (and that of Latin America and the Caribbean from 30 per cent to 45 per cent).
- The absolute level of FDI flows into Africa is increasing, from an annual average of \$800 million during 1975-1980 to an annual average of \$3.9 billion during 1990-1996. Although rising from a small level, FDI inflows into Africa grew by fivefold between the periods 1975-1980 and 1990-1996, compared with 4.7 times for Latin America and sevenfold for developed countries as a whole. Asia, however, has performed much better, mainly because the countries of that region have the benefit of substantial interregional investment flows, and both Asia and Latin America have shown a particularly dynamic FDI performance in the most recent years.
- Considering that market size is an important determinant of FDI inflows, it is noteworthy that, as a percentage of GDP, Africa's FDI stock in 1995 was 13 per cent, compared to about 13 per cent for Western Europe, 14 per cent for Asia, and 18 per cent for Latin America and the Caribbean. If only sub-Saharan Africa is considered, the share is as much as 17 per cent. Considering that market size in African countries is relatively small and that

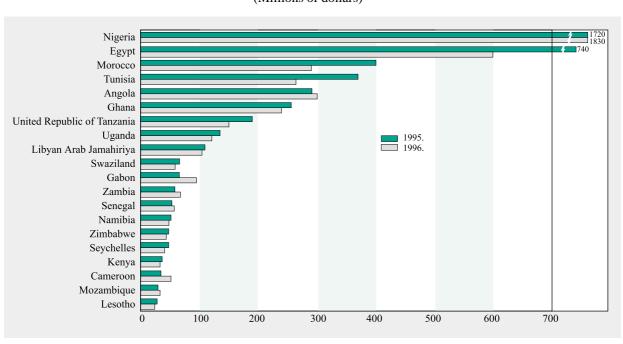


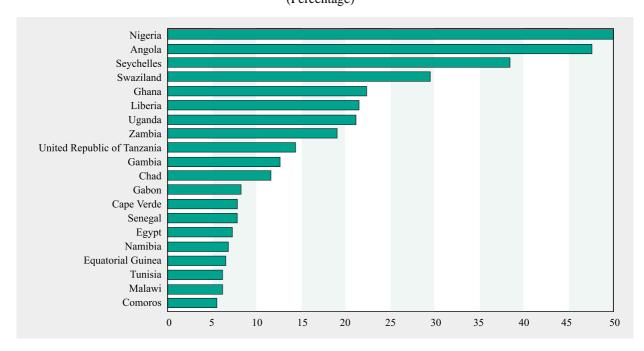
Figure II.12. FDI flows into the top 20 countries in Africa, 1995 and 1996 (Millions of dollars)

Source: UNCTAD, FDI/TNC database and annex table B.1.

- the level of development of Africa is lower, the difference between the performance of Africa and that of other regions using this indicator is not that unexpected.
- While FDI flows into Africa account for only a small share of flows into developing countries as a whole, the relative importance of the FDI inflows that the continent receives is quite high: in relation to gross fixed capital formation during 1990-1995, FDI flows accounted for 5.4 per cent, in comparison with nearly 5.5 per cent for Asia, 8.4 per cent for Latin America and the Caribbean and 5.9 per cent for Western Europe. There are a number of countries in Africa which, by this measure, received more FDI than major developing countries in Asia and Latin America.
- While flows continue to be concentrated in a few host countries (Nigeria and Egypt accounted for over a half of FDI into Africa during the first half of the 1990s), other countries are beginning to receive sizeable inflows (box II.4).
- While FDI in the primary sector in Africa is, relatively speaking, far more important than in other continents, the secondary and tertiary sectors together now account for perhaps as much as two-thirds of all FDI in Africa. It is a picture that is also reflected in the principal oil exporting countries: in Nigeria, for example, the primary sector accounted for about 33 per cent of the total FDI stock, with manufacturing contributing 48 per cent and services 19 per cent in 1992. The respective figures for Egypt in 1995 were 4 per cent, 47 per cent and 48 per cent; and for Algeria in the same year, 5 per cent, 25 per cent and 70 per cent (UNCTAD, 1997a).
- To the extent that data for United States' affiliates in Africa can be generalized, the rate of return on FDI in Africa has been considerably higher -- and consistently so -

Figure II.13. FDI inflows as a percentage of gross fixed capital formation in the top 20 countries in Africa, 1995

(Percentage)



Source: UNCTAD, FDI/TNC database and annex table B.5.

- than that in Latin America, and higher than the average for both developed and developing countries (UNCTAD, 1995b).
- Perhaps most interestingly, a number of firms from Africa are themselves beginning to become TNCs, i.e., they are emerging as outward investors. Although African TNCs remain relatively rare and small in size (with an outward FDI stock of \$26 billion in 1996, including South Africa), this shows that there *are* firms in Africa that can be competitive internationally, not only through trade but also through production in foreign markets. Firms from South Africa lead, followed by those from Nigeria. Together they accounted for two-thirds of FDI from the region in the 1990s (UNCTAD, 1997a).

Box II.4. Morocco, a rising star

During the 1990s, broad macroeconomic reforms have created a favourable investment climate in Morocco. The privatization programme and the liberalization of the FDI regime have also contributed to making the country attractive to foreign investors. As a result, FDI inflows to Morocco increased almost fivefold, from an average of \$83 million during 1985-1990 to an average of \$419 million during 1991-1996, with \$400 million in inflows in 1996 alone.

Prospects for sustained inflows are promising. Recent announcements of large investment projects included a \$900 million investment by Daewoo (Republic of Korea), ACCOR's plans to construct 19 hotel units, ABB-CMS' planned investment of \$1.6 billion and SGS Thomson's plan to invest \$400 million in micro-electronics.

Morocco is now the third largest recipient of FDI in Africa — and it is at the forefront of changing the image of Africa.

Source: UNCTAD, based on information provided by the Ministry of Finance and Foreign Investment of Morocco.

This suggests that the picture is mixed. And, of course, these figures are aggregates and mask a wide range of performances. But this is precisely the point: one needs to take a differentiated look at Africa, examining each country -- and perhaps even each industry -- on its own merit to see whether investment opportunities exist. And, of course, these figures do not say anything about the desire of African countries to attract more FDI -- or, indeed, about the potential for more FDI in Africa.

Within Africa, the host subregional or country pattern has not changed significantly during the past decade (annex table B.1):

- The share of North Africa in Africa's total inflows has declined from an average of 44 per cent during 1986-1990 to an average of 38 per cent during 1991-1996.
- The corresponding share of sub-Saharan Africa has risen slightly,²⁰ from 56 per cent to 62 per cent between the two periods.
- The share of oil exporting African economies in Africa's total inflows has increased marginally, from 71 per cent during 1986-1990 to 73 per cent during 1991-1996.

- The share of Africa's FDI inflows accounted for by the least developed countries in that region has remained almost the same: an average of 18 per cent during 1986-1990 and an average of 17 per cent during 1991-1996 (see the earlier discussion).
- Investment flows into Africa have become less concentrated. The five largest recipients during 1991-1996 -- Nigeria, Egypt, Morocco, Tunisia and Angola -- accounted for 78 per cent of all investment inflows to that region. But the corresponding share during 1981-1985 of the top five recipients -- Egypt, Nigeria, Tunisia, Cameroon and Angola -- was 93 per cent.

Geographical proximity, historical ties and recent trade agreements between North African countries and the European Union continue to render Western Europe the principal source of investment flows to Africa. Two countries, France and the United Kingdom, together accounted for 88 per cent of Western European investment to Africa during the first half of the 1990s. The United States accounted for 15 per cent of all investment flows into Africa originating from the developed countries. A new development is that developing countries, mainly in Asia, are also becoming a growing source of investment for Africa (box II.5), although North African countries receive considerable investment from West Asia, mostly in finance. 22

Most FDI flows in some North African countries, such as Algeria and the Libyan Arab Jamahiriya, go into the hydrocarbon industry. New oil discoveries in Algeria, coupled with a gas pipeline completed in 1996 that has already started to pump gas to Portugal and Spain via Morocco, are prompting the arrival of more petroleum investment. Privatization and high and sustained growth rates in Egypt, Morocco and Tunisia have attracted rising FDI in industries as diverse as hotels, cars, electronics and infrastructure. BMW (Germany) has announced plans to open its first assembly plant in Egypt in 1997.²³ Egypt is also attracting considerable investment in infrastructure, including telecommunications and airports, mostly through build-operate-transfer projects.

(b) Prospects

Several factors hold out the prospect of improvements in FDI performance in some parts of Africa. These factors are:

- Favourable growth performance. Africa's economic recovery, which started in 1994, was strong in 1996, with domestic output rising by 4.4 per cent, the biggest increase since 1988. This performance compares favourably with the 2.7 per cent GDP increase in 1995, and represents a turnaround in the per-capita income growth rate (UN-ECA, 1997). Still, per-capita income levels remain low.
- *FDI (and trade) liberalization.* In an effort to improve their investment regimes, several countries in Africa have removed ownership restrictions,²⁴ reduced taxation rates and abolished price controls. They have also encouraged private-sector initiatives. As of 1 January 1997, some 45 African developing nations had concluded at least one bilateral investment treaty and, in total, had signed 267 BITs, of which 17 were with countries in the continent.
- *Privatization.* Sub-Saharan African countries continued to sell off state-owned enterprises, including some in infrastructure, to foreign investors. They raised \$544 million in 1995,

Box II.5. Asian FDI in Africa

Transnational corporations from developing economies in South, East and South-East Asia (which already play a substantial role in intra-Asian FDI flows) are beginning to discover Africa (box table).

Box table. Major Asian FDI flows to Africa, a 1990-1996

(Millions of dollars)

	1990	1991	1992	1993	1994	1995	1996
	1990	1991	1992	1993	1994	1993	1990
China		1.3	7.7	12.8	27.4	17.7	
Republic of Korea			29.0	30.7	113.5	40.7	
Malaysia	-	1.2	4.8	4.8	34.0	36.1	46.1
Pakistan	5.0	4.2	8.1	7.0	5.5		
Taiwan Province of China	13.0	4.5	16.9	0.4	18.7	28.8	20.9

Source: UNCTAD, FDI/TNC database.

Examples are numerous. Daewoo (Republic of Korea) plans a multi-billion dollar expansion of its investments in Morocco.^a Hyundai (Republic of Korea) began building a new assembly plant in Botswana in 1996 to make vehicles for the African market. The JR Group (Hong Kong) is planning to expand into the Seychelles' tourism industry and to set up an offshore bank there (EIU, 1996f). Telekom Malaysia purchased a 30 per cent stake in Ghana Telecom. In addition, agreements were signed in 1996 between firms from Malaysia and Ghana in industries as diverse as hotels, banking, real estate and palm-oil development, aimed at attracting FDI in joint ventures or in wholly foreign-owned projects in the latter country. Furthermore, in order to facilitate business exchanges, Ghana and Malaysia accorded each other most-favoured-nation status, and Ghana waived visa requirements for Malaysians.^b PRC Trading of Huang Gu (China) established a brewery in Accra in 1996,^c and another Chinese firm has expressed interest in processing cocoa in Ghana for export to Asia. Finally, there are a number of important investments by Asian firms in South Africa (see box II.3). All of these examples indicate a growing interest of Asian developing economies in investment opportunities in Africa.

- "Bilan du monde", Le Monde, Edition 1997, p. 87.
- K. Hardi, "Rawlings looks East for growth", *Africa Business,* February 1996, pp. 28-29. Asmah George, "Chinese to brew beer in Accra", *African Business,* April 1996, p. 29. h

compared with \$74 million in 1990 (table II.4). Mozambique and Zambia, for example, have large-scale privatization programmes. Government efforts to nurture private business have been backed with more prudent macroeconomic management.²⁵ Some privatizations involving foreign investors have led to the upgrading of capital, know-how and technology. Consequently, some loss-making state-owned firms were transformed into profitable and dynamic enterprises.

Regional integration agreements. The convergence of economic policies in many African economies is improving prospects for enhanced regional cooperation. Governments are harmonizing their investment codes and customs duties (on imported components), with a view towards attracting TNCs that aim at serving the regional market. Formal regional integration or cooperation agreements also increase the size of domestic markets and allow firms both from the member countries and from outside to achieve economies of scale in production.

Including South Africa.

• Links with other regions. The most significant developments are the free-trade agreements between North African countries and the European Union, the Lomé Convention and its possible extension to South Africa, and the African Growth and Opportunity Act introduced in the United States Congress in April 1997. While the customs-union agreement between North African countries and the European Union allows for enlarged trade and FDI flows through facilitated market access and lower tariff rates, the Lomé Convention (signed between the 70 African, Caribbean and Pacific States, on the one hand, and the European Union, on the other) permits manufactured goods and most agricultural exports to gain duty-free access to the European Union.

Overall, prospects for an improved FDI performance during the second half of the 1990s appear favourable. Oil and mining companies, for example, have announced investment plans for Africa in 1997 totalling some \$5 billion. Prospects for investments in manufacturing and services are also improving. Even if there should be a further decline in Africa's share in world FDI flows, the importance of FDI for the continents might increase. In fact, during the period of a declining share, FDI stock as a percentage of GDP doubled from 6 per cent in 1985 to 13 per cent in 1995. More generally, it is the growth rate of FDI that matters, rather than the share of the region in world FDI flows. Naturally, Africa's prospects in this respect (and especially those of the continent's least developed countries) would improve if a broader basis for sustained economic growth could be created -- a task in which the international community has an important role to play, especially through official development assistance.

(c) South African transnational corporations and the economic development of southern Africa

Since the beginning of the 1990s, economic liberalization and regional integration in the southern African region have been on the rise. Within the Southern African Development Community (SADC) (box II.6), a group of countries with the strongest economic links with South Africa, hopes have been high that post-apartheid South Africa could emerge as a "growth pole" for the region, contributing positively via trade and FDI to the development of its neighbours. There have even been expectations that South Africa would initiate a regional restructuring process similar to the one which centred on Japan in East and South-East Asia. This section analyses the particular conditions

Table II.4. Privatization revenues in sub-Saharan Africa, 1988-1995 (Millions of dollars)

Country	1988	1989	1990	1991	1992	1993	1994	1995	Total
Côte d'Ivoire				10	6	5	14	120	154
Ghana		1	10	3	15	28	476	87	619
Mozambique		1	4	5	9	6	2	26	52
Nigeria		33	16	35	114	541	24		764
South Africa		632		5					637
Uganda					12	19	24	47	101
Zambia								69	69
Zimbabwe							232	75	307
Other	10	16	45	2	35	49	22	121	299
Total	10	683	74	60	191	648	792	544	3002

Source: World Bank, 1997a.

Note: There may be some discrepancy between the sum of the countries and what is reported as a total, due to rounding.

for two possible scenarios:

South Africa as the regional growth pole; and South Africa as the "leading goose" for the southern African region.

i. Growth pole

To become a regional growth pole, South Africa would need to contribute to the development of the neighbouring economies, mainly through trade and FDI.²⁸ With a GDP of more than \$125 billion in 1996, South Africa's economy is by far the largest in the region. Due to South Africa's political and economic isolation during the apartheid era, trade with its neighbours remained modest. However, since South Africa's 1994 elections, its trade with neighbouring countries has expended rapidly. This growth has been largely accounted for by increases in South Africa's imports of primary and intermediate goods and the expansion of its manufactured exports. However, this has been achieved at the cost of rising trade deficits incurred by many of South Africa's neighbours.

In principle, direct investment by South African TNCs could play a crucial role in the development of neighbouring countries, by serving as an "engine of growth" (UNCTC, 1992b), in particular in the following ways:

• Provision of capital and contributing to capital formation in the host economy. Already before the elections in 1994, South African FDI in southern Africa increased significantly (table II.5). Traditionally, most of these investments have been by mining companies, often accompanied by investments from financial institutions that seek to provide financial services to them (Business Map, 1996, p. 13). More recently, South African TNCs have been investing also in food processing, retailing and other services in countries in the region. Privatization programmes in these countries are also attracting investment from South Africa. South African Breweries, for example, purchased a major stake in Tanzanian Breweries when it was partially privatized in 1993 (annex table A.10).

Box. II.6. The Southern African Development Community

The Southern African Development Community (SADC), the successor of the Southern African Development Coordination Conference, comprises Angola, Botswana, Lesotho, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, United Republic of Tanzania, Zambia and Zimbabwe. SADC was established in August 1992, with South Africa (1994) and Mauritius (1995) joining later. The SADC treaty foresees, among other things, deeper economic cooperation and integration, on the basis of equality and mutual benefit through cross-border investment and trade as well as freer movement of factors of production; it thus goes farther than previous regional initiatives that just sought to coordinate rather than integrate the economies of member states. In August 1996, member states initialled the SADC trade protocol. It foresees the creation of a free-trade area within 8 years after the protocol is ratified by member states as part of the strategy change of SADC away from regional project coordination towards the liberalization of trade in services, goods and capital. At the SADC summit in September 1997, member states will discuss an internal tariff-reduction schedule. Botswana, Lesotho, Namibia, South Africa and Swaziland have already established free trade among them, as they also represent the Southern African Custom Union (SACU), which originates from a 1910 Custom Union Agreement between South Africa and several then British High Commission territories. In this connection, the question of dual membership in SADC and other regional organizations, such as SACU or COMESA (Common Market for Eastern and Southern Africa), is not yet fully resolved.

Table II.5. South African FDI^a stock in selected SADC countries, 1991-1994 (Millions of Rand)

Country	1991	1992	1993	1994
Botswana	76	169	198	232
Lesotho	11	20	32	43
Malawi	10	5	7	8
Mozambique	4	4	4	3
Namibia	45	82	94	96
Swaziland	89	72	85	605
Zambia	4	2	5	7
Zimbabwe	85	61	72	65
Total SADC	324	415	497	1 059
Memorandum:				
Other Africa	1 454	2 194	2 281	2 693
Total Africa	1 778	2 609	2 778	3 762

Source: UNCTAD, based on data provided by the South African Reserve Bank.

- Transfer of technology and contribution to human resource development. Little hard evidence is available that South African TNCs are contributing to economic development in the SADC countries through the transfer of technology. Although there are a number of firms in SADC countries with modern production processes, the generally low level of technological capability and sophistication of manufacturing in most of these countries makes it difficult for many local firms to absorb such transfers (Lall et al., 1996). There is also a paucity of hard evidence available on the contribution to human resource development (which usually takes place through vocational training of unskilled and semi-skilled workers) in South African affiliates in SADC member States as well as in the form of improvements in management capabilities, technical know-how and entrepreneurial abilities through formal and informal channels of learning.
- Providing opportunities for additional export revenues. Few data are available on the
 contribution of South Africa's TNCs to the export revenues of host countries in the
 region. But the more firms invest there to produce goods that are exported back to
 South Africa, the more positive should be the effect on the bilateral trade balances
 of those countries.

To sum up, South Africa's potential as a regional growth pole through trade and FDI is by no means exhausted. However, the feasibility and success of a growth-pole strategy depends crucially on two factors. The first is free access to the South African market for exports produced in neighbouring economies. Since 1995, when South Africa started with a process of progressive import-tariff reductions in accordance with its WTO obligations, the country has taken some decisive steps in this direction. Average import protection in manufacturing is due to be reduced to 8 per cent in the year 2000, from 19 per cent in 1994. But, despite significant reductions in many industries, some goods will still be subject to relatively high protection in the year 2000. For instance, clothing (excluding footwear) will still have a nominal rate of tariff protection of more than 45 per cent until 2000, despite a planned 44 per cent reduction (Industrial Development Corporation, 1996, p.6).²⁹

^a The threshold in the definition of FDI used here is different from the one used by the International Monetary Fund (see definitions and sources in the annex). Up to 1994, the South African Reserve Bank defined FDI on the basis of a threshold of 25 per cent. This means that the FDI used here are, in comparison to IMF data, an underestimation.

The second condition is faster demand growth in South Africa, which has risen rather modestly since 1994 (with GDP growth rates not exceeding 4 per cent; Vayenas, 1997). At present, prospects hinge largely on the results of the Growth, Employment and Redistribution (GEAR) programme, which is the main instrument of the Government of South Africa for stimulating the domestic economy.

ii. Building the nest?

The question for the future is whether South African firms can go beyond their traditional role in neighbouring economies and help them develop new industries, notably in manufacturing. Much may depend on whether South African TNCs establish an intra-regional division of labour, in the framework of which they upgrade production at home to more capital- and technology-intensive activities. These issues are at the centre of the debate on whether the southern African region can learn from the model of regional economic integration pioneered in South-East Asia where several groups of countries followed each other through stages of industrial development, driven by the dynamics of a changing intra-regional division of labour. This process is often referred to as the "flying geese" model (originated by Kaname Akamatsu and further developed by, e.g., Kiyoshi Kojima and Terutomo Ozawa), with Japan generally labelled as the "lead goose". The "lead goose", in the course of its own development process, constantly develops new industries and passes on to the next-tier countries those in which it has lost competitive advantages. 31

Recent trade liberalization measures have created additional pressures. Economic restructuring in South Africa is expected to have a substantial impact on several South African manufacturing industries. The overall outcome is expected to be a "relative shift in employment away from labour-intensive sectors" (Bell and Cattaneo, 1996, p. 23).

The need for restructuring is underlined by the findings of surveys of productivity in South Africa's manufacturing industries (Nordas, 1996). These suggest that South Africa's present trade regime has not helped the creation of globally competitive firms outside mining and energy. It is very likely that some industries will decline once exposed to global competition. South African policy makers have identified several industries (including aluminium, forestry, stainless and carbon steel) that could offset the negative effects of contraction in other industries (Maia, 1997). High unemployment makes the creation of new industries or the upgrading of existing ones all the more imperative. Trade liberalization also increases the need for restructuring in neighbouring economies.

However, it is not evident that restructuring will take place along the lines of relocating production through FDI from South Africa to other SADC members with lower labour costs only. This would tackle only some of the problems of low productivity and weak competitiveness. These are often due to deficiencies such as outdated management and organizational structures that cannot be solved simply by relocating production processes to areas with lower wage costs.³² Also, an untapped reservoir of labour in South Africa suggests that the potential for labour-intensive production in that country has not yet been exhausted. In this connection, it is important to note that intra-regional restructuring does not refer solely to the relocation of production processes; partnerships and alliances with firms in neighbouring countries, for instance, as regard research-and-development activities, as well as cross-border subcontracting linkages, can increase the competitiveness of South African firms without necessarily implying a reduction in employment in South Africa.

Still, it seems quite probable that at least some South African firms will attempt to improve their efficiency by combining their firm-specific assets with the locational advantages of other countries. But how far is such interactive restructuring likely to go, and how closely will it follow the "flying geese" model of East and South-East Asia?

Some answers can be found by comparing the situation in southern Africa with the conditions that accompanied the TNC-assisted interactive restructuring process in Asia (UNCTAD, 1995a, pp. 260-261). The six conditions are: different levels of development; ability to restructure; sufficient demand and markets; market verification of restructured industries through internationally competitive exports; enabling framework for the transmission of TNC assets; and a favourable investment climate.

Of these conditions, only the first is met by the southern Africa region at present. Several indicators suggest that the region possesses complementary economic structures that could enable TNCs to take advantage of differences in comparative advantages in order to match their own tangible and intangible assets with those of individual host countries.

Although GDP per capita in a few countries in the region is on a par with that of South Africa (table II.6), ³³ its level of development is significantly higher than that of most of them. This was also true of Japan *vis-à-vis* the Asian economies when the "flying geese" model took shape. Variations in GDP per capita in southern Africa are matched by differences in labour costs (table II.7), suggesting a comparative advantage in labour-intensive production processes for those countries in the region which already have a sufficiently developed industrial base. These cost advantages are enhanced by considerable disparities between labour laws, which, from an employer's perspective, seem more restrictive in South Africa than in neighbouring countries.³⁴ On the other hand, average figures for wages and GDP tend to mask the significant social and regional disparities within South Africa. Thus, wages for black workers are still far lower than the average (Standing *et al.*, 1996), and production is highly concentrated in the Gauteng-Province around Johannesburg, leaving some regions in the country at a lower level of development than others. However, South Africa's relatively rich endowment of human capital is conducive to the development of new industries, which could gradually replace those that are based primarily on an abundant supply of cheap labour.

Table II.6. Intra-regional disparities in GDP per capita levels in SADC (1994) and in East and South-East Asia (1970)

(Dollars and percentage)

SADC	GDP per capita 1994	GDP per capita levels in 1994 as share of South African GDP per capita in 1994	East and South-East Asia	GDP per capita 1970	GDP per capita levels in 1970 as share of Japanese GDP per capita in 1970
South Africa	2 554	100.0	Japan	7 307	100.0
Mauritius	2 846	111.4	Hong Kong	4 502	61.6
Botswana	2 731	106.9	Singapore	3 017	41.3
Namibia	1 577	61.7	Taiwan Province of China	2 188	29.9
Swaziland	1 158	45.3	Malaysia	2 154	29.5
Zimbabwe	636	24.9	Korea, Republic of	1 680	23.0
Zambia	410	16.0	Thailand	1 526	20.9
Lesotho	338	13.2	Philippines	1 403	19.2
Kenya	328	12.8	Indonesia	715	9.8
Malawi	178	6.9	China	696	9.5
Burundi	156	6.1			
United Republic					
of Tanzania	102	4.0			

Source: UNCTAD, based on Summers and Heston (1991), and data retrieved from Web site http://www.nber.org/pwt56.html.

As to the other conditions, good progress has been made in creating an enabling framework for FDI, as well as in implementing economic liberalization policies. However, most of the conditions necessary for the initiation of intra-regional restructuring are still far from being in place:

• Ability to restructure. While there is a need for industrial restructuring in South Africa and in other SADC member states, the ability to undertake it seems at present far more limited than in East and South-East Asia. Firstly, unlike Japan, South Africa faces high levels of unemployment. Any significant relocation of production processes -should it occur -- is therefore

Table II.7. Annual average wages^a and share of manufacturing in GDP in SADC countries, 1994 (Dollars and percentage)

Country	Annual average wages (Dollars)	Share of manufacturing in GDP (Per cent)
Botswana	4 354	3.9
Lesotho	1 838	13.1 ^b
Malawi	878	20.4
Mauritius		20.8
Namibia		8.9
South Africa	9 348	22.8
Swaziland	3 895	29.0
United Republic of Tanzania	205	4.8
Zambia	1 660	22.0
Zimbabwe	2 239	30.4

Source: UNIDO, 1996.

b 1990.

likely to induce far more political resistance in South Africa than it did in Japan, though it must be taken into account that not all employment-creating investment in neighbouring countries necessarily leads to employment reduction in South Africa, but rather -- as happened in East and South-East Asia -- it can also contribute to an upgrading of domestic employment. The high rate of unemployment also dampens prospects for fast wage increases, an important incentive for interactive regional restructuring assisted by TNCs. Second, at present it remains unclear whether South Africa possesses capabilities similar to those of Japan in creating new, dynamic, world-competitive industries. While Japan's share of world exports was almost 9 per cent as long ago as 1970, South Africa's was only 0.3 per cent of world exports in 1994.³⁵ The fact that foreign investors in South Africa ranked the lack of a well-educated work force as a major investment impediment seems to point in the same direction (Blank, 1996, pp. 265-266). Finally, lower levels of education limit the ability of most countries in the region to implement a restructuring process, to increase productivity and to absorb TNC assets (e.g., new technologies) (table II.8).

• Demand and markets. At present it is unclear whether extraregional and intra-regional demand will develop dynamically enough to sustain a regional restructuring process. In Asia, demand from the United States for goods produced in intra-Asian production networks drove the expansion of manufacturing production. In sub-Saharan Africa, extraregional demand so far focuses on primary commodities. But some recent developments could alter this situation. South Africa has become a partial member of the Lomé Convention between the European Union and the African, Caribbean and Pacific (ACP) States, receiving preferential tariffs for goods produced in South Africa that use inputs from ACP countries. In addition, the United States is considering an Africa package supporting United States' investment in Africa and helping countries to gain better trade access to United States' markets through substantial trade concessions (even in areas such as textiles). However, any regional interactive restructuring process in neighbouring countries will depend

a Includes supplements.

on stronger demand from South Africa for goods other than raw materials. ³⁷ According to a recent study (International Trade Centre, 1997, p. 8), the main export opportunities South Africa offers neighbouring countries lie in low-processed food products and in some manufactured goods, in particular textiles. ³⁸ Though South Africa is becoming an increasingly important trading partner for many sub-Saharan economies, overseas demand will also remain important to stimulate the traditional production of unprocessed, low value-added primary commodities.

- Market verification of restructuring through exposure to international competition. Any industry that has emerged from a restructuring process has to prove itself in competition with foreign competitors. Outward liberalization is important in this respect. Recent trade liberalization initiatives on the national, as well as regional, level points in this direction, though there is still much scope for further action. These measures could be buttressed by domestic initiatives to strengthen firms' competitiveness, such as the South African cluster strategy.
- Enabling framework for the transmission of TNC assets. The transmission of such TNC assets as capital, technology and management know-how requires a set of increasingly liberal policies at national and regional levels. In sub-Saharan Africa, despite a general trend towards more liberalization, there is still room for improving the enabling framework. In particular, foreign-exchange controls are often cited as significant obstacles to cross-border investment. Also, bilateral investment agreements within the region are rare. However, this was not much different in Asia in the early stages of the restructuring process.
- A favourable investment climate. The lack of a comparatively favourable investment climate seems to be one of the most important impediments retarding a TNC-assisted regional integration process as reflected, for instance, in very low figures for domestic investment in recent years. Most countries in the region need to foster political stability, improve the efficiency of public administration, upgrade existing infrastructure and ease social problems, particularly poverty. These problems are not easy to tackle in the short run. However, innovative approaches have been developed to overcome at least some of these by joint action (box II.7).

Table II.8. Enrolment ratios in selected SADC countries (1993) as compared to selected South-East Asian economies (1970)

(Percentage)

SADC	1st level	2nd level	3rd level	East and South-East Asia	1st level	2nd level	3rd level
Angola	88	14	0.7	Japan ^a	99	92	24.6
Botswana	115	57	3.7	Korea, Republic of	103	42	16
Lesotho	48	26	2.3	Malaysia	87	34	4
Malawi ^b	80	4	0.9	Thailand	83	17	13
Mozambique	60	7	0.4	Taiwan Province of China	98 ^c	66 ^c	18
South Africa d	117	82	15.9				

Source: UNESCO, 1995 and 1996.

- a 1975.
- b 1992.
- c 1976-1978.
- d 1994.

iii. Conclusions

While there is a potential for South Africa to become a regional growth pole, it is unlikely to initiate vigorous TNC-assisted interactive regional restructuring processes in the near future. This is also reflected in the natural resource-seeking, rather than efficiency-seeking, character of most FDI flows from South Africa to neighbouring countries. At present, the "geese" do not seem to be ready for take-off. Rather, they are still in the "nest-building" stage. All National efforts are paramount in this respect. But they could benefit substantially from regional cooperation and international support. South Africa could lead the way by further reducing the remaining barriers to outward FDI to her SADC partners.

Box II.7. The Maputo development corridor

Since the opening up of the port of Maputo in 1996, the Governments of South Africa and Mozambique have developed a number of activities to spur economic development in the region between Johannesburg and Maputo (including the South African provinces of Mpumalanga and Kwazulu/Natal), including the establishment of a joint investment promotion company and the upgrading of railway links and other infrastructure facilities. The private sector responded to these new developments: according to the Development Bank of Southern Africa, investment commitments by South African (as well as other) firms have reached \$2 billion. Most of these commitments are in mining, chemicals and agro-processing industries. Many investors are attracted by the location of Maputo, the nearest port to South Africa's industrial heartland around Johannesburg. They are also attracted by the prospects of cheap energy supplies, which may come in the near future from planned hydropower plants in the north of Mozambique. The infrastructure facilities in the corridor, including the Maputo port and the railways between Maputo and Johannesburg, are to be privatized and thus may offer additional investment opportunities for foreign companies in the corridor. The project might serve as a successful example for further joint initiatives to attract foreign investors. Further development corridors of the same type in other parts of South Africa are planned as part of the "spatial development initiative" of the Government of South Africa that focuses on the development of certain regions. a

a Jourdan and Gordhan, 1996.

3. Latin America and the Caribbean

(a) Trends

In the period of volatility in portfolio investments in Latin America and the Caribbean in 1995, FDI inflows into the region registered small increases overall, despite substantial ones into individual countries. By contrast, in 1996, FDI flows to the region increased significantly, by 52 per cent, to nearly \$39 billion, a record level. The region accounted for 30 per cent of all FDI inflows received by developing countries. Investment flows are also becoming more diversified in terms of recipient countries than they were in the beginning of the 1990s. In 1996, eight countries received average inflows of over \$1 billion, compared with only two countries in 1990. Particularly significant have been investments in mining (Chile and Peru), petroleum (Colombia, Ecuador and Venezuela), manufacturing (Argentina, Brazil and Mexico), and in export-oriented activities in Mexico's maquiladoras and in some Central American and Caribbean countries. Transnational corporations, especially in automobiles, are integrating Latin America more extensively into their global strategies.

With nearly \$10 billion, Brazil was the largest recipient of FDI inflows, easily topping Mexico (nearly \$8 billion). This represents a dramatic reversal: in 1992, when Mexico received over \$4 billion and Argentina nearly \$3 billion, Brazil received only \$2 billion. Brazil's impressive FDI performance

in 1996 may be an indication of things to come. Inflows for the first four months of 1997 were over \$4 billion — two and a half times that of the same period in 1996. 42 A survey by the Government found that FDI funds worth some \$221 billion are ready to enter Brazil between 1996 and 2000. 43 At the same time, the re-activation of Brazil's privatization programme, in which foreign-investor participation is expected to be substantial, could generate more than \$12 billion worth of FDI between the same years. The automobile industry has proven to be particularly attractive. Several large TNCs have made investments or announced plans to do so.

After a slump in 1994 and 1995, FDI inflows into Argentina showed the second largest increase of all countries in Latin America in 1996 (after Brazil), to about \$4.3 billion, placing that country again high in the league of Latin American recipients (figure II.14). (In relation to gross domestic capital formation, however, Argentina is in seventeenth place; see figure II.15.) The main factors were privatization schemes that encouraged the participation of foreign enterprises and foreign banks, membership of MERCOSUR -- in particular the benefits of a regulatory framework for the automobile and auto-parts industries and provision of preferential financing means -- and recent liberalizations in mining legislation (Chudnovsky, Lopez and Porta, 1997). As in Brazil, this increase may be the beginning of a period of sustained inflows. In particular, the automobiles, food and beverages, mining, oil and petrochemicals, construction and telecommunications industries are expected to receive up to \$23 billion in FDI until the year 2000.

During the first half of the 1990s, FDI flows to Mexico were concentrated in services, especially in the case of privatization programmes. Having reached a record FDI level of \$11 billion in 1994, Mexico's inflows declined in 1995, but increased somewhat in 1996. Mexico's prospects for more FDI flows are good, especially in the automobile industry. For example, Volkswagen (Germany) had announced investments of \$500 million for the period 1995-1996. The change in Mexico's policy on

Mexico Argentina Peru Chile Colombia Bermuda Venezuela Bolivia Cavman Islands Ecuador Costa Rica 1995 Virgin Islands Trinidad and Tobago Paraguay Bahamas Jamaica Uruguay

10

Figure II.14. FDI flows into the top 20 countries in Latin America and the Caribbean, 1995-1996
(Billions of dollars)

Source: UNCTAD, FDI/TNC database and annex table B.1.

Dominican Republic Guatemala petrochemical privatization may pull in investment, even though the Government decided to retain 51 per cent of the capital of existing petrochemical plants. (But it also authorized, in 1997, the establishment of new firms in that industry in which the private sector could have participation up to 100 per cent.)

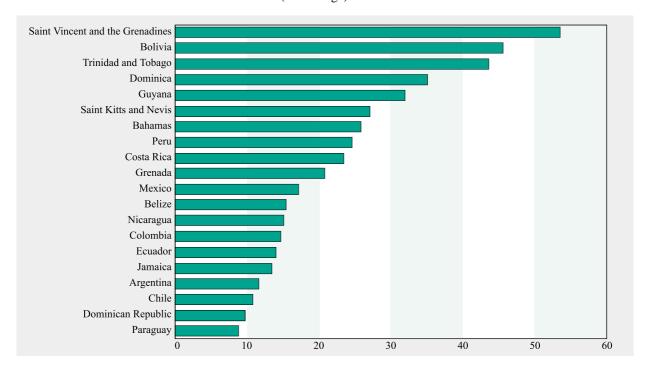
During the first half of the 1990s, FDI flows to the region had been influenced heavily by privatization programmes implemented by various countries. In 1996, privatizations accounted for almost a quarter of all FDI inflows, compared to a half in 1993. Investment flows to Latin America are now increasingly in the form of greenfield investments. Even in privatized firms, sequential FDI flows aimed at modernizing the existing facilities take the form of greenfield investments. Latin American privatizations, however, are far from being completed. While, according to some estimates, about \$60 billion worth of state-owned assets have been sold, a further \$70 billion worth of such assets are likely candidates for privatization (Dermota, 1996, p. 52). Therefore, there is still considerable potential for privatization-associated FDI.

The main trends among sources of FDI for Latin America and the Caribbean are:

• The United States remains the foremost foreign investor in the region. Cumulative FDI flows from the United States during the period 1990-1995 reached nearly \$66 billion and accounted for about 58 per cent of Latin America's total cumulative investments. According to the United States Department of Commerce, United-States TNCs are now investing more heavily in Brazil than in any other foreign country, and will continue to account for the majority of that country's inward FDI.

Figure II.15. FDI inflows as a percentage of gross fixed capital formation in the top 20 countries in Latin America and the Caribbean, 1995

(Percentage)



Source: UNCTAD, FDI/TNC database and annex table B.5.

- Canada's FDI is concentrated largely in mining in virtually every country in Latin America and the Caribbean. Exploration budgets for Latin America of Canadian mining companies increased from 16 per cent of their total budgets in 1992, to 42 per cent in 1995.⁴⁷ One company, Falconbridge, has moved its headquarters from Canada to Santiago, Chile.
- European FDI flows to Latin America and the Caribbean increased by 39 per cent in 1995, to nearly \$6 billion -- a historic high (IRELA and IADB, 1996). The members of MERCOSUR received more than a half of European Union FDI flows to that region (IRELA and IADB, 1996). The main destinations were Brazil (\$2 billion), Argentina (\$1 billion) and Mexico (\$880 million). Germany and Spain are the largest European investors in that region. Most European FDI is concentrated in natural resources and services, with energy and telecommunications being the primary recipients in the context of privatization plans. Almost a half of Europe's FDI to Latin America came through privatizations schemes, with Spain, Italy and France being the most active investors through such schemes. However, in 1995 and 1996, European investment has become more prevalent in the manufacturing sector, especially through large investments by German, French and Italian automobile TNCs in MERCOSUR. The Framework Agreement of 15 December 1995 between the European Union and MERCOSUR is likely to encourage further European FDI in that region.
- Japan's share of Latin America's FDI inflows remains low (about 13 per cent in 1995). Japanese FDI in Latin America is concentrated mostly in finance and insurance (34 per cent) and transport (32 per cent). The region remains the second largest target for Japanese outward investment to developing countries. Some 70 per cent of Japanese investment in Latin America is in tax havens (the Cayman Islands and the Virgin Islands) and another one-fifth is in Brazil and Mexico.
- Intra-regional investment has increased substantially in recent years. During the 1990s, intra-regional FDI was about \$7 billion. Chile was in first place, with nearly \$5 billion as of March 1997, followed by Brazil (\$935 million) and Argentina (with \$899 million). The main destinations are Argentina and Peru (receiving nearly \$4 billion and about \$1 billion, respectively, from Chile), followed by Venezuela (receiving \$601 million from Colombia).
- Investment flows from Asian developing economies (in particular, China, India, Hong Kong, Malaysia and Singapore) continued to leave their mark in the region, particularly for trade-supporting purposes and in the manufacturing of consumer goods (electronics, bicycles and textiles). Investments by Asian TNCs are mostly market-seeking, spurred by the region's recent integration efforts (MERCOSUR).

* * *

Several recent surveys and forecasts suggest that FDI flows to Latin America and the Caribbean are likely to increase considerably during 1997. According to a survey of the *Fortune* 1000 companies by the Bank of Boston, 80 per cent of the executives surveyed are more confident of Latin America's business prospects than they were five years ago. ⁴⁸ Foreign investors placed Mexico and Brazil in first and second place, respectively, and Chile in third place. The Institute of International Finance estimated that FDI flows to Latin America and the Caribbean will increase in 1997, with Brazil receiving the bulk of inflows (\$13 billion), followed by Mexico (\$8 billion), Colombia (\$3 billion) and Chile (1.5 billion). ⁴⁹

(b) A regulatory shift

Over the past few years, Latin American and Caribbean countries have undertaken a number of changes regarding their treatment of FDI. In particular, they:

- have significantly modified their national investment regimes, liberalizing the conditions under which foreign investors operate;
- have entered into numerous BITs with developed countries and, increasingly, among themselves;
- have implemented new regional or, specifically, subregional arrangements to deal with FDI;
- are now considering negotiating a hemispheric-wide investment agreement, within the context of the Free Trade Area of the Americas (FTAA) initiative, involving the entire Western hemisphere.

The revival and recent dynamism of economic integration has been accompanied by an expansion of intra-regional investment flows which, in turn, has encouraged the negotiation of investment arrangements among the countries of the region, either bilaterally or in the context of the various existing trade and economic integration agreements.

The driving forces behind these various initiatives are twofold:

- the comprehensive economic reforms implemented by most, if not all, countries of the region since the mid-1980s; and
- the reactivation of regional economic integration.

The policy reforms led to a substantial shift in economic theory and practice throughout the region as countries decided to replace their traditional, inward-oriented policies by a development strategy meant to enhance their participation in the world economy. This new strategy required a new approach to FDI. Up to the mid-1980s, what permeated FDI regimes was the idea of control: countries established controls for the entry of TNCs, controls for their operations after they were established, controls on the remittance of profits and other dividends, controls for the transfer of technology, exchange controls and so on. Latin American and Caribbean countries sought to control what they perceived were the negative effects of FDI; this "controlling" philosophy was, of course, fully consistent with the economic model in place in most countries at that time.

The opening of the region's economies in the late 1980s and early 1990s also brought a liberalization of investment regimes. Just as the protected economies of the past required a restrictive investment framework, the trade-liberalizing economies of the present are seen to demand open investment policies. Policy coherence is meant to maximize the positive effects of the overall development strategy of any particular country. The changes effected by Latin American and Caribbean countries regarding their national investment regimes are characterized as follows:

- The *de facto*, if not *de jure*, granting of national treatment to foreign investors. The previous policies tended to discriminate against foreign investors by denying them certain privileges to which only nationally owned firms were entitled, i.e., access to local financial markets.
- The elimination or significant reduction of controls on profit and capital remittances. Before, it was common to request from foreign investors that they send only a percentage of their profits abroad.

- The opening of entire industries that were previously closed to foreign investors, e.g., public utilities, banking and petroleum.
- The establishment by many governments of investment-promotion agencies -- sometimes in conjunction with the private sector -- to stimulate investment by foreign and national investors in their respective countries.

These changes are the foundations on which Latin American and Caribbean countries have built their network of bilateral and regional investment arrangements. These arrangements are intended to encourage investment from the participating countries and, increasingly, to protect their own investments, i.e., indigenous investment originated in the Latin American and Caribbean countries. In looking at agreements negotiated among the Latin American and Caribbean countries, as well as those negotiated by them with the United States and Canada (i.e., the investment agreements concluded in the Americas), the following characteristics stand out.

First, the number of agreements: as of 1 January 1997, there were 53 BITs between the countries of the Americas, 50 of which were negotiated in the 1990s. Thirty-seven of these BITs were negotiated between Latin American and Caribbean countries; only nine BITs have been concluded by the United States with other countries of the region, and seven have been negotiated by Canada. In addition to BITs, there are eight investment arrangements negotiated in the context of the existing trade and integration agreements, five of which are of a subregional nature: the NAFTA and the Group of 3 (Colombia, Mexico and Venezuela) chapters on investment, two protocols on investment concluded by the MERCOSUR countries, and a decision on investment taken by the Andean Group. The remaining three arrangements are chapters in the bilateral free trade agreements negotiated by Bolivia and Mexico, Costa Rica and Mexico and Chile and Canada; although bilateral in nature, these three agreements are not BITs as they cover a broader range of issues than do BITs.

Second, the various investment arrangements share important common features. A broad consensus has emerged in the Americas on issues that seemed controversial not long ago. Common approaches have been adopted in investment agreements in such areas as scope of application, treatment of investment, transfers, expropriation and dispute-settlement. More specifically:

- The investment instruments have a broader scope of application than traditional agreements as the definition of investment has been expanded to cover new forms of transactions, such as intellectual property rights, and are being applied to a more diverse group of investors, including natural persons. In addition, most treaties and agreements, such as the NAFTA chapter on investment and the two MERCOSUR Protocols, include standard provisions, such as "fair and equitable" treatment.
- The agreements also provide for national treatment and most-favoured-nation treatment for foreign investments once they have been admitted by the host country. The arrangements normally state that each party shall grant treatment "no less favourable" than that accorded to investments of its own nationals or companies, or those of third states. The arrangements also contain exceptions to national and most-favoured-nation treatment, of which the most common are related to privileges granted to certain investments in the context of economic integration schemes.
- The investment arrangements require the host country to guarantee the free transfer of funds related to investments. Almost all treaties define in great detail which types of payments should be included in the transfer clause. These generally refer to

returns (profits, interest, dividends, and other current incomes); repayment of loans; and proceeds of a total or partial liquidation of an investment. Most treaties also stipulate that transfers should be effected in a convertible currency. It is normally stated that transfers shall be made at the normal exchange rate applicable on the date of the transfer, and without delay. There are some exceptions or limitations on transfers, due for instance to balance-of-payments problems.

- The agreements prohibit the expropriation of investments except in specified conditions. They typically require that expropriations be made only for a public purpose, in accordance with due process of law, and on payment of compensation, which should be "prompt, adequate and effective". All BITs provide for disputes between states concerning the interpretation or application of the treaty to be submitted, at the request of either party, to *ad hoc* arbitration tribunals. Arbitration, however, has to be preceded by consultations, and disputes shall, whenever possible, be settled amicably through consultations or diplomatic channels.
- All investment treaties and agreements include separate provisions dealing with disputes between a contracting party and an investor, and contemplate arbitration as a means of dispute-settlement. This constitutes a major departure from traditional practice in Latin American countries, which have followed the Calvo doctrine. This holds that disputes between a foreign investor and a host country should be handled by the courts, and according to the law, of the host country. Thus foreign investors were limited to bringing claims against the host state in a domestic court or having their home countries assume their claims against the host state (diplomatic protection). The agreements normally refer to specific institutional arbitration mechanisms, including the ICSID Convention (or the ICSID Additional Facility Rules, in cases in which either the host or home state of the foreign investor is not an ICSID contracting party).

As well as many common features, the arrangements concluded by countries in the Americas also contain differences. The most important are related to the entry and establishment of investments and investors. Two approaches have been adopted in the agreements concluded among countries of the region. Newer instruments, such as the Colonia Protocol, and the chapters on investment in the NAFTA and other free-trade agreements, as well as the BITs signed by the United States and Canada, call for national treatment and most-favoured-nation treatment of both the pre-establishment phase (entry) and the post-establishment phase, and prohibit performance requirements as a condition for establishment. In the other bilateral and regional investment agreements, the national treatment and the most-favoured-nation standards are only applied at the post-establishment phase.

In addition to the existing investment agreements, three of the countries of the Americas (the United States, Canada and Mexico) are participating in the OECD negotiations on a Multilateral Agreement on Investment. The countries of the Americas have also been discussing the elements of a hemispheric-wide agreement on investment and have set up, in the context of the FTAA, a working group dealing specifically with this issue. This working group has been meeting since late 1995, and has already identified the main elements that may be included in such a hemispheric agreement.

4. South, East and South-East Asia

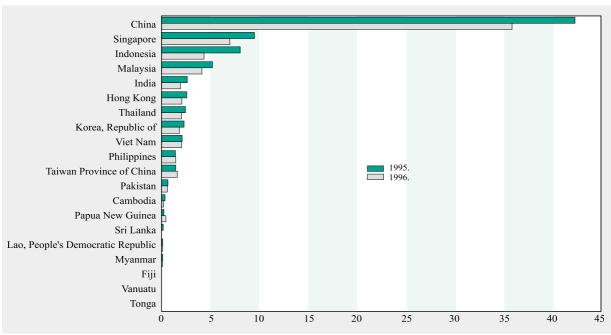
(a) Trends

Inflows of FDI into South, East and South-East Asia rose 25 per cent in 1996, to a record \$81 billion. That represented about two-thirds of all developing-country FDI inflows. The increase shows foreign investors remain confident about the region's long-term prospects, despite a slowing in its export growth and, to a lesser extent, GDP growth.

China, with \$42 billion in 1996, was once again the largest FDI recipient among developing countries, and the second largest in the world. China accounted for over two fifths of the \$16 billion increase of FDI inflows into the region (figure II.16). Inflows into China set a new record, partly because of the rush of foreign investors to establish and implement FDI projects before the enactment of policies that would abolish some of the preferential treatment for foreign investors (on 1 April 1996, with an extension of six months for certain types of projects). Another factor has been the Government's recent efforts to promote FDI to mid-west provinces that offer such locational advantages as rich natural resources and low-cost labour and land. Foreign investors have shown a growing interest in these provinces, where inflows increased by over 35 per cent, compared with 18 per cent for the country as a whole in 1996. In addition, a successful "soft landing" and continuing macroeconomic reforms; further liberalization of the FDI regime for some industries (particularly those that had been opened only partially and on a trial basis in the past); and the continued consolidation and expansion of investments by large TNCs; have all contributed to China's successful FDI performance.

Investments into the newly industrializing economies of Hong Kong, Republic of Korea, Singapore and Taiwan Province of China in 1996 increased by about 27 per cent over the previous year. Singapore was the star performer, maintaining its lead as the second largest recipient in the

Figure II.16. FDI flows into the top 20 countries in South, East and South-East Asia and the Pacific, 1995-1996
(Billions of dollars)



Source: UNCTAD, FDI/TNC database and annex table B.1.

region. Combined

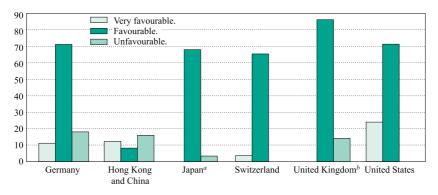
inflows to the other three newly industrializing economies, at \$6 billion in 1996, were below Singapore's \$9 billion. Electronics was the leading recipient industry for the Republic of Korea, Singapore and Taiwan Province of China, and services were the biggest recipient for Hong Kong. For decades, Hong Kong has been one of the most important international business centres in the region; however, there has been some concern whether that position can be maintained after its return to China. Results of recent surveys have shown that foreign investors have confidence in the future of Hong Kong, China as a regional business centre (box II.8).

Box II.8. Foreign investors' confidence in Hong Kong, China, after reversion

Hong Kong, China has emerged as a major regional trade, financial and business-services centre. With annual average outflows estimated at over \$20 billion during 1993-1996, Hong Kong, China is the world's fifth largest FDI source economy.^a It is also a major recipient of FDI, attracting an average annual flow of about \$2 billion in the 1990s. According to Hong Kong's Industry Department, Hong Kong's manufacturing FDI stock has quadrupled between 1984 and 1995. Accumulated investment from China during 1985-1995 is estimated to have exceeded \$10 billion (Zhan, 1995). The United States, the United Kingdom and Japan have also obtained sizeable stakes in Hong Kong.

Hong Kong became a "Special Administrative Region" of China on 1 July 1997. According to the scenario of "one country, two systems", within one sovereign State, the territory will retain its own economic, financial and social systems. Hong Kong, China is to remain autonomous for another 50 years in all areas except defence and foreign affairs. How is foreign investors' confidence going to be affected now that Hong Kong's sovereignty has reverted to China?

During the second half of 1996, the chambers of commerce of Germany, Japan, Switzerland, the United Kingdom and the United States conducted surveys of their respective foreign affiliates in Hong Kong (box figure). These surveys found that 83 per cent of companies surveyed expected Hong Kong, China's business environment in the next five years to remain favourable. About 45 per cent of the companies plan to expand their presence in Hong Kong, China through additional investment. The vast majority of the respondents (80 per cent of the German firms) aim at launching strategies to penetrate China's market via Hong Kong, China to take advantage of the territory's considerable experience of doing business in China and its excellent business infrastructure.



Box figure. Hong Kong, China investment climate assessments for the second half of the 1990s

Source: UNCTAD, based on Delegate of German Industry and Commerce: Hong Kong, South China, Viet Nam and German Association of Hong Kong (1996); Hong Kong Companies Registry (1996); "Japanese firms adopted cautions attitude", *Nihon Keizai Shimbun*, 17 October 1996; Swiss Business Council of Hong Kong (1996) and American Chamber of Commerce in Hong Kong (1996).

- a "Favourable" includes unchanged assessments.
- b "Favourable" includes "very favourable".

/...

(Box II.8, cont'd)

Similar findings emerged from a survey by the Hong Kong Trade Development Council in 1995. Over 92 per cent of the 2,500 local and foreign trade and manufacturing companies surveyed said they would keep their regional headquarters in Hong Kong, China after 1997, while most of the remaining firms said they would move to China. Nearly all of the respondents expected to stay in Hong Kong, China well beyond 1997.

The steady increase in the establishment of regional headquarters and regional representative offices set up by TNCs in Hong Kong, China also demonstrates business confidence. According to the Hong Kong Companies Registry (1996), the number of foreign regional representations in Hong Kong reached 2,307 as of late 1996, an increase of 12 per cent over 1995 (box table). The most significant increase -- 600 per cent between 1993 and 1996 -- was recorded by companies from Taiwan Province of China. During the same period, 106 new United States companies registered in the territory (American Chamber of Commerce in Hong Kong, 1996). An increasing number of Japanese trading houses are moving their textile-business headquarters to Hong Kong, China.

Item	United States	Japan	United Kingdom	China	Rest of the world	Total
Item	States	Japan	Kiliguoili	Cillia	the world	10141
Regional headquarters	188	122	90	85	331	816
Regional representative offices	226	338	123	128	676	1491
Total	414	460	213	213	1007	2307

Box table. TNC regional representations in Hong Kong, 1996

Source: UNCTAD, based on data provided by the Hong Kong Industry Department.

Nevertheless, the general sense of optimism is tempered with cautious pragmatism. For example, 52 per cent of the Swiss companies in Hong Kong, China have drawn up contingency plans in case Hong Kong, China's evolution does not live up to expectations. Some firms have also adopted a "wait-and-see" approach to short-term plans during Hong Kong's transition, but believe that business will be back to normal by 1998.

Overall, the surveys of foreign investors have found that Hong Kong, China's geographical proximity and trade and investment links with China, low taxation and free trade policy and the financial, communications and transport infrastructure are enduring attractions for FDI. The political climate was ranked eleventh place in a list of seventeen factors likely to affect investment decisions according to the 1996 Survey of External Investment in Hong Kong's Manufacturing, and seventh in a list of sixteen factors according to the 1996 Survey of Regional Representation by Overseas Companies in Hong Kong. Cost considerations, which have been a concern for companies doing business in Hong Kong, China, overshadowed by political uncertainty, could re-emerge in the medium-term as the factor most detracting from Hong Kong, China's business environment. Recent increases in commercial property rentals are expected to be followed by increases in residential rentals and labour costs.

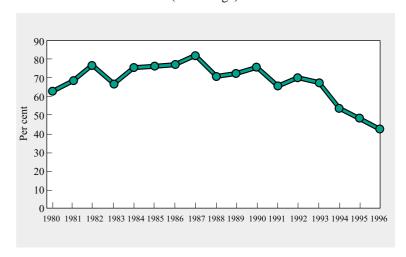
Should China remain on a stable course of development with continued reform and liberalization, then Hong Kong, China stands a good chance of sustaining its favourable investment environment. In the meantime, Hong Kong, China's continued prosperity after 1997 contributes to China's economic development. However, Hong Kong, China is being used less and less as a gateway for FDI into China and also less and less as a "window" for China onto the outside world, reflecting China's openness and the increasing role of some coastal cities such as Guangzhou, Shanghai and Xiamen, as well as the preference of both foreign and Chinese firms to have direct transactions to save costs and time.

^a It should be noted that about 30 per cent of this investment is indirect FDI, i.e., investment by foreign affiliates in Hong Kong, China, and more than half of it is directed towards China (UNCTAD, 1997b).

b According to Hong Kong's Industry Department, investment from these five countries accounted for 61 per cent of the total FDI stock in Hong Kong, China. Investment from China accounted for another 20 per cent.

Flows into four ASEAN member countries (Indonesia, Malaysia, the Philippines and Thailand) increased by 43 per cent in 1996, to an estimated \$17 billion. This was attributed to the significant growth experienced in Indonesia, Malaysia and Thailand, while flows into the Philippines fell below the 1995 level. Despite absolute increases in FDI over the past six years, ASEAN economies as a whole (i.e., including Brunei Darussalam and Viet Nam) have experienced sharp decreases in their share of inflows to South, East and South-East Asia, from 61 per cent during 1990-1991 to over 30 per cent during 1994-1996 (figure II.17). One reason is that ASEAN countries have faced domestic capacity constraints and

Figure II.17. Share of ASEAN^a in total flows into South, East and South-East Asia, 1980-1996 (Percentage)



Source: UNCTAD, FDI/TNC database.

^a Includes Brunei Darussalam, Indonesia, Malaysia, Philippines, Singapore, Thailand and Viet Nam.

infrastructure bottlenecks, while other economies in the region are now offering low labour costs and attractive incentives to foreign investors. Similar circumstances also helped to propel the earlier FDI take-offs of the ASEAN economies. ASEAN is now responding by proposing an ASEAN Investment Area to enhance its attractiveness to foreign investors. While the ASEAN Investment Area is still at the design stage, the types of activities planned -- ranging from coordination of legal and regulatory measures for further investment liberalization to information exchange, training, promotion, facilitation and network activities -- will widen the scope for investment in the member States.

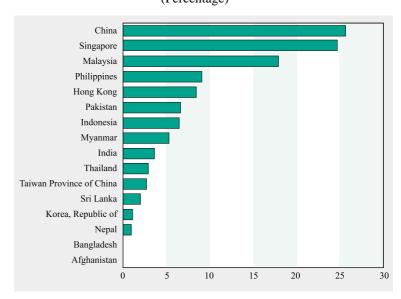
Viet Nam experienced a dramatic decrease of FDI contractual commitments during the first eleven months of 1996 but, at the end of that year, two large projects pushed the year's FDI commitments to a record-breaking \$9 billion, a 29 per cent increase over the previous year.⁵³ The increase in actual investments, however, was much smaller -- 8 per cent compared with 169 per cent in 1995.

Investment flows to South Asia rose to about \$3.5 billion in 1996, mostly reflecting a remarkable increase of about 34 per cent in flows to India. After a 47 per cent increase in 1995, inflows to India reached an estimated \$2.6 billion in 1996. For the first time in recent years, FDI overtook portfolio investment, which accounted for the largest share of private capital inflows into that country. The Government of India has stepped up its efforts to attract FDI, including investments from overseas Indians, in an effort to raise annual inflows to \$10 billion. Recently, India has become an attractive FDI location for Asian newly industrializing economies. Indeed, the pace of investment from the Republic of Korea in India is outstripping even that of the United States and the United Kingdom, traditionally India's biggest trade and investment partners. Firms from the Republic of Korea plans to invest \$4 billion in India in the next two years. FDI flows to the rest of the economies in South Asia remain low, but are growing.

Flows into the Pacific economies were an estimated \$375 million in 1996, a decline from their 1995 peak of \$590 million. Papua New Guinea continued to be the largest host economy in the Pacific.

Ranking the countries of the region by the ratio of FDI flows to gross domestic capital formation in 1995 reveals that FDI has played a significant role (about a quarter) in China, Singapore and Malaysia (figure II.18). For most of the other economies in that region, however, the ratio is less than 10 per cent. Fiji, Papua New Guinea and Vanuatu, however, enjoyed particularly high ratios of FDI flows to gross domestic capital formation. Malaysia has the highest ratio of inward FDI stock to GDP followed by Singapore. Indonesia, Hong Kong and China (figure II.19). The shares of FDI inflows in gross fixed capital formation and FDI stock in GDP for the entire region in 1995 were 9 per cent (8 per cent in 1994) and

Figure II.18. FDI inflows as a percentage of gross fixed capital formation in South, East and South-East Asia, 1995
(Percentage)



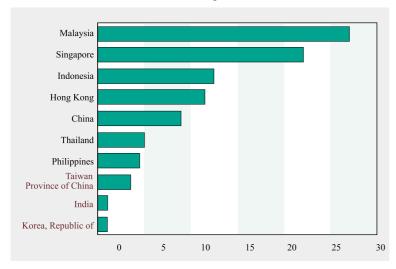
Source: UNCTAD, FDI/TNC database.

15 per cent (14 per cent in 1994), respectively. While there is a general recognition that FDI has contributed to South, East and South-East Asia's growth and development, the question has also been raised whether the large current account deficit in some economies can be attributed to the fast growth of FDI inflows (discussed below).

Intra-regional investment remains the principal FDI source for the region, despite the remarkable growth of FDI by TNCs from developed countries. For the major Asian developing

Figure II.19. Inward FDI stock as a percentage of GDP in selected host economies, 1995

(Percentage)



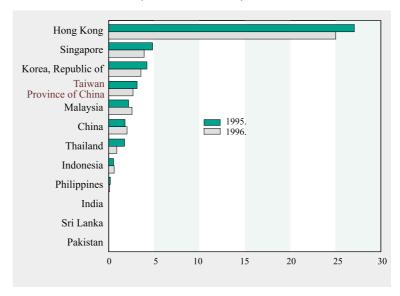
Source: UNCTAD, FDI/TNC database and annex table B.6.

economies, FDI the stock attributed other Asian to developing economies, at nearly 40 per cent, is still larger than that from either Europe, Japan or the United States (UNCTAD, 1997b, p. xiv). The "flying-geese" process of regional industrial restructuring remains the driving force behind intra-regional flows, with more and more countries taking part. To keep moving up the value-added chain of production and stay competitive, the newly industrializing economies are competing to become regional business centres, trying to attract FDI in services and hightechnology industries, while the four ASEAN countries and China have adopted a more selective approach to FDI, targeting "qualitative investments" for upgrading their industrial bases. In the meantime, the rising costs of land and labour have increased the speed at which firms based in the newly industrializing economies are moving labour-intensive activities to other parts of the region, including LDCs (see above).

Investment outflows from the region rose by 10 per cent in 1996, to \$46 billion, with Hong Kong topping the league of outward investors (figure II.20). The region accounted for 89 per cent of FDI outflows from all developing countries in 1996, and four fifths of the FDI stock held by these countries as of that year. One important feature of the region's FDI is its recent great

Figure II.20. FDI outflows from South, East and South-East Asia, 1995 and 1996

(Billions of dollars)



Source: UNCTAD, FDI/TNC database and annex table B.2.

leap outward, leading to a greater geographical diversity. Outside the region, North America, Australia and Latin America remain the most important FDI destinations. Asian TNCs are also expanding rapidly into the European Union (box II.9). More recently they have begun to invest in Central and Eastern Europe, taking advantage of privatization programmes, rising local demand for consumer goods and proximity to the European Union market. In the meanwhile, some Asian TNCs, particularly from Malaysia, China and the newly industrializing economies are also moving into Africa (see section on Africa).⁵⁷ Investment from developing Asia to South Africa accounted for over 20 per cent of the total inflows of that country during 1994-1996.

Developing Asia's outward FDI exhibits a distinct pattern, reflecting differing stages of development of the home economies. Firms from the newly industrializing economies, mainly the Republic of Korea and, to a lesser extent, Taiwan Province of China, are setting up global production facilities in capital- and technology-intensive industries. These economies, which possess advanced skills, research and industrial bases and large indigenous firms, are investing extensively in electronics, automobiles, petrochemicals and oil refineries. Firms from Singapore and Hong Kong tend to invest more in high value-added services, ranging from trade and finance to tourism, as well as in some manufacturing niches. The four ASEAN countries are developing indigenous specialized capabilities in component manufacturing, resource-based activities (e.g., wood, rubber and petrochemicals) and labour-intensive activities (e.g., textiles). Investments from China and India, both countries with diversified industrial bases, are also broad-based. Many Asian investors have been involved extensively in real estate development and infrastructure building.

The extent to which Asian developing economies are becoming more transnationalized is reflected in the rising ratio of FDI outflows to gross domestic fixed capital formation (annex table B.5). Although the average ratio for all Asian developing countries is still low by the standards of the industrialized countries, it is considerably higher than the average for the developing world as a whole. Among the major home economies in the region, except for Hong Kong (most of whose outward investment went to mainland China), Singapore recorded the highest degree of international investment activity in 1991-

Box. II.9. Investment from developing Asia into the European Union is on the rise

Investment outflows from South, East, and South-East Asian developing economies into Europe increased from an annual average of \$100 million during 1989-1991 to an annual average of \$5 billion during the early 1990s. While North America remains their main investment location outside Asia, manufacturing and services investments in the European Union have gathered momentum.

Still, the European Union accounted for only 4 per cent of Asia's outward FDI stock in the early 1990s. Although low, that share reflects the fact that Asian firms are only just beginning to penetrate the European market. Many firms from the Asian newly industrializing economies increasingly see a need for a physical presence in the European Union in order to serve this large and rich market. Other firms from these economies are seeking access to advanced technology, skills or research-and-development facilities.

Outward investment by Asia's newly industrializing economies in Europe is divided about equally between manufacturing and services. Manufacturing FDI is biased heavily towards the electronics industry, which accounted for three-quarters of the combined manufacturing projects of the newly industrializing economies. Textiles, clothing, leather and footwear, as well as chemicals and the production of toys, follow by a wide margin. The distribution of projects within the services sector is much less concentrated than in manufacturing. Investment in trade-supporting services figures most prominently, but FDI in financial services is only slightly less important. Asia's newly industrializing economies have also invested in other services, such as sea transport, hotels and telecommunications.

Investments in both manufacturing and services projects are primarily located in the United Kingdom and Germany, followed by France and the Netherlands. The same ranking of host countries prevails with regards to electronics. The major host countries in the European Union have attracted a similar number of FDI projects from Asia's newly industrializing economies, both in manufacturing and services. The only exception is France, where manufacturing projects (all but one in electronics) account for two-thirds of the total number of projects. The United Kingdom hosts Asian FDI projects in all major service industries. In the services sector of Germany, the focus of investors from the Asian newly industrializing economies has been clearly on trade and, to a lesser extent, on finance and sea transport.

Partly driven by growing exports, Asian FDI in Europe is on the rise. Still, it is at an early stage and needs to be nurtured, especially since most Asian firms have little or no experience of investing in Europe. Governments have a role to play. Asian governments, in addition to gradual liberalization, could give a helping hand to their outward investors, including through training and orientation programmes, provision of information, promotion of partnerships and contacts, and rendering financial support.

Governments of European Union countries could liberalize further FDI frameworks and remove any remaining impediments to foreign investors. Governments of member countries and the European Commission could also make greater efforts to assist prospective Asian investors in establishing themselves in Europe.

Source. based on UNCTAD, 1997b.

1995, followed by Malaysia and Taiwan Province of China (estimates based on annex table B.5). China, the Republic of Korea and Thailand are catching up rapidly. In fact, the ratio of FDI outflows to gross fixed capital formation (during 1991-1995) was 9.5 per cent for Singapore and 6.9 per cent for Malaysia; this compares with 5.6 per cent for all developed countries, 7.9 per cent for the European Union and 6.6 per cent for the United States.

The trend in the transnationalization of firms from the region is likely to continue. For example, the big six chaebols of the Republic of Korea (Daewoo, Hyundai, LG, Samsung, Sangyong and Sunkyong) have planned to invest \$80 billion abroad between 1996-2005 (EIU, 1996g). At the same time, the region will most likely maintain its lead in attracting FDI, thanks to the projected sustained dynamism of the region's economy.

(b) Does foreign direct investment create balance-of-payments problems?

In the past decade, a number of East and South-East Asian countries experienced remarkable economic growth, which was partly export-led and associated with an upsurge of FDI during that period. A feature of this performance is that, despite rapid export growth, large and persistent current account deficits were registered in some countries, such as Malaysia and Thailand. These deficits were mainly financed by heavy inflows of private capital, of which FDI constituted a significant portion. The weakening of global industrial production -- which started in 1995 and which was particularly severe in the electronic industries -- was a major factor contributing to the general decline in the pace of export expansion and the deterioration in the current account position of the region as a whole. In the event, the export slowdown turned out to be short-lived but it, nevertheless, focused attention on the continuing current account deficits experienced by some countries and raised questions about the role of FDI in this regard. This section examines this issue, focusing on the balance-of-payments (BOP) impact of inward FDI. There is no implication that FDI can or should be judged solely on the basis of its BOP impact. This should be viewed in the broader context of the general macroeconomic setting and in relation to the role of TNCs as regards other national objectives, such as growth and development. Section 2.

The current account balance is one of the principal indicators that economic authorities follow closely. At certain stages of the development process, large current account deficits need not be a cause for alarm. Such deficits are normal at the initial stage of industrialization or when there are major structural changes brought about by the diversification, deepening or upgrading of the industrial base which involve heavy imports of capital and intermediate goods. Nor is it surprising that large FDI inflows are at times associated with large current account deficits, as such inflows are normally used to finance new projects or the expansion or modernization of existing production facilities. These almost inevitably require the importation of new and advanced machinery. Nevertheless, the persistence of large deficits raises a number of concerns and entails the risk of a sudden shift in investors' confidence, leading to reversals in capital inflows, particularly of portfolio capital.

In assessing the sustainability of persistent current account imbalances, the ratio of the deficit to GDP has to be considered in relation to the structural features of the economy, the macroeconomic policy stance and the political situation. Among the structural features are high levels of gross domestic investment used to expand productive capacity, to promote future economic growth and to enhance a country's ability to generate future trade surpluses with which to meet external obligations. Investment and savings rates could also serve as measures of creditworthiness and as indicators of the growth potential that international lenders and portfolio investors find attractive. Another consideration is the importance of the export sector in the economy as measured by the ratio of exports to GDP. As exports are a source of foreign exchange, a large export sector indicates a capacity to service and, ultimately, to reduce external indebtedness. The manner in which the current account deficit is financed as well as the level and composition of external liabilities have an impact on a country's ability to absorb external shocks. In the case of foreign debt, the country bears most of the burden arising from such shocks, whereas equity financing, such as through FDI, allows asset price adjustments so that foreign investors share part of the negative impact. As to the volatility of capital flows, this varies according to the type of instrument, with, for example, short-term debt

and portfolio investment being potentially more volatile than FDI. A satisfactory international reserve position can also serve as a safety net in times of payments difficulties.

The impact of FDI on the BOP of a country varies, depending on the purpose of the investment, the nature of the activity and the age of the project. In general, trading transactions of market-seeking foreign affiliates are likely to entail more imports than exports, particularly in the initial stage when a substantial proportion of machinery and inputs is likely to be imported.⁶¹ By contrast, resource-based or efficiency-seeking affiliates will generally record higher exports than imports. The trading consequences of strategic asset-seeking investment are likely to be ambiguous, depending on the type of investment (Dunning, 1993). Different value-added activities require different proportions of tradable inputs and outputs. For example, studies on selected Asian countries show that industries producing apparel and electrical machinery have much higher export propensities than the chemical industry.⁶² This finding could also reflect the production orientation of these industries, whether import substituting or export oriented, as well as differences in comparative advantage. At the firm or project level, the type of linkages created and the age of a project are important determinants of the BOP impact; new projects normally require heavy imports of machinery and equipment as well as intermediate inputs but, as the project matures, import requirements per unit of output may be expected to decline as local sourcing tends to increase over time.⁶³ Payments of direct investment income are also likely to increase over time as they are a function of the stock of inward FDI; such payments necessarily begin only after new investments become productive and/or profitable. Outflows also result from the payment of royalties, which can be quite substantial, and, where it occurs, from transfer pricing (Vaitsos, 1973). Factors specific to a host country, such as the importance of TNCs in the economy, the country's stage of development, its size and its resource endowments influence the extent and nature of external transactions of TNCs. Thus, the effects of FDI on the BOP are bound to be country specific and sensitive to the type of investment, the industry mix and the maturity structure of investment.

There are various approaches to estimating the impact of TNC activities on the BOP of host countries. One approach, used in the discussion below, is to identify the transactions associated with their activities that are reflected in the current and financial accounts of the BOP either as credit(+) or debit(-) entries. These are referred to as direct effects. The trading activities of TNCs generally produce the largest BOP impact. Exports of goods and related freight and insurance services are credits in the current account, whereas imports are debits. Of particular interest are payments of direct investment income(-) consisting of dividends, distributed branch profits and interest on intra-company loans as well as payments of royalties and licence fees used in FDI operations(-). The most immediate impact on the BOP of FDI may be reflected in the financial account under the item direct investment in a country (+), comprising equity capital and intercompany claims and liabilities. Borrowing from offshore capital markets to finance TNC activities(+) and interest paid on such loans(-) also have immediate and longer term impacts on the BOP. The sum of all these items would constitute the actual direct BOP effect of TNC activities. If positive, this would normally involve a foreign exchange inflow; if negative, an outflow.

The operations of TNCs also have indirect BOP effects. These arise mainly from the contribution of FDI to gross domestic capital formation, which (through the interaction of the multiplier and accelerator effects) is generally growth enhancing. Higher economic growth, in turn, influences other macroeconomic variables (e.g., exports, imports and savings) which are reflected directly or indirectly in the BOP. Large capital inflows or outflows resulting from TNC activities can also affect the exchange rate and hence the price and volume of traded goods. Transnational corporations may also induce domestic firms to produce goods for which there is demand abroad, thus raising exports; or they may use inputs of local suppliers, the production of which requires

imported goods, thus raising imports (UNCTC, 1981). These are just some examples of how FDI affects the BOP indirectly. The indirect effects could be significant, but are difficult to quantify and the validity of estimates depends on the realism of simplifying assumptions.

Another problem is that the BOP effect of FDI cannot be measured exactly without knowing what would have happened if the FDI had not occurred (Dunning, 1993). It is the "net effect" that counts, measured by the difference between the actual external transactions associated with TNC activities and those that would have occurred in their absence. Any such assessment is bound to be conjectural, and its validity depends on the conduct of macroeconomic policy and various behavioural assumptions. Another approach that is widely used is regression analysis relating FDI with important BOP and other macroeconomic variables. In this case, the choice of explanatory variables would necessarily be selective. Despite measurement problems and other limitations, a number of empirical studies examine the effect of FDI on the BOP by applying these different approaches mentioned. Most of the literature deals with the BOP impact of outward investment, but there are also some important studies on inward FDI (see box II.10).

This section examines the BOP impact of inward FDI on four Asian economies -- China, Malaysia, Singapore and Thailand -- in which FDI has played an important role, particularly since the mid-1980s. They represent countries at various stages of development, with different market sizes and resource endowments. Singapore has generally had, and continues to have, a healthy BOP position. Malaysia and Thailand, while experiencing rapid export growth, due largely to FDI in export-oriented industries, registered large and persistent current account deficits in the 1990s. China's current account balance in the past decade has, on average, been positive.

Table II.9 presents quantitative estimates of transactions by foreign affiliates that would be captured in the BOP of these countries. There are serious data constraints on trade and financial flows related specifically to foreign affiliates in a host country. For some countries, inward FDI was the only variable for which complete time-series data are available. Sometimes, existing trade data provide only partial coverage of TNC activities. In view of these data limitations, only imperfect insights into the repercussions of TNC activities on the BOP can be gleaned. Nevertheless, the analysis and comparison of country experiences can give an indication of which factors were responsible for differences in the impact on the individual country's BOP.

i. Singapore

Of the four countries, Singapore is the most economically advanced, and is characterized by a high degree of industrial sophistication and technological capability. Foreign direct investment has been vital to the economic development of the country. During the period 1991-1995, FDI accounted for about a quarter of gross fixed capital formation. The manufacturing sector is heavily dominated by foreign affiliates whose share in total exports was 87 per cent in 1994. Since 1988, the current account has registered a healthy and rising surplus, averaging over \$13 billion a year in 1994-1996. This surplus combined with high capital inflows has allowed international reserves and outward investment to increase steadily. The surplus is a reflexion of a very high domestic savings rate relative to the investment rate -- 49 per cent and 35 per cent, respectively, in 1995.

Singapore's statistics do not distinguish payments of direct investment income from those of other investment income. There are no figures on imports of TNCs so that the net trade effect cannot be determined. There is, however, reason to believe that the net contribution of FDI to the BOP is positive. Studies have shown that TNCs have significantly higher export propensities than domestic firms. ⁶⁶ The

Box II.10. Empirical findings on the BOP effects of inward FDI

Sanjaya Lall and Paul Streeten (1977) conducted empirical studies to quantify the BOP and income effects of FDI in the manufacturing sector of six developing countries (Colombia, India, the Islamic Republic of Iran, Jamaica, Kenya and Malaysia). The studies covered a sample of 159 firms, of which 147 had foreign equity participation. Except for Kenya, the overall direct effects of the activities of sample firms on the BOP of host countries were found to be negative. As a percentage of sample firms' sales, the negative effects ranged from 12 per cent in India to 55 per cent in the Islamic Republic of Iran. The surprisingly positive direct effect for Kenya, amounting to 3 per cent of sales, can be explained by the large exports of some firms surveyed which were probably not representative of all foreign firms in the country. Regardless of the industry or source of control, a large majority of sample firms had negative direct effects. On average, foreign-controlled firms had more adverse direct effects than locally controlled firms. These results can be attributed largely to the nature of import-substituting industrialization at that time. Government policies clearly induced FDI into industries that were neither very competitive nor export oriented. Moreover, the bulk of FDI in manufacturing was heavily dependent on imports.

Lall and Streeten recognized that a comprehensive evaluation of the BOP effects of FDI must compare the actual situation with what would have happened had FDI not occurred, and calculate the direct and indirect effects under each situation. The approach used was to calculate social income effects of FDI in a cost-benefit framework. Three alternatives to FDI were considered, the first of which was importing the entire output produced by foreign firms. The net income effects were negative in about 40 per cent of sample firms, though this had no relation to "foreignness". The main determinant of variations in the income effects was the extent of protection granted to the firms. The second — the financial replacement alternative — compared the actual cost of servicing FDI (through profits, interest and royalty payments) with the social cost of alternative sources, such as local capital or foreign borrowing. The finding was that the purely financial contribution of FDI appeared to be negligible or negative, implying that it would have been cheaper to use alternative sources. The third alternative was the most likely local replacement. By means of a composite index of technology and entrepreneurship ability, each sample firm was assigned a certain degree of local replacement. The results showed that some 30 per cent of firms with foreign equity appeared to be totally replaceable by local firms, 50 per cent were partially replaceable, and the rest totally irreplaceable. However, the study emphasized that the calculations might have overlooked some other relevant factors.

The United Nations Centre on Transnational Corporations (1981) conducted a study on the direct effects of TNCs on the BOP of Mexico, based on the 1977 trade of all foreign affiliates in Mexico identified as having international trade transactions. Assumptions were made as to the foreign-affiliate share of other BOP items for which TNC transactions were not separately identified. The study showed a current account deficit of \$758 million for foreign affiliates, representing 47 per cent of the country's current account deficit in 1977. The overall BOP deficit arising from activities of foreign affiliates, including FDI-related capital flows, amounted to \$521 million. A disaggregation by industry showed discernible differences in the export and import orientation of TNCs. The largest importers were in pharmaceuticals, machinery and automobiles, accounting for 65 per cent of total imports of foreign affiliates, largely surpassing their share of exports of 34 per cent. In contrast, heavy industries had the highest share of exports (47 per cent), compared with a 30 per cent share of imports. These trade patterns are reflected in their respective share in the trade deficit: 92 per cent for the former and 4 per cent for the latter. Non-durable consumer goods accounted for the remaining 4 per cent.

The studies mentioned above were undertaken several years ago. Conditions and policy orientation have since changed, which could raise doubts as to the studies' relevance to current analysis. A recent study (Fry, 1996) examined the effects of FDI inflows on a group of six Asian economies (Indonesia, Republic of Korea, Malaysia, Philippines, Singapore and Thailand). Through regression equations, the five channels through which FDI influences the economy and hence the BOP were examined, namely, savings, investment, exports, imports and economic growth. Positive effects were found on the first four variables, with a lagged response for exports. The impact on economic growth was felt indirectly through the effects on investment and exports. The result of a dynamic simulation showed that FDI raised investment initially and worsened the current account balance. However, in the steady state (i.e., constant ratio of FDI to GDP over time) savings increased even more than investment because of the growth resulting from current and previous FDI, thus leading to an improvement in the current account balance in the long run.

Table II.9. Balance-of-payments transactions of foreign affiliates in selected Asian countries, 1990-1995^a (Millions of dollars)

Country	1990	1991	1992	1993	1994	1995
China						
Trade, net			-9 015	-16 596	-18 221	-16 050
Exports		12 000	17 356	25 237	34 713	46 890
Imports			-26 371	-41 833	-52 934	-62 940
Direct investment income ^b	- 46	- 10	- 22	- 231	- 400	-9 953
Subtotal: current account			-9 037	-16 827	-18 621	-26 003
FDI in country	3 487	4 366	11 156	27 515	33 787	35 849
Total transactions of affiliates			<u>2 119</u>	10 688	<u>15 166</u>	9 846
Memo item: Country						
Current account balance	11 997	13 272	6 401	-11 609	6 908	1 618
Malaysia ^c						
Trade, net	787	-1 302	349	-166	-2 028	
Exports	15 462	18 284	22 316	26 177	34 483	
Imports, c.i.f.	-14 675	-19 586	-21 967	-26 343	-36 511	
Royalties	- 176	- 216	- 275	- 273	- 273	
Direct investment income	-1 926	-2 275	-2 939	-3 222	-3 846	-5 350
Subtotal: current account	-1 315	-3 793	-2 865	-3 661	-6 147	
FDI in country	2 332	3 998	5 183	5 006	4 348	4 700
Total transactions of affiliates	1 017	_205	2 318	1 345	<u>-1 799</u>	
Memo item: Country						
Current account balance	- 870	-4 183	-2 167	-2 809	-4 147	-6 800
Singapore						
Trade, net			•••	•••	•••	
Exports, manufacturing	22 504	22 620	24 331			
Imports						
Direct investment income						
Subtotal: current account						
FDI in country	5 575	4 887	2 204	4 686	5 480	6 912
Total transactions of affiliates						
Memo item: Country						
Current account balance	3 097	4 884	5 615	4 205	11 284	15 093
Thailand						
Trade, net			•••	•••	•••	
Exports						
Imports						
Royalties and license feesd	- 170	- 206	- 281	- 427	- 452	- 630
Direct investment income	- 312	- 56				
Subtotal: current account						
FDI in country	2 444	2 014	2 114	1 730	1 322	2 003
Total transactions of affiliates	•••		•••	•••	•••	•••
Memo item: Country						
Current account balance	-7 281	-7 571	-6 303	-6 364	-8 085	-13 554

Sources: UNCTAD, based on IMF, 1996b; and other international and national sources.

a Positive figures are credits; negative figures are debits.

b Profits and dividend payments were not recorded before 1995.

c Trade data for 1990-1992 are based on Phang (forthcoming), whereas 1993-1994 data are extrapolations using the growth in trade of foreign affiliates (limited companies only); 1994 royalties assumed to be the same as 1993.

d Total paid, includes non-TNCs.

presence of many local firms that supply and service foreign affiliates in Singapore implies that domestically-sourced inputs and value added are likely to be significant. Data on United States' non-bank foreign affiliates suggest that TNCs from the United States contribute positively to the merchandise trade balance of Singapore. In 1993, United States imports of goods shipped by these affiliates from Singapore amounted to \$9 billion, or more than double the exports of goods shipped from the United States to these affiliates in Singapore of \$4 billion.⁶⁷ However, United States foreign affiliates represented less than 12 per cent of Singapore's total merchandise exports and less than one-fifth of its stock of foreign direct equity investment in that year, so that it is difficult to make generalizations on the overall trade contribution of TNCs only on the basis of United States data. It should be noted that the overall trade balance (including trade-related services) of Singapore has been in deficit in the 1990s and the major contribution to the current account surplus derives from other services. Singapore has a highly developed traded services sector and already has a strong position in the region as a financial and offshore banking centre. These are areas in which foreign affiliates are quite active. In the electronic industries, which are dominant in Singapore, constant upgrading and diversification have failed to prevent a declining trend in the importance of manufacturing. This trend coincides with an expansion of the country's role as a regional procurement and operational headquarters, as well as a research-and-development centre. The stock of FDI in the services sector now exceeds by a large margin those in the primary and secondary sectors. While there are no data on the TNC contribution to the substantial surplus in the service account, this is likely to be significant. (The services sector is, in general, less import-intensive then, but probably as export-intensive as the manufacturing sector (UNCTC, 1989).) Inward FDI flows have been sustained at a fairly high level in the 1990s, but remittances of profits have also been

The benefits of FDI to the BOP and to the economy as a whole result from deliberate government policy. Creating an attractive business environment for TNCs has been a principal concern (of the Government). Therefore, the Government has invested substantially to provide adequate infrastructure, education and training, R&D and public services. FDI policies have been directed at supporting priority sectors and achieving sustained and diversified growth.

ii. Malaysia

Malaysia is one of the fastest growing countries of the region, with growth averaging about 9 per cent a year between 1990 to 1996. The structural transformation of the economy over the past two decades has placed it at the forefront of the second-tier of newly industrializing economies. Transnational corporations have played an important role in this transformation and in the spectacular expansion of manufacturing exports. These accounted for 80 per cent of total exports in 1995, compared with 21 per cent in 1980. Malaysia has been one of the largest recipients of FDI among developing countries. The big surge in FDI with a decisive export orientation occurred in the late 1980s and has been sustained throughout the 1990s. Malaysia has a high savings rate but the investment rate is even higher. This is reflected in the current account, which registered rising deficits throughout the 1990s, reaching a peak of \$6.8 billion or 7.7 per cent of GDP in 1995. The deficit declined in 1996 with an easing of overheating pressures in response to weakening export demand, which led to slower import growth.

Manufacturing is dominated by a few industries, notably the electrical and electronic industries, making the economy vulnerable to changes in world demand for the products involved. In 1995, exports of electrical machinery, appliances and parts amounted to almost 66 per cent of exports of manufactures or 52 per cent of total exports. This industry, in which foreign affiliates are prominent, is characterized by high import intensity, limited technology transfers and backward linkages. Value added is relatively low and has even declined over the years, from 28 per cent of

gross output in 1981 to 22 per cent in 1992. A survey of 18 of the largest foreign affiliates in the industry carried out in 1995 showed that the value of imported materials and components accounted for 78 per cent of their total inputs (Ariff and Yew, 1996); this is much higher than the average for all manufacturing industries. The global electrical and electronics industry is highly competitive and requires specialized inputs that meet precise quality standards. These inputs may not easily be available locally. Building a network of local suppliers takes time, although already there are encouraging signs of foreign affiliates forging backward linkages.⁶⁸ Evidence points to local technological capabilities influencing the extent of local procurement. There are indications of technological deepening and upgrading, and of serious efforts to diversify beyond the electrical/ electronic industries. There may also be possibilities for the country, with its rich natural resources, to develop resource-based industries; this could be beneficial to the BOP as relatively fewer imported inputs would be required and higher domestic value added per unit of output.⁶⁹ This suggests an area where more FDI can be attracted, but the pace of all these changes appears slow, as does technological absorption. A principal constraint is the shortage of skilled labour and there are other deficiencies in transport, telecommunications and energy, which the Government is attempting to remedy. The economy is almost close to full employment and has lost its comparative advantage in low-skilled labour-intensive type activities, which characterize a substantial part of TNC activities in the country. With a labour shortage, and based on what has been achieved so far, the country may need to shift to higher value-added activities, which would require substantial investment in R&D and a strengthening of the human resource base.

The contribution of TNCs to the trade balance in 1990-1994 was on the whole negative. With profit remittances and other direct investment income payments averaging \$2.8 billion per year, foreign affiliates had large current account deficits during the period, generally surpassing the deficits registered for the country as a whole. This implies that, in contrast, local firms and other entities had contributed positively to the current account. Because of heavy inflows of FDI, the overall direct effect of TNC activities on the balance of payments was positive. However, remittances of profits show a steadily rising trend. That is not unexpected, given the heavy inflows of FDI since the late 1980s, which added substantially to the FDI stock. Profit remittances may soon exceed inward FDI flows, which have not grown much in recent years. An extrapolation of available data suggests that the total direct effect has probably been negative in the past few years. International reserves dropped in 1994 and 1995, although an increase was registered in 1996. After some time lag, the impact of FDI on the BOP may turn positive. There is, moreover, scope for improving such gains by reducing import dependence and moving towards more profitable value-added activities. Foreign direct investment has contributed to a major structural transformation in Malaysia, but now a major challenge for the country is how to create the conditions which would encourage FDI that would upgrade and diversify the country's industrial base.

iii. Thailand

Like Malaysia, Thailand benefited from the currency appreciation and higher labour cost in Japan and other Asian newly industrializing economies, which led to a sharp rise in FDI inflows in the late 1980s. The expansion of largely export-oriented FDI fuelled strong export growth and triggered an investment boom. Economic growth has been rapid, averaging 8 per cent per year between 1990 to 1996. However, Thailand was among the countries in the region most affected by the 1996 export slowdown. For the first time in almost a decade, GDP growth fell below 7 per cent.

In the 1990s, Thailand registered a widening of the current account deficit, which reached around 8 per cent of GDP in 1995 and 1996. This was, of course, a manifestation of the large savings-investment gap. The savings rate of 34 per cent in 1990-1995, high in relation to the average of around 25 per cent for developing countries as a whole, 70 was surpassed by the gross domestic

investment rate of over 41 per cent. The large current account deficits were only partly financed by FDI. Most of the financing was through external borrowing, particularly bank loans. In recent years, these have shown a shift in maturity structure, with a rising share of short-term debt, that is creating concern.

Data limitations again prevent a definite assessment of the BOP effects of FDI. Investment inflows averaged \$2 billion a year in 1990-1995.⁷¹ Royalty payments and licence fees have been increasing as well as investment income, of which profit remittances are a significant part. Indications are that FDI has played an important role in the large trade deficit, which constitutes the bulk of the current account deficit. An analysis of the impact of FDI flows, using a dynamic simulation exercise for the period 1987-1991 of a simple macroeconomic model of Thailand, confirmed the expansionary effect of FDI on exports, private investment and GDP growth (Jansen, 1995). However, FDI also led to an adjustment process in which imports and investment income payments rose sharply, resulting in enlarging the current account deficit by more than the increase in FDI. A decomposition analysis of the sharp increase in the import to GDP ratio from 25 per cent in 1985 to 40 per cent in 1991 showed that this was largely due to a rise in import dependency, which was related to the growing role of FDI. Foreign investment projects imported 90 per cent of all machinery and equipment and over 50 per cent of raw materials. The trend towards intra-regional networks of FDI and trade may have further strengthened this dependence. In 1995, the ratio of total merchandise imports to GDP increased even further to over 42 per cent. However, import dependency that is related to FDI, especially that involving imports for processing, is likely to be cyclically sensitive. Hence, imports will probably decrease as capacities in affected industries become less fully utilized. Moreover, considering that over 43 per cent of total imports in 1990-1995 were capital goods, the current BOP constraint resulting from such imports has to be weighed against future growth in income and savings.

The heavy reliance on imported inputs, coupled with low value added, limit the realization of potential foreign exchange gains from FDI. Although backward linkages exist in resource-based and lower-end manufacturing, few local linkages have been generated for more technologically sophisticated industries because of the inability of local support industries to provide quality inputs and services. Thailand needs to upgrade and diversify its industrial base, not only to increase value added, but because it is already losing its competitive edge in low value-added labour-intensive industries, which have accounted for much of the FDI in the past decade. Higher technology industries are slowly coming onstream. But there appear to be bottlenecks due to the shortage of skilled labour and inadequate resources devoted to research and development. In view of the long-term nature of these activities, upgrading may take time. In the near future, it is expected that the current account deficit will narrow, as an improvement in the savings rate is accompanied by lower investment and import rates, due to surplus capacity in many basic industries.

iv. China

China has been the largest developing country recipient of FDI since 1992. During 1993-1996, it accounted for 36 per cent of FDI flows to developing countries, with average annual FDI amounting to almost \$35 billion.⁷² China constitutes an attractive location not only because of its size, but because of its economic growth. This averaged more than 10 per cent a year during 1990-1996. But market access has not been the only motive for FDI; relatively low labour costs have made China an important export platform for TNCs engaged in labour-intensive industries.

China generally enjoyed current account surpluses in the 1990s.⁷³ However, the figures need to be revised downwards, as the reporting of dividends and profit remittances only started in 1995.

total direct impact of the BOP transactions of foreign affiliates has been positive (even allowing for adjustments in payments of direct investment income), but this has largely been due to heavy inflows of FDI. The net trade effect of TNC activities has been negative and substantial. A decomposition of 1994-1996 trade data into processing and non-processing shows large deficits, averaging \$22.5 billion a year in non-processing trade of foreign affiliates, a substantial portion of which consisted of imports of investment goods (table II.10). In contrast, processing trade registered a rising net surplus, reaching \$11.6 billion in 1996. This reflects a marked decline for foreign affiliates in the import intensity of processed exports (as measured by the ratio of imports for processing to exports after processing) from 92 per cent in 1994 to 78 per cent in 1996. However, this still compares unfavourably with the 1996 ratio for local firms of 66 per cent, implying higher local value added for the latter. This suggests an area where further improvement in the BOP contribution of FDI could take place, provided that local suppliers are competitive and are up to international standards. It is expected that the deficit on invisibles would widen because of rising direct investment income payments. This, combined with heavy investment requirements, leads to a forecast of current account deficits for China in the coming years. But FDI inflows are likely to remain high, which should be sufficient to finance the deficit (EIU,1996h).

* * *

The impact of FDI-related activities on the balance of payments is bound to be country specific and sensitive to the type of investment, the industry mix and the age structure of investment. Results of a dynamic simulation of a macroeconomic model of six Asian countries showed that FDI raised investment initially and worsened the current account balance (Fry, 1996). However, in the steady state (i.e., constant ratio of FDI to GDP over time), savings increased even more than investment because of the growth resulting from current and previous FDI leading to an improvement in the current account balance in the long run. Factors specific to a host country, such as the importance of TNCs in the economy, the country's stage of development, its size and its resource endowments, influence the extent and nature of external transactions of TNCs. As the overall BOP effect of FDI comprises direct and indirect effects, the validity of estimates depends on the adequacy of the data and the realism of the assumptions associated with indirect effects. The counterfactual situation is also virtually impossible to determine, and thus efforts to evaluate the BOP effects of TNC activities can at best allow only partial conclusions.

Table II.10. Value of international transactions of foreign affiliates in China, 1994-1996^a (Billions of dollars)

		1994 ^b			1995			1996		
Firms	Exports	Imports	Trade balance	Exports	Imports	Trade balance	Exports	Imports	Trade balance	
Foreign affiliates	34.8	53.0	- 18.2	46.9	62.9	- 16.1	61.5	75.6	- 14.1	
Processing trade	30.6	28.1	2.5	42.1	37.1	5.0	53.1	41.5	11.6	
Non-processing trade	4.2	24.9	- 20.7	4.8	25.9	- 21.1	8.4	34.1	- 25.7	
All firms	121.0	115.0	6.0	148.8	132.1	16.7	151.1	138.8	12.2	
Processing trade	57.0	47.0	10.0	73.7	58.4	15.4	84.4	62.3	22.1	
Non-processing trade	64.0	68.0	- 4.0	75.1	73.7	1.3	66.7	76.5	- 9.8	

Source: UNCTAD, based on International Trade Centre; UNCTAD/WTO calculations, based on ITC's *ChinaTraders* database, provided by the Statistics Department, Customs General Administration, China.

^a Foreign affiliates include fully foreign-owned, equity joint ventures and contractual joint ventures. Components may not add up to totals due to rounding.

b Differences in trade data from table II.9 may be due to rounding.

Beyond that, it is clear that FDI cannot be judged solely on the basis of its BOP impact. Whatever the impact, it should be viewed in relation to TNCs' contributions to other objectives, such as growth and development. Moreover, an evaluation of the effects of TNC operations on the BOP needs to be placed in the context of a country's overall macroeconomic performance. At some stages in the development process, for example, the presence of large current account deficits need not cause alarm. The persistence of large deficits, of course, can raise the concern of economic authorities. But, in assessing their sustainability, the level of deficits must be considered in relation to the structural features of a country's economy; its macroeconomic policy stance; and the political situation; which all influence a country's ability to meet future payments obligations and absorb external shocks. Nonetheless, the importance of government policies that facilitate and encourage foreign affiliates to build forward and backward linkages and to raise domestic value added needs to be emphasized. Such policies not only help improve the BOP but, above all, contribute to the strengthening of domestic enterprises and, therefore, to growth and development.

5. West Asia

After a slowdown of FDI flows to developing West Asia (annex table B.1) in 1994 and large disinvestments in 1995, ⁷⁴ particularly in Saudi Arabia and Yemen, investment flows attained a level of nearly \$2 billion in 1996. Flows to West Asia in that year accounted for 1.5 per cent of all FDI flows to developing countries. (Including Israel, flows to West Asia accounted for 1 per cent of global FDI flows in 1996.) The nearly \$3 billion increase in FDI inflows in 1996 reflected mainly increases in Saudi Arabia, Syrian Arab Republic, Turkey and Yemen. Some three-fifths of the countries in the region have received higher inflows in 1996 than in 1995 (figure II.21). Turkey alone received \$1.1 billion in 1996, an increase of 26 per cent over 1995.

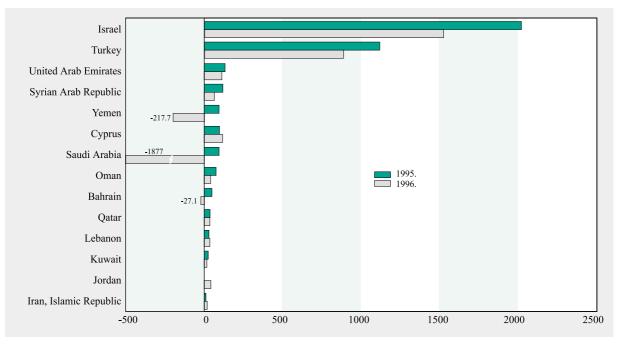


Figure II.21. FDI flows into West Asia, 1995-1996 (Millions of dollars)

Source: UNCTAD, FDI/TNC database and annex table B.1.

Investment flows to West Asia have been declining over time. West Asia's share of developing-country inflows fell from 30 per cent during the period 1981-1985 to 2 per cent during the period 1991-1996. This reflected mainly decreases in FDI flows to the eight oil exporting countries, however, whose share of total developing-country inflows declined markedly -- from 29 per cent to 0.3 per cent -- between the same periods. However, the share of developing-country inflows accounted for by the six non-oil exporting economies has increased only marginally, from 1.2 per cent to 1.7 per cent, between the above-mentioned periods. This poor performance of West Asia as a host to FDI is also reflected in the low ratio of FDI to gross fixed capital formation, which averaged 1.2 per cent during the period 1991-1995, whilst in Africa (another region receiving little FDI) the corresponding share was 6 per cent (figure II.22).

The past ten years (1986-1996) have been characterized by significant year-to-year fluctuations in investment flows to West Asia. Saudi Arabia and, to a lesser extent, Yemen are responsible for most of these fluctuations. Investment in oil exploration and other natural resources in these economies tends to be "lumpy", because large FDI inflows may occur in one year, but not in following years. In Yemen, for example, large investment inflows in oil exploration took place between 1991 and 1993 (e.g., by Canadian Occidental Petroleum Ltd. (Canada) in partnership with Pecten Yemen and Consolidated Contractors International Co. (Lebanon)⁷⁷), but these inflows dropped to minuscule levels thereafter and even turned negative in some years, because of net disinvestments. If Saudi Arabia and Yemen are omitted, a more stable FDI trend emerges over the 1990s. Furthermore, 1996 (and not 1993) emerges as the peak year for investment inflows in the past decade. In other words, the volatility of inflows into two West Asian economies -- albeit major ones -- masks recent improvements in the FDI performance of other countries in the same region.

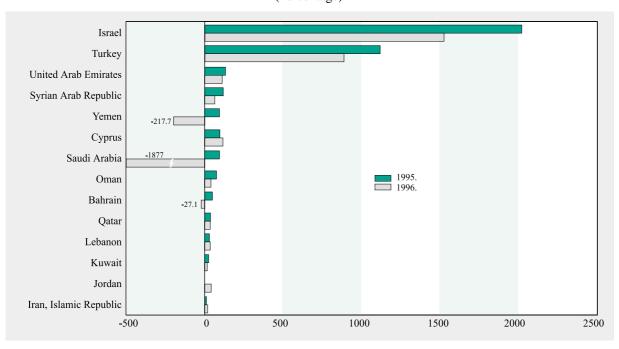


Figure II.22. FDI inflows as a percentage of gross fixed capital formation in West Asia, 1995 (Percentage)

Source: UNCTAD, FDI/TNC database and annex table B.5.

West Asian countries are beginning to make stronger efforts to create a business-friendly environment. However, countries that are members of the Gulf Co-operation Council (GCC)⁷⁸ are relatively less open to non-GCC investors.⁷⁹ For example, in Oman, effective from January 1997, the new corporation tax code penalizes companies with foreign-equity stakes by requiring them to pay tax rates of 25 to 50 per cent on profits (depending on the level of foreign ownership), while wholly owned Omani firms pay tax rates ranging between 5 to 7.5 per cent (EIU, 1996i). However, the preferential FDI treatment given to GCC members is not reflected in the pattern of bilateral investment treaties. As of 1 January 1997, only 7 of the 152 treaties concluded by these countries for the promotion and protection of FDI were intra-regional bilateral arrangements. France, Germany and the United Kingdom together accounted for some three-fifths of the treaties signed by West Asian countries with developed countries (UNCTAD, 1997c).

Most FDI outflows from West Asia originate mainly from Kuwait and Saudi Arabia and are directed to GCC members. Though small, annual average intra-regional flows have tripled between the periods 1980-1985 and 1991-1994, attaining \$640 million in the latter period (UNCTAD, 1997c).

While the petroleum industry of the oil exporting countries receives most FDI inflows, in the non- oil exporting economies FDI flows go mainly to the secondary and tertiary sectors. Activities to expand the oil and gas industry and plans for large investments mainly in Oman, Qatar and the United Arab Emirates to supply gas to Asian markets, encourages petroleum FDI into these countries. Saudi Arabia's application in 1997 to join the WTO, if successful, could enable its petrochemical industry to gain better access to international markets, as well as boost its non-oil exports through enhanced investment and trade liberalization. FDI flows to non-oil producing economies, such as Jordan, Lebanon and Turkey are increasingly going into manufacturing. In the case of Turkey, manufacturing FDI, rising since 1988, has been encouraged by the 1989 customs union agreement with the European Union. The privatization of large state-owned firms, notably the planned sale of a 30 per cent stake in Turk Telekom in 1997, could lead to more FDI in services. Flows to Cyprus are concentrated in tourism and financial services.

C. Central and Eastern Europe

1. Trends

In 1996, FDI flows into Central and Eastern Europe fell to \$12 billion from \$14 billion in the previous year (annex table B.1). Nonetheless, inflows during 1995-1996 were more than twice as high as the annual average inflow (of nearly \$6 billion) during 1992-1994. Large declines were registered by Hungary (nearly \$3 billion), the Czech Republic (over \$1 billion) and the Russian Federation (\$200 million). Among the largest recipients in that region (figure II.23), only Poland saw a substantial increase in inflows in 1996, to \$5.2 billion. The region's inward FDI stock in 1996, at \$46 billion, was less than that of Indonesia (\$59 billion).

The reduced flows into Central and Eastern Europe reflect, in part, declines in privatization-related investments. In Hungary, for example, FDI flows worth \$600 million in 1996 (or 29 per cent of its inflows) were received in connection with privatizations, compared with about \$3 billion in 1995 (or 66 per cent of inflows in that year).⁸³ The decline in FDI inflows also reflects problems related to transition to a market economy. Without a stable market economy in place, some foreign investors may have overestimated the region's potential to absorb FDI and temporarily shelved plans for expansion.

Nonetheless, prospects for privatization-related investment in the region are still good, especially in those countries that are only now embarking on large-scale privatization schemes, such as Bulgaria (in 1997-1998) and Romania (in 1997). Even in countries in which privatization is quite advanced, such as the Czech Republic, there are still good prospects for sequential FDI, although the extent to which such FDI takes place varies from privatization project to privatization project. There are also signs that investments that are unconnected with privatization schemes, and are geared to both domestic and regional markets, are increasing, propelled by closer trade links with the European Union.⁸⁴ Efficiency-seeking investments are also on the rise, as TNCs, especially automobile manufacturers, are taking advantage of the availability of skilled low-cost labour in several countries in the region.⁸⁵

Investment flows to the region remain concentrated in the Czech Republic, Hungary, Poland and the Russian Federation. The first three countries alone accounted for 68 per cent of the region's inflows (and 73 per cent of its inward stock) in 1996. (It should be noted, however, that these countries together also accounted for 30 per cent of the region's GDP in 1995.) Western European TNCs still dominate the FDI source picture, followed closely by TNCs from the United States and the Asian newly industrializing economies, in particular the Republic of Korea (UN-ECE, 1996a). Japanese TNCs remain on the sideline.

A small but growing share of inflows is accounted for by intra-regional investments, particularly within the Commonwealth of Independent States.⁸⁶ With Central and Eastern European countries recovering slowly from the transitional depression, many companies based there are beginning to rebuild their export networks in other countries in the region, banking on their connections and knowledge of markets and a level of local brand awareness that remains high.

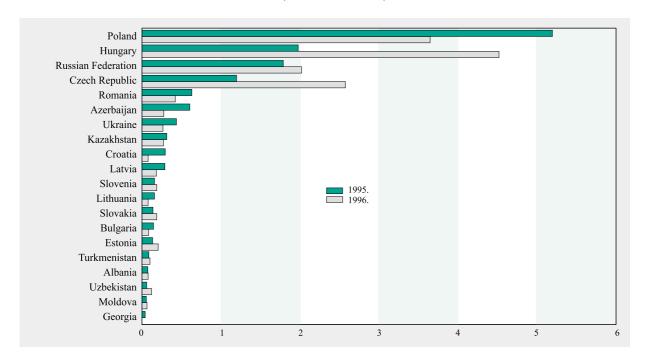


Figure II.23. FDI flows into the top 20 countries in Central and Eastern Europe, 1995-1996^a (Billions of dollars)

Source: UNCTAD, FDI/TNC database.

^a Includes economies in Central Asia and former Yugoslavia.

Trade within the region by the Czech Republic, Hungary, Poland and Slovakia rose by 40 per cent in 1995, and trade between the Czech Republic and Poland has more than doubled since 1995 (UN-ECE, 1996b). Several Central and Eastern European companies are also investing in the region (box II.11), including through mergers and acquisitions and joint ventures. For example, Slovakia's VSZ a.s. merged with Trinecke Zelezarny a.s. from the Czech Republic, to form a steel-making company, and the Russian gas company Gazprom acquired Hungary's General Banking & Trust Co.⁸⁷

The growing importance of intra-regional FDI is also reflected in the fact that 16 per cent of the BITs concluded by Central and Eastern European countries are with other countries of the region, most of them settled in 1996. Romania leads, together with Poland, in BITs concluded with other transitional economies, followed by the Czech Republic, Hungary and Ukraine (see annex table B.10).

Box II.11. Hungary's nascent outward investors

In 1996, Hungary experienced record FDI outflows of \$58 million. In the first quarter of 1997, more than \$50 million FDI outflows were approved.^a Last year, the National Bank of Hungary registered 385 licences and approved another 74 licences for outward investment. Hungarian firms initiated new investments in 44 countries in 1996, mostly in Romania, followed by the United States and Slovakia. The favoured locations for Hungarian FDI were Slovakia, Romania and Austria. In Romania, Hungary was the twentieth largest foreign investor, contributing \$23 million in cumulative inflows out of an estimated total of \$2.2 billion between 1989 and 1996.

Oil and Gas Ltd. (MOL), Hungary's largest company and its second biggest exporter, has become that country's most active outward investor. In Croatia, Oil and Gas Ltd. is negotiating the acquisition (for DM 92.8 million) of a 12.5 per cent stake in the Adriatic Sea-Hungary pipeline. The company has also expanded its network of petroleum distribution in neighbouring countries and has participated in oil exploration and drilling in the Commonwealth of Independent States, as well as in other oil-endowed countries in other regions. Hungarian pharmaceutical producer Richter Gedeon has established, together with a Russian partner, a packaging factory in the Russian Federation. In Romania, pharmaceutical producer Pharmavit has been the most successful Hungarian investor.^b Zalakerámia, a ceramic tile manufacturer, acquired a producer in Croatia and, recently, the majority stake in the Cesaron factory in Romania.^c

Growth of Hungary's outward FDI is based on several factors:

- Most major Hungarian enterprises have been privatized and have, by now, consolidated their
 activities and strengthened their financial position. Some are listed on the local stock exchange,
 enabling them to raise capital, including for outward investment.
- The small size of Hungary's economy leaves many enterprises with international expansion as the only avenue for becoming competitive internationally.
- Hungarian enterprises may be in a particularly advantageous position when investing in other transitional economies because of their knowledge of these markets. Often, particularly in the case of smaller investors, cultural and personal links play an important role in investment decisions. This is reflected by the importance of Central and Eastern Europe in the Hungarian outward FDI picture. That region accounted for about a quarter of Hungary's FDI abroad in 1996 (box table).

/...

(Box II.11, cont'd)

Box table. Hungary's FDI abroad, 1996

(Millions of dollars and percentage)

Host country	Number of licences	Share of total (Per cent)	Value of FDI (Million dollars)	Share of tota (Per cent)
Central and Eastern Europe	217	58	14.0	24
Poland	23	6	0.4	1
Romania	106	28	4.9	8
Russia	22	6	1.8	3
Slovakia	37	10	5.1	9
Ukraine	29	8	1.8	3
Western Europe	98	25	10.0	17
Austria	37	10	3.3	6
Germany	36	9	2.0	3
Netherlands	4	1	2.0	3
United Kingdom	21	5	2.7	5
United States	46	12	2.8	5
Other	24	6	31.4	54
Total	385	100	58.2	100

Source: National Bank of Hungary, unpublished data.

The available data suggest that Hungarian FDI in Central and Eastern European countries is concentrated in manufacturing, whereas the country's FDI in Western countries appears to be more geared towards establishing a trading presence.

Hungary's investment abroad has been facilitated by the liberalization of its FDI regime in compliance with the country's OECD membership. In 1996, the regulation of capital outflows was simplified. A two-step procedure for authorization for outward FDI, involving both the Ministry of Industry and Trade and the Ministry of Finance, was replaced by a one-stop reporting and registration obligation with the National Bank of Hungary. Only portfolio investments and special cases not fulfilling all provisions of the new law (e.g., where the host country is not an OECD member country and no bilateral investment treaty exists) now require prior authorization by the National Bank of Hungary.

The Government is also considering measures to promote further outward FDI, such as establishment of a promotion fund, preferential credit lines and investment guarantees. The promotion fund would operate as a joint stock investment company, co-investing with Hungarian private enterprises that invest abroad and selling its stake in the fund to those enterprises after a period of time. The Hungarian Export Credit Guarantee Corporation (MEHIB) has developed a political risk insurance scheme for Hungarian outward investors. Investment locations are ranked on the basis of four risk categories that are revised twice a year. A fifth category applies to countries on an ad hoc basis.

a See Világgazdaság, "Növekszik a magyar tökekivitel" ("Hungarian capital exports increase"), vol. 29, no. 46, 5 June 1997, pp. 1 and 3.
 b See Magyar Hirlap, "Egyre több magyar cég lépi át a határokat" ("There are more and more Hungarian firms investing abroad"), 8 February 1997, pp. 1 and 10.
 c See Tamás G. Korányi, "Bukarestben vett gyárat a Zalakerámia" ("Zalakerámia has bought factory in Bucharest"), Napi Gazdaság, vol. 6, no. 209, 4 June 1997.

2. Foreign direct investment and competition

By increasing competition in local markets, FDI has had a major influence on market structures in several countries of Central and Eastern Europe. There are many examples of FDI liberalization contributing to a healthier competitive market. Foreign direct investment, particularly in small and medium-sized enterprises, has helped to de-monopolize markets and stimulate competitive behaviour. Foreign-investor participation in the restructuring and privatization of large state-owned enterprises has helped to overcome the "legacy of monopolization" (Fingleton *et al.*, 1997). Foreign affiliates typically have better marketing capabilities, a superior market performance and are also engaged more actively in exporting than are purely domestic firms (UNCTAD, 1995a). ⁸⁸ Competition introduced by such firms, either in the form of products and services unavailable previously or of higher quality, is forcing local producers and service providers to try and enhance their own performance (OECD, 1996c; see also Hooley *et al.*, 1996). This is particularly visible in consumer-related services and manufacturing industries that were neglected under the centrally planned system (box II.12).

The rush of TNCs to establish a local presence in the region has resulted, in many industries, in too many companies fighting for too few consumers. That has further improved consumer welfare through quality improvements and price decreases and a consumer orientation of goods and services hitherto unknown in the countries of the region. This has been further accentuated by growing competition from local manufacturers who are taking advantage of the new business opportunities and are winning customers back from foreign companies (and brands) by improving quality and offering less expensive products.

Box II.12. TNCs in consumer and service industries in Central and Eastern Europe

Services industries and consumer-oriented manufacturing were mostly neglected under the centrally-planned economic systems in Central and Eastern Europe. After the market-opening, prior unavailable products and services were introduced through trade and investment. For example, retailing companies such as Globi (Belgium), Robert/Auchan (France), Savia/Tesco (United Kingdom), Seham/ Ahold & Allkauf (Germany), Marks & Spencer (United Kingdom), Ikea (Netherlands) and Metro (Switzerland) expanded their networks of supermarkets and hypermarkets to the Baltics, the Czech Republic, Hungary, Poland and Slovakia.^a In the tobacco industry, companies such as B.A.T. (United Kingdom), Phillip Morris (United States), R. J. Reynolds Tobacco Co. (United States), Reemtsma (Germany) and Rothmans International (United Kingdom) invested more than \$3 billion to buy cigarette factories in the region. Similarly, the world's largest hotel groups (Trust House Forte Plc (United Kingdom), Holiday Corporation (United Sates), Intercontinental (Japan) and Sheraton (ITT Corp., United States)), and the world's biggest music companies (Bertelsmann Music Group (Germany), EMI (United Kingdom), Polygram (Netherlands), Sony (Japan) and Time Warner (United States)) moved swiftly into Central and Eastern Europe. And, as Western consumer-related companies moved into the region, the global advertising agencies that promote and market their products followed closely behind (including Bates, Saatchi & Saatchi, BBDO, Grey, McKann Erickson, Young & Rubicom and FCB). Perhaps more important, several insurance companies established a presence after restrictions on foreign involvement were lifted -- among others, Nationale Nederlanden (Netherlands), Sedgwick (United Kingdom), Marsh & McLennan (United States).b Similar examples can be found in other producer services, particularly nontradable banking, financial and other business services, c

- ^a See "Survey consumerism", *Business Central Europe*, June 1997, pp. 37-46.
- b See "Survey insurance", *Business Central Europe*, November 1993, pp. 33-47.
- ^c See, e.g., "Long-term punt", *Business Central Europe*, February 1997, pp. 51-52.

Foreign direct investment has also helped to ease the adverse effects on domestic production of opening an economy to competition through trade. The Hungarian pharmaceutical industry is an illustration. Here, the ability of the industry to compete with foreign imports after the market was opened benefited from foreign investment: the slowdown in the decline of domestic production in total sales over 1994-1995 (the market share of domestic products fell from 74 per cent in 1990 to 47 per cent in 1994 and 45 per cent in 1995) was due to the fact that five of the ten leading pharmaceutical companies became foreign-owned. Likewise, the increase in car sales in Poland to more than 370,000 units in 1996 (an increase of 41 per cent over 1995 -- the biggest increase recorded in Europe that year) occurred after Fiat purchased its long-standing Polish partner FSM in 1992. Fiat's production in Poland meant that imports could be kept at a low level of 108,000 units in 1996 and that domestic production was able to compete successfully with foreign imports. 90

Competition through FDI also helped to expose goods and services produced by Central and Eastern European firms to world market prices. This has sometimes led to closures of local companies incapable of competing with foreign affiliates in their own country. As a result, some industries became almost entirely foreign-owned. In the Visegrad countries, for example, only a few established television-producing firms (such as OTF in Slovakia, Videoton in Hungary and Elemis and Unimor in Poland) have survived competition from imports, foreign affiliates and private startups. 91

In some instances, however, TNCs have led to reduced competition by, for example, foreclosing market entry, fixing prices and engaging in anti-competitive mergers. Eager to attract FDI, several countries in Central and Eastern Europe have sometimes made concessions to individual TNCs by, for example, granting exclusive market-supply rights for extended periods. As countries became more aware of the adverse impact on competition of providing such exclusive rights, they began to withdraw them. For countries aspiring to join the European Union, removing such exclusive privileges was a necessity. In Poland, for example, Daewoo's tariff incentives (in the form of duty-free imports of components which were granted under its \$1.2 billion purchasing agreement of carproducer FSO in 1996 and are guaranteed until March 1998) have become an issue in the preliminary discussions on the country's European Union membership. The European Union has said the incentives are an anti-competitive practice that discriminates against European Union car-producers, which have to pay duties on their exports to Poland.⁹²

Anti-competitive behaviour by foreign affiliates has prompted action by national competition authorities in the region. For example, Poland's competition authority fined FIAT \$1.3 million for demanding pre-payments for Cinquecento cars. ⁹³ Hungary imposed fines totalling \$3.4 million on Sara Lee/Douwe Egberts (Netherlands), Eduscho (Austria), Tschibo Frisch Röst Kaffee (Germany), which has a \$20 million greenfield investment in Budaörs, and Kraft Jacobs-Suchard and Nestlé (Switzerland), for fixing coffee prices. ⁹⁴ However, such incidents do not appear to be more prevalent in Central and Eastern Europe than in other regions. In addition, import competition undermined the ability of foreign affiliates to engage in restrictive business practices and anti-competitive behaviour. ⁹⁵

3. Conclusion

Central and Eastern Europe's success in attracting FDI remains weak by global standards. In addition, the continued dependency of FDI inflows on privatization programmes in the region does not augur favourably for future FDI inflows. Most advanced economies -- with the exception of Poland -- have largely concluded their privatization drives, and the likelihood of major

privatization efforts in the next-tier countries looks small. However, once a major privatization that allows for foreign participation gets under way in the Russian Federation, FDI can be expected to increase considerably.

Despite the small numbers, FDI has been a factor in the region's transition process towards creating market economies. This has been particularly apparent in areas where foreign enterprises have introduced competition and the benefits arising therefrom (in the form of quality improvements, price-decreases and a consumer-orientation) in local markets, and where they salvaged domestic production from all-but-sure extinction brought about by the market opening to Western imports.

Notes

- Real GDP growth in Latin America is estimated to be 3.8-4.6 per cent during 1997-1998, compared with 5-10 per cent for developing Asia and 3 per cent for all developed countries (OECD, 1996a, table 24).
- Data reported by Eurostat do not include reinvested earnings in order to make FDI data comparable among all European Union member countries.
- The data on reinvested earnings have been included in Japan's official balance-of-payments statistics only since 1996. The 1996 outflow data including and excluding reinvested earnings are \$25,485 million and \$22,994 million, respectively (Japan, Bank of Japan, 1997).
- One aspect of New Zealand's and Australian's liberalization programmes that is not well understood is the role played by their bilateral agreement, the Australia New Zealand Closer Economic Relations Agreement. Although it is a preferential agreement motivated by the small size of their domestic markets, there was very little to gain from having preferential access to each other's market because the combined market is still small and there are a number of similarities between the two regions (Scollay, 1996). To increase market size, what is important is access to much larger markets -- hence Australia liberalized unilaterally *vis-à-vis* the rest of the world.
- There is also scope for more FDI in Australia's financial industry, as recommended in a recent inquiry into the Australian financial system.
- This figure has started to rise again during the past two years, but it is unlikely to match the 1981 level for some time.
- For a list of these countries, see note to annex table B.1.
- At least 11 LDCs have populations below 1 million (World Bank, 1996, pp. 188-189). By definition, among other criteria, the per capita GDP of LDCs is \$765 or less.
- ⁹ Afghanistan, Bangladesh, Cambodia, Kiribati, Lao People's Democratic Republic, Maldives, Myanmar, Nepal, Samoa, Solomon Islands and Vanuatu.
- Data from UNCTAD, FDI/TNCs data base.
- "Worlds apart", Far Eastern Economic Review, 25 July 1996, p. 81.
- Hiebert Murray and Lee Matthew, "Investors flock to Cambodia, but beware", *Far Eastern Economic Review*, 11 July 1996, p. 56.
- Stéphane Dupont, "La zone franc s'élargit à la Guinée-Bissau", *Les Echos*, 2 January 1997.
- "Watching the Mekong flow", *The Economist*, 7 September 1996, p. 59.
- ¹⁵ "Private-sector beer is best", *The Economist*, 2 November 1996, p. 54.
- Mark Ashurst, "Africans forge closer trading links", *Financial Times*, 26 November 1996, p. 6.
- This does not mean that no information is available: various publications (e.g., the Economist Intelligence Unit's country studies), some databases and a number of international organizations providing FDI promotion services, such as UNCTAD, World Bank and UNIDO, as well as governmental bodies and chambers of commerce in home countries touch upon FDI and provide some relevant information.
- Through their IPAs, most LDCs offer promotional brochures and similar material, typically of short length, to foreign investors.
- The discussion of FDI trends refers to all countries in Africa except South Africa, which is classified as a developed country.

- Sub-Saharan Africa includes all developing countries in Africa except the six North African countries (Algeria, Egypt, Libyan Arab Jamahiriya, Morocco, The Sudan and Tunisia).
- In 1995, Tunisia concluded a free trade zone agreement with the European Union to be phased in over 12 years. See, Roula Khalat, "Tunisia steps up sell-offs to attract funds", *Financial Times*, 29 May 1996.
- James Whittington and Mark Dennis, "Most markets restrict foreign investors", *Financial Times*, 10 January 1996.
- "New horizon economies", Union Bank of Switzerland, First Quarter, 1997, p. 84.
- In 1995, for example, Nigeria promulgated an indigenization decree allowing foreign companies to take a majority stake in local firms. See, "Foreign investors are in no hurry to divest", *Financial Times*, 14 November 1995.
- ²⁵ "An African success story", *The Economist*, 14 June 1997, p. 53.
- Nancy Dunne, "U.S. to reward growth in Africa", *Financial Times*, 30 April 1997, p. 5.
- ²⁷ "The world in 1997", *The Economist*, 1996, p. 79.
- If South Africa should become a growth pole, it may initiate a dynamic in the framework of which the country becomes increasingly a location for foreign investors from neighbouring countries.
- However, in the case of Malawi and Zimbabwe, bilateral trade agreements make these tariff barriers, at least in some products, less significant.
- See, for instance, Christopher Vadot, "La SADC et le modèle asiatique", *Jeune Afrique économie*, 16 September 1996, pp. 56-59.
- For a more detailed discussion of the "flying geese" paradigm, see UNCTAD, 1995a.
- ILO, "Unemployment in South Africa is probably lower than estimated, says ILO study". Press release, ILO/96/31, ILO: Geneva, 14 October 1996, p. 2.
- Almost the same results are obtained when more sophisticated indicators for levels of development are applied, for instance, the UNDP Human Development Index (HDI). According to the HDI, other SADC countries, namely, Mauritius and Botswana with index values of 0.825 and 0.741, respectively, are ranked higher than South Africa which has an index value of 0.649 (UNDP, 1996).
- Based on oral communication with South African experts.
- ³⁵ UNCTAD trade database, unpublished data.
- ³⁶ "America loses its Afrophobia", *The Economist*, 26 April 1997, p. 23.
- For instance, Mauritius and Zimbabwe, two of the more advanced countries in the region, seem to possess particular competitive advantages in food-processing and some manufactured goods, e.g. textiles.
- The study analyses trade opportunities between SADC and SACU. Therefore, the statement also holds true for SACU members other than South Africa, i.e., Botswana, Lesotho, Namibia and Swaziland.
- ³⁹ "Exchange curbs keep investors on wrong side of SA border", *Sunday Times*, 5 May 1996.
- At present, South Africa has not concluded any BITs within SADC. The country has prepared a draft of such a treaty with Mozambique, which may serve as a blueprint for similar agreements with other African states.
- The concept is Terutomo Ozawa's.
- 42 Central Bank of Brazil. 1997.
- 43 Latin American Special Report, August 1996, p. 5.
- 44 Prensa Economica, March 1997, p. 56.
- 45 UNCTAD, FDI/TNC database.
- See United States Department of Commerce, 1996d.
- Bernard Simon, "Time to learn Spanish", *Financial Times*, 22 April 1996.
- 48 "Investors in Latin America more confident", *Financial Times*, 17 March 1997.
- ⁴⁹ Ibid
- These are the Colonia Protocol for the Reciprocal Promotion and Protection of Investments in MERCOSUR of 17 January 1994 which applies to investments among MERCOSUR members; and the Buenos Aires Protocol for the Promotion and Protection of Investments of Third States of 5 August 1994, which applies to investments from non-MERCOSUR countries. Contained in UNCTAD, 1996d.
- The Decision 291 of the Commission of the Cartagena Agreement: Common Code for the Treatment of Foreign Capital, Trademarks, Patents, Licenses, and Royalties of 21 March 1991, which replaced the old

- Decision 24 on the same subject matter. Contained in UNCTAD, 1996d.
- In 1996, the inflation rate was brought down to 7 per cent, the lowest since 1993. China's foreign debtservice ratio was 7 per cent and its foreign exchange reserves now exceed \$100 billion.
- ⁵³ "Viet Nam defies gloom mongers", *Asia Times*, 3 January 1997, quoting the Ministry of Planning and Investment (MPI) of Viet Nam.
- In fiscal year 1996-1997, FDI accounted for 40 per cent of total private capital inflows and portfolio investment for 37 per cent (excluding global depository receipts). See "Foreign direct investment pips FII funding in 96-97", *Economic Times*, 19 May 1997.
- The United States tops the list of countries investing in India, followed by the United Kingdom and Mauritius (mainly investment by overseas Indians). According to the Office of the Director General of Foreign Trade of India, companies based in the Republic of Korea committed Rs 22.4 billion of FDI to India, 12 per cent of which was approved between April and September 1996 (the first six months of the 1996/1997 fiscal year). Thus, the inflow of FDI from the Republic of Korea to India rose more than 12 times compared to last year.
- For example, the LG group announced it was committing \$2 billion in investments to India in various industries, including petrochemicals, pharmaceuticals, cosmetics, household goods and other processed goods over the next few years.
- Some developing Asian economies are among the leading investors in South Africa. Malaysia, Republic of Korea, Singapore, Taiwan Province of China and India are ranked fourth, fifth, tenth, eleventh and twelfth, respectively, as sources of FDI into South Africa during 1994-mid-1996 (Cargill, 1996).
- The BOP implications of outward FDI of these countries, which are becoming important investors, are not explored in the discussion.
- The current account balance can be defined in different ways: (1) the difference between exports (goods, services and income) and imports plus net transfer payments; (2) minus (capital and financial account balance) plus change in reserves; and (3) the difference between national savings and domestic investment.
- For a detailed discussion of the subject see Milesi-Ferretti and Razin (1996).
- Market-seeking investment could improve the BOP of the host country through foreign exchange saved, provided that it does not depend on very high rates of protection, which could result in artificially high profits, and hence remittances of such profits may exceed net savings from not importing.
- The countries are Indonesia, Thailand (Ramstetter, 1997) and China (Sun, 1996).
- Local procurement of Japanese affiliates in Asia increased from 27 per cent of total procurement in 1981 to 44 per cent in 1988, but declined to 34 per cent in fiscal year 1994. In Latin America, there was a steady increase in the ratio from 28 per cent in 1981 to 39 per cent in fiscal year 1994. The figures refer to all Japanese affiliates; but to be able to capture the vintage effect adequately, local procurement for the same set of firms should be compared over time.
- For a more detailed discussion of the various approaches, see Dunning (1993).
- There are serious problems involved in measuring these transactions. While there are specific items in published BOP statistics that can be directly attributed to TNC activities, for most of the items, transactions of TNCs are not separately identified. Note that in the current account, entries are on a gross credit or debit basis, whereas in the financial account, entries are on a net basis reflecting changes in assets and liabilities.
- See, for example, Ramstetter (1996) on the manufacturing industry.
- The corresponding figures for 1992 were \$6.6 million for imports and \$2.9 million for exports (United States, Department of Commerce, *Survey of Current Business*, various issues). Data do not fully measure the trade effect of United States TNCs because of the absence of intra-affiliate trade.
- 68 See Athukorala and Menon (1995) and Sivalingam and Yong (1993).
- Sivalingam and Yong (1993) report that, in these industries, the local content of total input was 76 per cent in 1983.
- The figure is the 1990-1993 average gross domestic savings rate for low and middle-income countries or countries with 1993 GNP per capita of less than \$8,626 (World Bank, 1996).

- Since the creation of the Bangkok International Banking Facilities (BIBF) in March 1993, there has been a shift from intra-company loans to BIBF loans. For 1995, the rebooking of FDI loans was estimated at \$437 million. This figure should be added to FDI in table II.9 to derive the total financial flows associated with FDI (Thailand, Bank of Thailand, 1996).
- Foreign-direct-investment data should be treated with caution because of problems of over-valuation and round-tripping (see UNCTAD, 1995a, pp. 59-60) but measures introduced recently towards national treatment should reduce data distortions.
- In 1993 and 1996, China recorded current account deficits amounting to around \$12 billion and \$5 billion, respectively.
- Israel, a developed country according to UNCTAD's classification, is not included unless otherwise specified.
- ⁷⁵ Bahrain, Islamic Republic of Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia and United Arab Emirates.
- Cyprus, Jordan, Lebanon, Syrian Arab Republic, Turkey and Yemen.
- Reported in the *Oil & Gas Journal*, vol. 89 (2 December 1991), pp. 37-44.
- Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and United Arab Emirates.
- J. Whittington and M. Dennis, "Most markets restrict foreign investors", *Financial Times*, 10 January 1996
- ⁸⁰ "Bilan du monde", *Le Monde*, 1997, p. 113.
- ⁸¹ "New horizon economies", Union Bank of Switzerland, First quarter 1997, p. 89.
- ⁸² "A survey of Poland", *Business Central Europe,* February 1997, pp. 42-45.
- See BNA's Eastern Europe Reporter, 24 February 1997, p. 119; see also Figyelö, 6 February 1997, p. 7.
- Lansbury and Pain found a significant effect from privatization programmes, labour costs and research intensity, and existing trade linkages; see Lansbury and Pain (1997).
- For the automobile industry, see, e.g., Haig Simonian, "Into the east at full throttle", *Financial Times*, 13 February 1997, p. 11.
- For example, over the first nine months of 1995, 40 joint ventures between CIS partners were registered in Kazaksthan, 1,042 in the Russian Federation and 63 in Uzbekistan. See V. Komarov, "Investitsionnoye sotrudnichestvo stran SNG", *Ekonomist*, May 1996, pp. 82-87.
- 87 Business Central Europe, 1996, various issues.
- This finding has been recently supported by econometric research in Hungary. See Hooley *et al.* (1996).
- Information provided by the Hungarian Ministry of Industry, Trade and Tourism, Division of Trade Development and Investment Promotion.
- See Stefan Wagstyl, "Manufacturers have moved into the fast lane", *Financial Times*, 26 March 1997, p.
- 91 See "Twilight zone", *Business Central Europe*, March 1996, p. 33.
- See Christopher Bobinski, "Poland tightens up on Daewoo under EU pressure", *Financial Times*, 3 February 1997; and *BNA's Eastern Europe Reporter*, 24 February 1997, p. 140.
- "Crossborder monitor", *Business Eastern Europe*, 8 February 1995, p. 3.
- 94 Ibid.
- See Péter Kaderják, "A hazai közvetlen külföldi befektetéseket meghatározó tényezökről egy kvantitativ elemzés", *Közgazdasagi Szemle*, December 1996, pp. 1072-1087.

CHAPTER III

FOREIGN PORTFOLIO EQUITY INVESTMENT

Liberalization and globalization have stimulated the development of closer financial (as well as trade) relations between developed countries and emerging markets. Foreign direct investment (FDI) has become an important source of capital inflows for emerging markets since the late 1980s. Another is foreign portfolio equity investment (FPEI), which has spread to emerging markets as regulatory barriers to capital movements have fallen. By contributing or participating in the equity capital of firms, both FDI and FPEI can enhance the development of the enterprise sector in host countries. This chapter addresses trends and issues relating to FPEI flows to emerging markets. In the first section, the linkages between FDI and FPEI are analysed. The second section discusses the trends in FPEI flows to emerging markets; and the third section provides an overview of the main mechanisms through which these flows are channelled (these are elaborated further in annex C at the end of this volume). The conclusions briefly raise a number of issues relating to FPEI that require further in-depth analysis.

A. Linkages between foreign direct and portfolio investment

In principle, FPEI is distinguished from FDI by the degree of management control that foreign investors exercise in a venture: portfolio equity investors usually provide only financial capital by purchasing shares of a company without any involvement in the company's management. Foreign portfolio equity investment typically has a shorter investment horizon than FDI, sometimes just a few weeks or months, although this horizon can extend to ten years or more. The type of investor is also different: while FDI investors are firms engaged in the production of goods and services, portfolio equity investors are more often either financial institutions, institutional investors (such as pension funds, insurance companies or investment trusts), or individuals, and are typically interested only in the financial returns of their investments.

In practice, these distinctions are often less than clear-cut and are subject to a number of qualifications:

• The ownership threshold commonly used to distinguish FDI and FPEI is somewhat arbitrary. An investment is normally counted as FDI when it involves an equity capital stake of 10 per cent or more of the ordinary shares in an incorporated enterprise, or its equivalent for an unincorporated enterprise. This is held to indicate a lasting interest in, or a degree of control over, the management of the enterprise (IMF, 1993). An equity stake of less than 10 per cent is categorised as foreign portfolio equity investment.

However, minority-share purchases can in some circumstances involve direct management participation, and in some cases lasting management control can take place with a less than 10 per cent equity stake (as recognized by the IMF and OECD definitions of FDI). In the case of Japan, for example, Japanese companies sometimes hold less than 10 per cent of the shares of foreign suppliers of raw materials, but still have representation on the foreign company's board of directors and maintain a long-term business relationship with these companies.

- The role of venture capital investors. These provide equity capital for young unquoted companies, often at the start-up stage, and are often very closely involved in managing them, either directly or indirectly, by providing advisory services. Although their overriding motive is to achieve a capital gain, venture capital investors often wait several years before selling their equity stakes.
- Data constraints. Only a few countries (including major source countries, such as OECD members) have systematically recorded equity capital flows in their balance-of-payments accounts under categories that distinguish FDI from FPEI. The lack of accurate data on cross-border FPEI flows is a serious handicap for analysis. The recent nature of FPEI flows to emerging markets poses an additional challenge. A special effort is therefore made here to use data from a variety of sources: host countries,² home countries and international financial institutions (box III.1).

Flows of FPEI normally take place through transactions involving shares of companies quoted in stock markets, although some FPEI flows also take place in unquoted companies (for example, in the case of venture capital funds). The contribution of FPEI to the financing of domestic enterprises can be significant (box III.2). It is most direct when the investment is made in the market for primary issues, in the local stock market, or in international markets through international equity offerings or issues of depositary receipts. Share purchases in the local secondary market contribute indirectly to the financing of local firms by pushing up equity prices and thus lowering the cost of raising capital in the stock market, thereby encouraging new equity issues. Furthermore, FPEI may increase the liquidity of the local stock exchange, bringing benefits to other segments of the capital market, such as the bond market, and increasing the volume of finance available for both local firms and foreign companies established in a country. Consequently, FPEI can help strengthen the local financial infrastructure, which can facilitate the operations of TNCs. An efficient financial system can also contribute to attracting FDI. At the same time, as FPEI finances in part the capital requirements of local companies, it can also increase the competitiveness of these companies. Although portfolio investors are attracted in the first place by "blue-chip" companies in emerging markets, investors also seek opportunities to take advantage of "price anomalies" by investing in companies that appear to be undervalued on the basis of, for example, the price-earnings ratio. These need not necessarily be blue-chip companies; they can be companies with high growth potential. Foreign investment can ease the access of these companies to capital markets and reduce their cost of capital investment.

Flows of FPEI are intimately linked to the development of stock markets in recipient countries. Many venture-capital fund investments in unquoted companies are made with the expectation of reaping capital gains subsequent to the listing of such companies on the stock market once they become mature. Likewise, some country funds are set up in developing countries in anticipation of the establishment of a local stock market. With regard to mergers and acquisitions, there is a close relationship between FDI and FPEI. In many cases, cross-border mergers and acquisitions are considered as FDI transactions because they confer a lasting and significant management interest in the merged or acquired company. However, it is possible for such transactions to take place with a minority equity interest, in which case the transaction would be recorded as a FPEI flow.

There is a partial overlap in the motivations underlying FDI and FPEI. For both types of investment, the rate of economic growth (as well as potential rate of growth) of the host country are an important influence on decisions on where to invest. For efficiency- or asset-seeking FDI, however, this element may be of lesser importance. For instance, in the case of FDI made with the intention of

Box III.1. Data on FPEI

There is no single perfect source of data on FPEI flows. Because of the variety of instruments through which such investments can be made, and their increasingly global nature, few individual countries have reliable and accurate statistics on FPEI flows. At the global level, in particular, the accurate tracking of these flows remains a challenge.

There are several commonly utilized sources of data on regional and global FPEI flows. The World Bank reports its estimates annually in *Global Development Finance* (formerly entitled the *World Debt Tables*), and the IMF does likewise in its *Balance of Payments Statistics Yearbook.* The World Bank publishes only FPEI data on emerging markets, while the IMF also includes data on FPEI in developed countries. The report on cross-border capital flows produced in the past by Baring Securities has also been a frequently referenced data source; this report will in future be published by Cross Border Capital. The World Bank defines FPEI as the sum of country funds, depositary receipts (American and Global) and direct purchases of shares by foreign investors. The data on these three sources of FPEI are based on information from a number of sources, including Euromoney databases and publications; Micropal Inc.; Lipper Analytical Services; published reports of private investment houses, central banks, national securities commissions and national stock exchanges; and the World Bank's Debtor Reporting System. The IMF reports balance-of-payments data received from its member countries. The magnitudes published by these three sources are different due to the differences in methodologies utilized in producing the data.

In light of the limitations in utilizing balance-of-payments data, the data used here are from the World Bank, which appear to be the most comprehensive available at this time. Inputs from actual market sources of data give some assurance that these data represent reasonably reliable and comprehensive estimates of actual FPEI flows.

An alternative method of producing estimates for FPEI flows is to use consolidated data from home (as opposed to host) countries. The most important sources of this type of investment are the United States, Japan and the United Kingdom. This, however, has proven difficult because Japanese authorities have only recently begun to record geographically disaggregated FPEI data, while authorities in the United Kingdom do not provide disaggregated data at all. The United States Treasury Department, however, maintains a detailed data set, which is used in this chapter. Five major recipient countries have also provided relatively detailed information, which is also used here.

Source: UNCTAD, based on World Bank, 1997b and IMF, 1996b.

Box III. 2. Financing of domestic enterprises in Malaysia and Thailand

Information on new capital raised by domestic enterprises and FPEI flows into two emerging markets, Malaysia and Thailand, has shown that FPEI has played an important role in the financing of enterprises through the local stock market (box table).

Box table. New equity issues and FPEI inflows in Malaysia and Thailand, 1993-1995 (Millions of dollars)

Country	1993	1994	1995
Malaysia			
New equity issues	1566.4	3383.6	5237.5
FPEI flows	8938.7	4289.6	1150.0
Thailand			
New equity issues		4905.8	5294.8
FPEI flows	2681.8	408.1	2118.8

Source: UNCTAD, based on International Federation of Stock Exchanges, 1994 and 1995.

In Malaysia, FPEI exceeded the amount of capital raised through new equity issues in 1993 and 1994, implying that part of that investment was made in the secondary market. In 1995, however, FPEI was about a fifth of the total amount of capital raised. In Malaysia, FPEI flows exceeded FDI flows in 1993. In Thailand, such flows have been lower than capital raised from new equity issues and represented about 40 per cent of all capital raised in 1995. In Thailand, FPEI flows have exceeded FDI flows in 1993 and 1995.

Market capitalization and growth potential are important factors in determining the overall magnitude of FPEI. Not surprisingly, countries with high ratios of market capitalization to GDP have attracted stable FPEI inflows. Indeed, such inflows have been an important source of financing of domestic enterprises in these emerging markets.

Source. UNCTAD, based on International Federation of Stock Exchanges, 1994 and 1995.

rationalizing production or establishing an export base, the cost and skill level of the labour force, the state of physical and communications infrastructure, the host country's geographical location (distance to target markets), as well as the existence of free trade agreements between the host country and target markets that facilitate market access, may be of greater importance than the host country's growth rate (UNCTAD, 1993a). For market-seeking FDI, the size and economic growth of the market are particularly important determinants (UNCTAD, 1993a). Host-country market size, however, does not appear to be the most important determinant of FPEI flows. In a survey of international equity investment funds recently conducted by UNCTAD,³ the potential rate of economic growth was identified most frequently as being highly important in investment decisions. Market size can have, however, an indirect influence in so far as the size of stock market capitalization, and hence its degree of liquidity, is in many cases related to the size of the economy.⁴ Political stability is also important for both FPEI and FDI; the same is true for the degree of volatility of exchange rates. For portfolio equity investors, the level of ease of capital repatriation and disclosure standards for companies operating in the local market appear to be very important. Typically, FDI does not attach an equally high degree of importance to the latter.

These differences highlight a major contrast between the investment motivations for FDI and FPEI. The overriding motivation for investment by portfolio equity investors is their participation in the earnings of local enterprises through capital gains and dividends. Hence, it is more important for them that capital be easily transferable and that disclosure standards be high. Transnational corporations tend to be more interested in accessing markets and resources and, more generally, in the contribution that the investment can make to the competitiveness of the transnational corporate system as a whole (UNCTAD, 1995a). The latter concern is particularly important for firms that have integrated international production structures and have an intra-firm specialization in production. In general, TNCs tend to have a longer-term investment horizon than portfolio equity investors, especially when their investment involves a capital outlay (in the case of greenfield investment, for example).

The contrast in motives between TNCs and portfolio equity investors is not, however, always so stark. In particular, the investment horizon of venture capital investment tends to be somewhat longer than for FPEI in general, and the existence of significant (and perhaps also long-term) management control is not unusual. In that case, it is very difficult to differentiate between FDI and FPEI. However, the principal underlying motives remain different. For venture capitalists, the foremost motivation is to share in the capital gains of the equity of a local enterprise when it is listed eventually on the stock exchange. The stock exchange acts as a mechanism through which venture capitalists "exit" the investment. Thus, venture capitalists, while closely affiliated with the management of the enterprise in question, are also focused for the duration of their investment on their eventual exit. Venture-capital investments, therefore, represent a case in which the linkage between FDI and FPEI can be quite strong.

The discussion above helps to illustrate why FPEI flows are more volatile than FDI flows. Since the prime motivations behind the two types of investment are mostly different, so are the investment horizons. Typically, it is easier for portfolio equity investors to liquidate their investments by selling their equity positions in the secondary securities market than for TNCs to sell their foreign affiliates, especially if these are intertwined in international production networks or "sunk" costs are high. The volatility of FPEI flows may, however, vary with the type of mechanism through which an investment is made. In particular, venture-capital portfolio investment is less volatile than some other types of FPEI flows. Similarly, investments placed through large institutional investors (e.g., via country funds) appear to be less volatile than portfolio investments made directly in the local market; portfolio equity investments through closed-end investment funds⁵ appear to be less volatile than investments placed by open-end investment funds (for reasons examined below).6 Investment flows in the secondary market for depositary receipts do not affect the flow of funds in or out of the local stock market because trading activity is conducted on foreign stock exchanges. Thus the issue of volatility of FPEI flows does not arise in this case. Direct portfolio equity investment in the local stock market is probably the most volatile form of FPEI, particularly when such investments are managed by retail investors, who tend to invest more speculatively, and do not have access to the sophisticated investment methods or the extensive information and resources for research typically available to large institutional investors.

Overall, total FPEI flows to emerging markets have fluctuated more widely than total FDI flows during the period 1986-1995 (annex table A.11). This is indicated by the greater relative variance of FPEI flows compared with FDI flows - - four times that of FDI flows.⁷ Evidence at the country level also shows that FPEI flows are more volatile than FDI flows, although the degree of volatility may be influenced by the extent of domestic macroeconomic instability (box III.3). For example, in

the five emerging markets for which fairly detailed data on FPEI flows have been obtained, the relative variance of these flows is many times higher than that of FDI flows (annex tables A.12 through A.16).

Box III.3. Volatility of FPEI flows and macroeconomic instability in Malaysia, South Africa, Thailand, Turkey and Venezuela

The volatility of FPEI flows tends to be higher in countries with high levels of macroeconomic instability. (Although causality could operate in either direction, it appears that, in general, the variability of FPEI flows reflects actual or expected macroeconomic instability.) Ranking Malaysia, South Africa, Thailand, Turkey and Venezuela according to the degree of domestic macroeconomic instability (based on the level of inflation and the variability in exchange rates) (annex table A.17), and comparing that ranking with a ranking of the degree of volatility in capital flows in general, and in FPEI in particular, shows a correspondence between the two rankings. Turkey, Venezuela and South Africa have experienced high volatility in these macroeconomic indicators (in descending order of degree of volatility), while Thailand and Malaysia have experienced relatively low levels of volatility in these indicators. Turkey and South Africa, followed by Venezuela, have also experienced higher volatility in capital flows in general, and in FPEI flows in particular (South Africa first, followed by Turkey and Venezuela).

Source. UNCTAD.

B. Trends

1. General trends

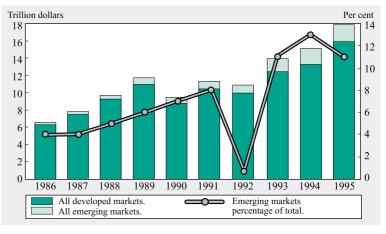
Substantial FPEI flows into emerging markets is a relatively recent phenomenon, dating from the early 1990s. A watershed was reached in 1993, when the level of FPEI trebled, compared with a year earlier (annex table A.11). Flows declined in 1994 and 1995, partly in response to the financial crisis in Mexico in December 1994. However, they recovered in 1996: the volume of new

equity raised on international capital markets in 1996 by emerging markets increased by 34 per cent over 1995, reaching some \$15 billion (World Bank, 1997b, p. 18).

Between 1986 and 1995, emerging stock market capitalization grew more than tenfold -- from \$171 billion to \$1.9 trillion -- a much faster pace than that in developed markets (figure III.1). As a result, emerging markets' share of world stock market capitalization increased from nearly 4 per cent as of end-1986 to nearly 11 per cent as of end-1995. By the end of 1995, over 17,000 companies were listed and

Figure III.1. Emerging markets share of world market capitalization, 1986-1995

(Trillions of dollars and percentage)



Source: International Finance Corporation, 1996.

traded in emerging capital markets - - the equivalent of about 90 per cent of the number of companies listed in developed-country markets.

The aftermath of the financial crisis that hit Mexico at the end of 1994 and spread for a short period to other emerging markets illustrates the resilience of emerging markets. Countries with a large domestic financial sector and a broad domestic savings base recovered especially quickly from the crisis. Thus, an analysis of the impact of the Mexican crisis on the performance of 26 emerging stock markets other than Mexico shows that it has been significant beyond December 1994 for only four countries (Atlan *et al.*, 1996).⁸ Of these four countries, two are in the same region (Brazil and Colombia) and two have gone through domestic turbulence that has weakened their domestic financial sectors (Pakistan and Hungary).

A closer look at recent trends in FPEI flows in the two main recipient regions, Asia and Latin America (flows to Africa and to the emerging markets of Europe and Central Asia are relatively small) (figure III.2), reveals some similarities in the movements of these flows. Between 1992 and

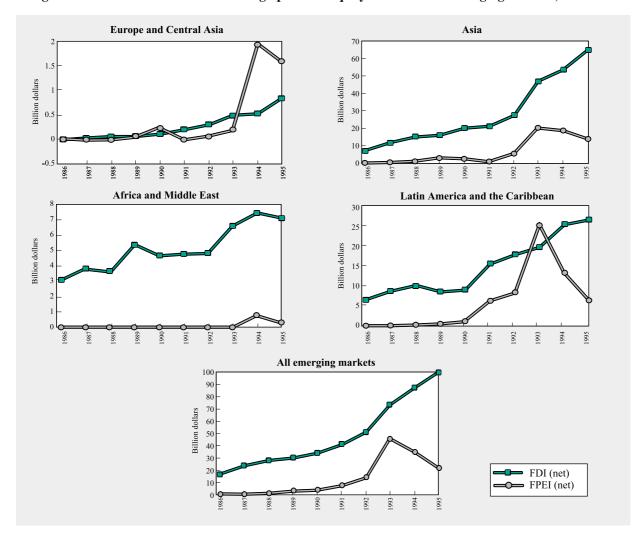


Figure III.2. Evolution of FDI and foreign portfolio equity investment in emerging markets, 1986-1995

Source: data from annex table A.11.

1993, flows to both regions increased substantially -- by 560 per cent in Asia and 230 per cent in Latin America. In 1994, they decreased by 2 per cent in Asia and 51 per cent in Latin America. In 1995, however, FPEI flows increased slightly (by 4 per cent) in Asia, and decreased (by 45 per cent) in Latin America.

The two major factors behind the increase in FPEI flows to emerging markets are the liberalization and globalization of financial markets and the concentration of substantial financial resources in the hands of institutional investors. The globalization of financial markets implies that financial capital can move more freely and at lower cost between countries. This has been facilitated by financial-market liberalization and by the rapid flow of market information made possible by improvements in communications technology. Investors are thus in possession of the tools and information that allow them to move funds quickly between different countries and regions of the world. They have also been willing to take more risk because they expect higher returns in new and fast-growing emerging markets. Between 1988 and 1995, there was a significant increase in the number of emerging markets establishing liberal regimes towards foreign investment. In 1988, only three emerging stock markets were classified by the International Finance Corporation as "free" with respect to foreign investment in stocks listed locally; eleven markets were categorized as relatively free (annex table A.18). By 1995, 26 emerging markets were classified as free, 11 markets as relatively free, and only one market was closed to foreign investment.

The second major factor responsible for the surge in FPEI flows to emerging markets is the institutionalization of savings and investments in developed countries. It has been estimated that insurance companies, pension funds and mutual funds in developed countries (and some emerging markets) had an identifiable pool of savings worth nearly \$21 trillion in 1993 (Howell et al., 1995, p. 58). It is also estimated that the six largest developed countries are holding around \$38 trillion in savings. These figures, although not strictly comparable, provide a very rough indication of the heavy concentration of developed-country savings under the management of institutional investors. In comparison, global equity market capitalization in the same year was \$14 trillion. Investment by developed-country mutual funds in emerging markets has been particularly important (annex table A.19). However, by one estimate, the average share of emerging market securities in institutional investors' portfolios is only around 1 per cent (IMF, 1995, p. 172). In general, institutional investors in developed countries are biased in favour of investments in domestic assets, mainly because they are risk averse or lack familiarity with foreign economies and financial markets, although this is beginning to change. Hence, a very small shift (in percentage terms) in their investment portfolios in favour of emerging markets would result in a substantial increase in the volume of FPEI flows to these markets. There is a high correlation between FPEI flows in emerging markets and interest rates in developed countries (for example, interest rates of United States Treasury Bills). ¹⁰ Indeed, low returns on financial investments in developed markets during 1993 induced a surge in FPEI flows into emerging markets in that year.

The trend of rising FPEI flows during the 1990s (compared with the 1980s) appears to be a longer-term structural phenomenon, rather than a cyclical one. This can be explained by the fact that growth remains higher in emerging markets than in developed ones, with the former offering good opportunities for diversification of portfolio-investment risks. Even though there has recently been a strong upturn in developed-country capital market performances, especially in the United States in 1996, FPEI flows to emerging markets have remained strong. There are indications that investors are exploring new frontiers of investment, ¹¹ and that the volume of international equity offerings by companies from emerging markets is increasing.

2. Trends in outflows to emerging markets from the principal source countries

It is estimated that, over the period 1992-1994, more than 35 per cent of FPEI flows to emerging markets originated in the United States, 15 per cent in Japan and 11 per cent in the United Kingdom (Howell *et al.*, 1995). In recent years, investors from Hong Kong and Singapore have also invested in emerging markets.

For the most important of these source countries, the United States, FPEI flows to emerging markets increased substantially in 1993, but decreased in 1994 and 1995 (annex table A.20). They rose again in 1996, despite a clear upturn in stock-market returns in the United States. ¹² Overall, FPEI flows from the United States were hosted by over 39 emerging markets. ¹³ However, the majority of funds (89 per cent of the total in 1995) have been placed in a handful of countries with large equity markets: Argentina, Brazil, Chile and Mexico in Latin America; China, India, Indonesia, the Republic of Korea, Malaysia and the Philippines in Asia; and South Africa. The same group of countries accounted for 69 per cent of United States FDI outflows to emerging markets in 1995. The degree of concentration of FPEI flows in a few emerging markets is therefore higher than that in FDI outflows, at least for the United States.

By comparison, the distribution of the total net assets of international emerging equity funds indicates that country equity funds have been established for only 35 emerging markets (annex table A.19). This does not, however, imply that only 35 emerging markets have hosted international equity fund investments. The actual number could be significantly higher if investments placed via regional and global equity funds are included. Nevertheless, almost the same group of emerging markets (Brazil, Chile, China, India, Indonesia, the Republic of Korea, Malaysia, Mexico, the Philippines, the Russian Federation, Taiwan Province of China and Thailand) has attracted the lion's share of equity funds.

It is not surprising that the distribution of FPEI is skewed towards upper-middle income and large low-income countries with a high growth potential. These countries have dynamic securities markets that offer a broad base for investment. Investors often claim that, besides the level of risk-adjusted returns, the degree of market liquidity is a crucial element in the decision to invest in emerging markets. In this respect, an adequate market infrastructure and the availability of exit mechanisms (through stock exchanges) contribute to greater liquidity. More mature markets also tend to offer a superior level of regulation regarding information-disclosure and accounting standards.

C. Investment mechanisms

There is a large variety of mechanisms through which FPEI flows are channelled. The principal mechanisms are venture capital funds, country funds, American depositary receipts and global depositary receipts, convertible bonds and bonds with equity warrants. Some mechanisms are more suitable to a particular stage of development of an emerging market than others. Furthermore, the credit standing of companies issuing equity shares also influences the level of their access to particular segments of the international capital markets. Countries may prefer to channel FPEI inflows through specific mechanisms in order to protect their markets from externally induced turbulence.

1. Venture capital funds

Since the late 1980s, many specialized venture capital institutions have been formed to invest in emerging markets. Many are structured as two-tier investment funds, with management provided by professional fund managers from international capital centres (see annex C for technical details). While venture-capital institutions have been established in many countries, including several least developed countries (e.g., Bangladesh, Madagascar, Mozambique and Uganda), they have expanded fastest in the newly industrializing economies of Asia and the transition economies of Central and Eastern Europe. The major trends in venture-capital funds are:

- The pool of investable venture capital funds in South and East Asia outside infrastructure has increased rapidly over the past ten years, from an estimated \$500 million to \$6 billion. Several major regional and international financial institutions, including the Hongkong and Shanghai Banking Corporation, the Development Bank of Singapore and AIG Investment Corporation (Asia), have established venture capital or private equity funds.
- There has been a similarly rapid expansion of venture capital financing in Central and Eastern Europe. The number of venture capital funds investing there is estimated to have reached 72 by 1995, with a total committed capital of about \$4.5 billion. The European Bank for Reconstruction and Development has supported actively the creation of equity funds in the region.

Over the past two decades, the International Finance Corporation has promoted venture capital funds in developing countries in an effort to improve the access of small and medium-sized firms to equity finance and management expertise. The International Finance Corporation has worked with institutional investors, investment banks and fund managers in structuring funds, identifying fund managers and placing funds. By 1996, it had invested \$196 million in 49 venture capital funds, with a total initial capital of \$1.5 billion. 14

The Commonwealth Development Corporation has also expanded its venture capital activities in developing countries, in particular by promoting venture capital funds, in order to provide start-up capital to companies in eight African countries (Ghana, Kenya, Mozambique, South Africa, Tanzania, Uganda, Zambia and Zimbabwe). These funds are generally smaller (\$10-\$15 million) than those in which the International Finance Corporation has invested, and are managed directly by the Commonwealth Development Corporation.

However, the experience of venture capital investors in developing countries to date has been mixed. It is clear that their success, and willingness to continue investing in emerging markets, depends on a number of basic conditions being met. These include: finding enough firms with business management skills and offering prospects of high returns on investment; attractive tax regimes in host countries; and the availability of "exit" options for disposing of investments.

2. International equity investment funds

By pooling the investable funds of a large number of small investors, international investment funds provide economies of scale that can lead to lower average transaction costs of entering foreign markets directly (such costs can be prohibitive for small investors). They offer investors both

professional portfolio services and diversification of risks. These funds can invest on a global, regional, subregional or individual country basis. They can also be structured either as closed-ended or open-ended (see annex C for technical details).

From 1986 to 1996, the total number of international emerging equity market funds grew from 28 to 1,435, while the net asset value of these funds increased from \$2 billion to \$135 billion (annex table A.19). Of the total number of international equity funds as of September 1996, 298 were global funds; 775 were dedicated to Asia; 239 to Latin America; 88 to emerging Europe; and 35 to Africa and the Middle East. Asian funds accounted for the largest share of total net asset value of emerging market equity funds (48 per cent), followed by Latin America (11 per cent).

The International Finance Corporation has been a leading sponsor of many closed-end funds investing in emerging market securities. Closed-end funds are also established by investment banks, investment management firms, host-country governments, and groups of individual investors. There has been an evolution recently towards specialized funds, such as debt-equity conversion funds, index funds, corporate debt funds and sectoral funds (such as infrastructure funds). Closed-end country funds were initially set up to invest in countries that were largely closed to foreign investment (for example, the Korea fund, launched in 1984), or in countries in which foreign investors have found it difficult to invest for administrative reasons. Since the first emerging market fund, the Mexico fund, was launched with a listing on the New York Stock Exchange in 1981, closed-end funds have become the dominant form of vehicle for less-mature emerging market investments.

3. American depositary receipts and global depositary receipts

American depositary receipts are negotiable certificates issued by a commercial bank in the United States known as a depositary. They certify the ownership of non-United States companies' securities that have been deposited with either the depositary bank handling the issue (the depositary) or with the depositary's custodian bank abroad (see annex C for technical details).

The market for depositary receipts has grown rapidly during the 1990s, due in large part to increased emerging-market issuance activity. According to the Bank of New York, a total number of 10.7 billion depositary receipts with an overall value equivalent to \$337 billion were traded in 1996 on United States securities exchanges; in addition, an estimated 1.5 billion depositary receipts with a value between \$20 and \$25 billion were traded on European exchanges, or on the "over-the-counter" market. Between 1990 and 1996, the compounded annual growth rate of trading in depositary-receipt shares was 30 per cent, while in value terms trading increased by 22 per cent. The total number of depositary-receipt programmes in existence at the end of 1996 exceeded 1,600 and included issues from 63 countries. Non-United States companies are reported to have raised \$19.5 billion through depositary-receipt issues in 1996. This represents an increase of 63 per cent in the value raised and 50 per cent in the number of new issues over 1995. Emerging markets accounted for approximately 50 per cent of new issues in 1996, rising from 20 per cent in 1995.

4. Convertible bonds and bonds with equity warrants

Convertible bonds and bonds with equity warrants are hybrid debt securities that contain equity-related features (see annex C for technical details). For the issuing companies, the major advantage of issuing convertible debt may be that it enables them to attract financing which might otherwise be more difficult to attract, and that it may allow a better matching of cash flows in the

early growth period of the company when financing may be particularly crucial. Generally, the rights attached to these instruments will only be expected to be exercised in the event that the company is successful and its market value and share price rises.

Emerging market issues of equity-related bonds have risen quite quickly during the past ten years (annex table A.21). During that period, emerging-market issues grew at an annual average rate of 192 per cent, compared with 21 per cent for developed countries and 23 per cent for all markets. However, the size of emerging-market issues is small. During the past ten years, a total of \$374 billion of these securities were issued, of which emerging markets accounted for only 4 per cent (\$16 billion); developed countries accounted for the rest. Nevertheless, the growth in emerging market issues of these instruments coincides with the start of heavy institutional-investor interest in emerging markets.

Most emerging market equity-related bond issues (84 per cent of the total) have been floated in the Eurobond market. This has been the case especially with respect to issues of bonds with equity warrants. A relatively small volume of issues has been floated in the market for foreign bonds (bonds which are offered in one particular country and are denominated in the currency of that country). Emerging-market countries have been more active in the market for convertible bonds than in the market for bonds with equity warrants. The former accounted for 93 per cent of total emerging-market issues of equity-related debt instruments during the past ten years, whereas for developed economies convertible bond issues comprised only 32 per cent of the overall value of equity-related bond issues. The issuance of bonds with equity warrants is also a more recent trend in emerging markets than is the issue of convertible bonds (bonds with equity warrants were first issued in 1989 in emerging markets, while convertible bonds have been issued since 1985). On a regional basis, eight countries from Asia have dominated issuance activity (of equity-related bonds) among emerging markets. Asian issues of convertible bonds have, on average, accounted for 81 per cent of all emerging-market convertible bond issues, and for 85 per cent of emerging-market issues of bonds with equity warrants. Emerging markets in Latin America, on average, accounted for 4 per cent of all emerging-market convertible bond issues and 15 per cent of issues of bonds with equity warrants.

D. Some issues raised by FPEI

The policy implications of the growth of FPEI, especially for development, are not yet fully grasped. Although FPEI investors can provide a welcome source of external finance for domestic companies, their generally short-term investment horizon (especially when compared with FDI investors) raises concerns over the stability of such flows.

Flows of FPEI contribute most directly to the capital formation of companies in emerging markets through the subscription of primary issues. Even if a foreign investment is made in the secondary market, it can contribute to enterprise development through the reduction of the cost of capital by boosting the stock index and thus encouraging companies to go public, or to launch new equity issues. At the outset, there is some indication that a large part of FPEI flows to emerging markets is directed towards the secondary market (Howell *et al.*, 1995).¹⁵

Against this beneficial contribution, concerns have been raised with respect to the perceived volatility of such flows and its potential negative impact on domestic economies. Some unresolved issues that need to be addressed are:

- Does liberalization increase the exposure of emerging markets to potentially higher degrees of equity price instability or to speculative attacks, including potential contagion from disturbances originating in other markets?
- Are there policies or mechanisms that could be implemented in order to allow emerging markets to withstand better potential volatility in FPEI flows?
- Are the causes of stock market volatility in host emerging markets more the result of elements internal to the local market or of external events?
- In view of the pressure on institutional investors to secure capital gains, what distortions might this introduce into investment choices in emerging markets?
- What measures can be taken to reduce stock market volatility? Does an enlargement of the domestic-investor base, notably through the strengthening of the role of institutional investors, help to reduce such volatility?

* * *

Foreign portfolio equity investors contribute to the equity financing of local companies and do not generally seek management control of these companies. This is perhaps the most distinctive feature of FPEI, as compared with FDI. Emerging markets have begun to host substantially increased FPEI inflows during this decade. In absolute terms, these flows now represent an important class of foreign capital in these countries in their own right. Such flows may rise further, given the continuing liberalization and globalization of financial markets and continued superior growth performance in emerging markets in comparison to developed countries, along with relatively fast rising market capitalization in the former group.

In light of this trend, it is important to identify the potential impact of FPEI flows on host countries' economies and the policy implications resulting therefrom. In particular, it would be useful to analyse the causes (and their direction) of volatility in these flows and their likely impact on the financial sector and the real economy in host countries, especially developing ones.

Notes

- The term "emerging markets" is used here to denote developing countries and transition economies in Central and Eastern Europe. This chapter follows a methodology similar to that used by the International Finance Corporation in classifying as an emerging market any country with a 1994 GNP per capita level of \$8,955 or less (this includes countries classified by the World Bank as low- and middle-income). The group of countries so defined includes several countries that in other chapters are considered as developed (such as Greece and Portugal) and excludes several economies that are considered as developing elsewhere in this volume (such as Hong Kong, China and Singapore). For a more complete listing of countries comprising emerging markets, see IFC, 1996.
- Only a small number of countries have replied to UNCTAD's questionnaire on FPEI. Data for these countries are used here.
- A survey of international emerging market equity fund managers was conducted by UNCTAD in January 1997 in order to determine what elements they considered to be most important in making investment decisions at the country level. The survey found the potential rate of economic growth to be the factor most frequently cited as being important to investment decisions. The degree of ease of

capital repatriation and the existence of a favourable environment for foreign investors were second most frequently mentioned, followed by disclosure standards. Other factors frequently identified as being important include political stability, the existence of a good settlement system, the comprehensiveness of securities market regulation, the degree of securities market liquidity and the soundness of the local currency (or the degree of volatility in the exchange rate).

- Market size is perhaps also relevant indirectly because larger markets tend to have better developed capital markets, greater market capitalization and a wider array of investment opportunities. In less-developed emerging markets in which total capitalization is especially small, market size may become a constraint on FPEI by some large institutional investors that tend to invest in large blocks.
- For a discussion of closed- and open-end funds, see annex C, section 2.
- According for the IMF (IMF, 1995, p. 172) "Turnover ratios for open-end funds vary widely. Index funds, for instance, typically have low turnover ratios, whereas actively managed funds often have turnover ratios above 100 per cent, and many "aggressive" funds have turnover ratios of several hundred per cent. The average open-end fund has a turnover ratio of about 100 per cent. Closed end funds typically have turnover ratios below 50 per cent, and often in the neighbourhood of 20 per cent."
- The relative variance, one measure of the degree of variation of a set of points around their average, is the square of the coefficient of variation. This measure of variability has been used for the purpose of comparing the degree of variability between flows of differing absolute magnitudes.
- The study contains an econometric analysis of the performance of 26 emerging markets following the Mexican crisis of December 1994: seven in Latin America (Argentina, Brazil, Chile, Colombia, Mexico, Peru, Venezuela), six in Europe and Middle East (Greece, Hungary, Jordan, Poland, Portugal, Turkey), 11 in Asia (China, Hong Kong, China, India, Indonesia, Republic of Korea, Malaysia, Pakistan, Philippines, Sri Lanka, Taiwan Province of China, Thailand) and two in Africa (South Africa, Zimbabwe). The Capital Asset Pricing Model was applied to calculate the betas of each market, also taking into account the regional impact (of Latin America and Asia) as well as the impact of the Mexican crisis.
- The shifting demographic structure towards a larger proportion of the population into older age brackets in developed countries indicates that the volume of funds managed by pension funds in these countries will need to rise quickly in future if pension programmes there are to remain viable. The concentration of developed country funds under management by institutional investors is therefore likely to further increase
- On an annual basis over the period 1986-1995, the correlation coefficients between United States interest rates on Treasury bills and FPEI flows to all emerging markets, FPEI flows to Asia, and FPEI flows to Latin America were, respectively: -0.7, -0.6 and -0.8. These coefficients are statistically significant and indicate that FPEI flows to emerging markets are heavily influenced by developments in United States financial markets.
- For example, a number of new investment funds for Africa, Eastern Europe and Central Asia were launched in 1996.
- This may, in part, reflect the increasing acceptance among institutional investors in the United States of emerging markets and a concomitant rise in familiarity with these markets. It may, in addition, also indicate a more general desire among investors in the United States to diversify into foreign markets in response to anxiety over a possible reversal in rising returns in the United States markets.
- The exact number of countries cannot be determined because some more marginal host countries are included in the data under the "other" category.
- Information provided by the International Finance Corporation.
- This report estimated, for example, that, over the period 1992-1994, more than 70 per cent of FPEI flows to emerging markets were made in the secondary markets for securities.

Part Two

Foreign direct investment, market structure and competition policy

Introduction

The past decade has witnessed a remarkable process of liberalization of foreign-direct-investment (FDI) policies worldwide. This has been part of a broader liberalization of international trade in goods and services and flows of finance, technology and knowledge. In previous years, the *World Investment Report* focused on two components of the process of FDI liberalization: the reduction of restrictions on FDI and transnational corporation (TNC) activities, and the establishment of standards of treatment and protection of FDI. These are the dimensions of liberalization to which the attention of countries has also largely been devoted. As firms respond to these measures in the broader context of their own strategic objectives by increasing investments abroad, a third component of liberalization -- maintaining the proper functioning of the market -- becomes important, and competition policy is central here. The issues addressed in this Part of *WIR97* round out, therefore, earlier discussions of FDI liberalization and related regulatory frameworks, including in reference to international investment arrangements.

More specifically, Part Two of this *Report* examines the relationships between FDI, market structure and competition (chapter IV) and considers policy implications, especially as they relate to developing countries (chapter V). Foreign-direct-investment-related competition issues deserve increased focus because TNCs play an important role in the globalizing world economy. The first of the chapters that follow examines the interaction between FDI, market structure and competition in product markets in the national economies of host countries. It also examines the evolving nature of this relationship in the context of the regionalization or globalization of markets and production and, especially, the emergence of integrated international production. The next chapter discusses the implications for policies aimed at maintaining the contestability of markets and ensuring that markets function as competitively as possible. Considerations related to competition and competition policy become particularly relevant for developing countries as they liberalize and become more closely integrated into the world economy -- albeit to different degrees and in different ways. Balancing efficient resource-use with dynamic growth of their economies presents new challenges for countries

as regards maintaining policy coherence, as well as formulating and implementing competition policy. This introduction highlights the main issues and questions that Part Two will address and introduces the key terms and concepts that will be used in the analysis.

* * *

The ultimate objective of FDI liberalization is to enhance economic growth and welfare. Developing countries, in particular, have increasingly turned to FDI as a source of the capital, technology, managerial know-how and market access needed for sustained economic growth and development. The move towards more open FDI regimes has been accompanied by a shift in many countries towards greater deregulation of economic activity and greater reliance on market forces in their domestic economies, as well as on international trade and factor movements (especially those relating to capital and skilled human resources). Liberalization has contributed to increased FDI flows to countries with those economic characteristics that TNCs find attractive, and has promoted more complex and integrated patterns of international production by TNCs. However, the benefits that result depend not only on the volume of the resource flows, but also on how competitive markets are and how efficiently the industries and economies in which TNCs operate function. In addition, the equitable distribution of the benefits may not be easy to achieve. The pain of adjustment to competition is all the more severe when FDI liberalization, trade liberalization and domestic economic reform go hand in hand, as is the case of many developing countries today.

"Economic efficiency" refers to a situation in which participants in an economy make economic choices that accurately reflect the relative scarcities of goods, services and resources available for consumption and production. When production and consumption take place efficiently (box 1), the economic welfare of a society (the consumers and producers taken together) is maximized, in the sense that it is not possible to make any member of the economy better off without making someone else worse off. In other words, moving from a situation of inefficiency to one of efficiency can make all members of a community better off, assuming that ways can be found by which the gainers can compensate the losers. In general, efficiency, broadly defined in dynamic as well as static terms (box 1), not only maximizes welfare, but also supports and strengthens economic growth and development. However, the adjustment costs involved in implementing efficiency-enhancing policies should not be underestimated. Furthermore, there may be reasons to limit the pursuit of efficiency as an immediate economic objective. Such reasons often reflect competing objectives, including, in particular, development considerations, and they depend, among other things, on the importance attached to competing objectives and the degree of difficulty perceived in pursuing them through measures that do not distort market behaviour and diminish efficiency.

In market economies, competition among firms and among consumers provides the incentive for firms and consumers to behave in a manner that leads to efficiency. In economies that have opened up to FDI, therefore, the efficient operation of industries with TNC participation, and of the economies as a whole, depends on the extent and nature of competition that prevails. In particular, it depends on whether FDI liberalization does, indeed, inject greater contestability into these markets, and whether greater contestability is, indeed, maintained.

"Contestability" refers to the ease with which firms can enter and exit a market. A market is deemed to be fully contestable if: (I) the suppliers are sufficiently numerous for none of them, acting alone or in collusion with other suppliers, to be able to raise prices above average cost, yielding super-normal profits; or (ii) entry into the market is sufficiently easy that, if incumbent suppliers

Box 1. Market competition and performance: key concepts and theories

Competition in a market refers to rivalry among the sellers and among the buyers of a good or service; the sellers and buyers that can enter the contest constitute the market. The extent and nature of market competition is considered important in determining the performance of economic systems. Under static conditions (i.e., under given conditions with respect to technology or resources), economic performance is judged in terms of efficiency, which has two elements:

- Technical efficiency, which exists when the production and distribution of goods take place with minimum inputs, given technological constraints.
- Allocative efficiency, which exists when resources are allocated in the optimal manner -- that is, they cannot be reallocated among parties, or production and distribution reorganized, to serve better the demand for goods and services.

As mentioned, however, these concepts refer to performance under given technological constraints. A third concept, that of "dynamic efficiency" or efficiency under conditions of technological change, becomes important in order to assess performance over time. It refers to the rate at which technological constraints change over time and new products are added to the feasible set.

The relationship between competition and economic performance was traditionally described in terms of the "structure-conduct-performance" (SCP) paradigm, according to which economic performance in a well defined market depends upon the interaction between the structure of the market and the conduct of buyers and sellers in the market (Boner and Krueger, 1991, p. 3). As originally interpreted, this theory held that market structure, as captured mainly by the concentration of sellers and barriers to entry, was the primary determinant of both conduct and performance. At one extreme of perfect competition (with very large numbers of sellers and no barriers to entry, among other conditions), no seller has the power to influence, on his or her own, the price (or terms) at which a product is sold; at the other extreme, monopoly, the seller has the power to set the price (or terms) most advantageous for her/him. A great majority of market situations fall between these two situations and involve imperfect, but workable competition. In such markets, high levels of seller concentration, protected by entry barriers, provide fertile conditions for collusive practices, which will lead to high price, and perhaps costs (Bain, 1959).

More recent economic theory and empirical research have, however, established that both "competition" and "market structure" are, in practice, multi-faceted concepts, and that the relationship between the two defies simple generalizations, especially when deriving policy prescriptions:

- Most obviously, in a world in which many products are differentiated, consumer welfare does not depend on price alone -- product variety, quality and innovation are all crucial, and there is little evidence that large numbers, or the absence of concentration, necessarily fosters better performance on these counts.
- As shown in contestable market theory (Baumol et al., 1982), even highly concentrated industries will be forced to price "competitively" if they face the discipline for potential "hit and run" entry (see box 2). Thus, concentration is not the most important dimension of market structure; contestability (or free entry and exit) is key, and here, the main factor is the extent to which entry requires expenditures on sunk costs: without sunk costs, incumbent sellers, even oligopolists, will always be vulnerable to the rapid entry of new firms, and thereby be unable to exploit their apparent market power. Of course, many real world industries are, in fact, characterized by substantial sunk costs, and this may often deter de novo domestic entry. However, the market may still be contestable to competition from foreign firms which have already incurred the necessary sunk costs elsewhere or which may have resources superior to those of potential domestic rivals. Whether they enter by exporting or through FDI, their presence may render even markets for products of domestically concentrated industries in a particular location inherently contestable.

/...

(Box 1, cont'd)

This raises, of course, the question of the relevant market. The appropriate scope of a market in terms of the products to be included is usually defined in terms of products that are sufficiently close in attributes that a rise in the price of one will induce consumers/buyers to substitute the other. However, in an increasingly globalized world economy, the geographic scope of the market also needs to be defined -- it might be national, regional or global. The level of concentration of domestic producers in a given country may tell us very little about the *extent of competition between sellers* in that market (or the market for their product). This is most obviously the case within blocks of countries, such as the European Union, in which, as markets become increasingly integrated, the concentration of producers in a particular country may be of no more relevance than was the concentration of producers within a particular region of a national market before integration took place (Davies, Lyons *et al.*, 1996).

- Furthermore, as boundaries blur between industries and new products emerge that are based on technology discontinuities and on combinations of generic technologies from across hitherto distinct industries, identification of the market becomes more difficult (Delapierre and Mytelka, forthcoming).
- Market structure and concentration are themselves the product of the competitive process. It has been argued (Demsetz, 1973) that the reason why firms in concentrated industries earn higher profits is not because they set higher prices, but, rather, because they are more efficient. It is this greater efficiency which enables them simultaneously to secure dominant market positions and high profits. A somewhat similar message emerges from some modern game theoretic analyses of market structure (e.g., Sutton, 1991), which show how tougher competition between incumbent firms may itself *cause* higher concentration; the reason is that competition means lower prices, and lower prices force out marginal producers, while offering less favourable prospects for new potential entrants.

Modern theory also highlights the importance of understanding the nature of the competitive game, and the types of competitive weapons firms use. In particular, where goods are differentiated and/or technologically sophisticated, competition may involve heavy and escalating outlays on advertising and research and development, as incumbent firms strive to enhance the quality (either actual or perceived) of their product, and new innovative firms enter the market. This is relevant for at least two reasons: first, it underlines the earlier observation that consumer welfare does not depend on price alone; second, these types of expenditure are invariably sunk costs. Thus, the competitive process may itself give rise to everescalating sunk costs, making new entry difficult and the market less contestable. There is growing evidence (e.g., Sutton, 1991; Davies, Lyons *et al.*, 1996) that, in many such markets, market enlargement (and, by implication, globalization) may not result in falling concentration; rather, as the market expands, sunk costs increase apace, and there is the possibility that a stable and tightly-knit oligopolistic group will continue to dominate (or emerge), unconstrained by the competitive discipline of potential entry. On the other hand, as long as markets remain contestable, competition through innovation may ultimately contribute more to economic performance by expanding production possibilities than competition through price or other variables that merely ensure the best use of existing production possibilities.

In sum, there is no simple (inverse) mapping between concentration and the state of competition in a particular market. If "structure" is to be a concept of operational relevance, it cannot be simply equated to concentration: market contestability and openness to trade and FDI competition are equally important. It is also important to define the scope of the effective market appropriately and to acknowledge that the nature of the competitive process will differ importantly depending on the innate nature of the product(s) involved.

Source: UNCTAD.

tried to raise prices substantially, new entry would be likely to occur. In either case, firms would hesitate to increase prices substantially, because of risk of loss of market share (boxes 1 and 2). Thus, fully contestable markets (which may rarely exist in reality) are necessarily highly competitive. More generally, the greater the ease of entry to (and exit from) a market, the more competitively and hence, efficiently, it functions. In the context of a national market, this would refer to ease of entry by domestic producers/sellers, by foreign producers selling the product through international trade, and by TNCs engaged in FDI (or non-equity arrangements) for production and sale in the market.

Box 2. Contestability of markets

The concept of "contestability" emphasizes the role that potential competition plays in disciplining the behaviour of firms. According to the contestability theory of markets, even highly concentrated markets would function as if they were competitive if entry and exit are free enough that the potential entry of competitors will force incumbents (even in a two firm oligopoly or in a monopoly) to behave as if they were price takers in a highly competitive market (Baumol *et al.*, 1982). In a highly contestable market -- one characterized by "ultra-free entry and exit" -- any supra-normal profits arising from the exercise of market power will result in "hit-and-run" entry by new firms, the erosion of market share for incumbents and a subsequent return to competitive behaviour on the part of these. The requirement of ultra-free exit implies that there are no (or very limited) sunk costs to act as barriers to entry. The contestability paradigm -- which has yet to be established through rigorous and extensive empirical testing -- therefore considers ease of entry and exit as the salient characteristic of market structures that give rise to efficient outcomes. The concept of contestability associated with the paradigm focusses upon the "entry and exit" characteristics of industries with a view to developing a conceptual framework that would allow for more informed regulatory decisions related to these market structures and competition in specific industries.

A more recent literature has applied the idea of contestability to an analysis of the broader policy framework and structural factors that affect the ease with which foreign firms can enter into and serve national markets, be it through trade or investment (OECD, 1995; Lawrence, 1996; and Feketekuty and Rogowsky, 1996). The term "contestability" is used in this literature mainly to emphasize that the ability of foreign suppliers to serve markets depends on both the ease with which firms can *enter* an economy (which, in turn, depends on the removal of impediments at the border) and the ease with which they can actually participate in that economy's markets (which depends upon many other factors that serve as impediments to firms' operations as producers and sellers). This new contestability literature differs in several respects from the "contestability theory" literature. For example, whereas the latter emphasizes the importance of both free entry and exit, the former largely focuses on the issue of entry. One reason for this is that, while exit from a micro-economic perspective involves the termination of a firm's activities in a particular industry, exit of a foreign firm from a particular national market relates only to a firm's activities in that market; the issue of sunk costs as an impediment to exit is therefore muted in the new contestability literature to the extent that sunk costs related to foreign market participation constitute a smaller share of the firm's total sunk costs.

Another difference relates to the attention paid to government policies. The earlier --contestability theory -- literature emphasized the structural characteristics of particular industries (or markets) and their implications for potential competition and the application of competition law. In contrast, the more recent contestability literature has a broader policy-focus, and draws attention to the role played by trade and investment policy, competition policy, government regulation, technology policy, government procurement, corporate governance, standard setting and tax policies (Lawrence, 1996, p. 32) in achieving contestable markets.

Source: UNCTAD.

Governments rely on a number of policies and policy instruments to maintain the contestability of, and competition in, their markets for goods and services: trade policy, including the rules governing the supply of goods and services through international trade; FDI policy, including the rules governing the entry and participation of foreign enterprises in production (and sales); competition policy, including the rules governing arrangements among firms/suppliers and the conduct of individual firms/suppliers generally (but not exclusively) in a national market; and other policies related to economic activity that affect market transactions.

There is a high degree of inter-dependence between trade policy, FDI policy and competition policy. Appropriately configured, these three policy tools can be mutually reinforcing and ensure that markets function effectively to promote efficient resource allocation and economic development. Indeed, failure to achieve proper coherence between the three can lead to distortions and reduced welfare gains. For example, if investment policies are liberalized but trade policies remain restrictive, the scope for foreign affiliates and domestic firms to abuse their market power is much increased, because they are shielded from an important source of competition in the form of imports. Conversely, free competition from imports will enable the market to check the propensity for abusive practices such as collusion, price-rigging and profit-gouging. In the case of activities that are insulated from trade competition -- in particular, non-tradeable services -- FDI becomes the principal modality of competition by foreign providers; the role of competition policy, both for maintaining competition in markets generally and as a critical element in the process of FDI liberalization, therefore, assumes greater importance, since one important source of competition (imports) is lacking. Considering that services account for more than half of GDP in all developed countries, and contribute the single largest sector in most developing countries, this makes both FDI policy and competition policy important for increasing the contestability of many markets.

Investment liberalization can be expected to make product markets more contestable in so far as it reduces formal barriers to market entry by foreign firms seeking to establish operations to produce for local sales, and allows incumbent monopolies or cartels to be challenged. Ease of entry for the establishment of operations by foreign firms in export-oriented production would, moreover, affect the contestability of the market(s) -- national, regional or global -- to which their output may be exported.

Since FDI involves production, the initial impact of its entry will be on the contestability of the markets for the factors of production on which TNCs draw for their production operations. This has implications for competition in the factor markets concerned -- an issue (beyond the direct purview of this volume) that is of interest particularly with regard to markets for non-mobile factors of production, including, especially, labour (UNCTAD-DTCI, 1994). It is also of relevance because of the links between factor and product markets: FDI contestability in product markets will depend on, among other things, ease of entry into factor markets in host countries.

Increased contestability by means of FDI can generally be expected to increase competition in the product markets concerned. The actual relationship between FDI and competition involves, however, the interaction of FDI with three interrelated variables:

• The structure of the markets -- national, regional or global -- for the products of the industries in which FDI takes place. Transnational corporations tend to enter industries with a relatively high concentration of firms in production; this often translates into a concentration of sellers

in the markets for their products. This suggests that opening up industries and their markets to TNC entry increases contestability. However, the ownership-specific advantages of TNCs might sometimes give them sufficient lead over single-nation competitors to create a new pattern of concentration in which the former assume a dominant role. But concentration within national markets is not necessarily important if there are no barriers to entry and exit (see boxes 1 and 2); where such barriers exist, there is greater potential for anticompetitive business practices by dominant firms, including TNCs. This also applies to regional or global markets.

- The conduct of firms in the markets involved. The business practices or conduct of TNCs (as of other firms) can also affect competition directly or by influencing market structure. Of particular interest here are entry barriers that might be erected in an industry, as well as anticompetitive practices (including restrictive business practices), especially by TNCs that acquire dominant positions and that can benefit from their transnational character. Apart from business practices of firms that replace regulatory impediments to entry with private impediments, accepted business practices that characterize specific markets but pose special difficulties for new foreign entrants are receiving increased attention.
- Government policy and practices. The relationship between FDI and competition may also be influenced by public policy and practices that are not explicitly related to FDI restrictions or standards of treatment, but which frequently continue in spite of FDI liberalization. Of particular importance are government policies and actions aimed at attracting foreign investors, especially when major investment projects are at stake. Exclusive or monopolytype inducements that grant legally protected market power may be given to TNCs by governments, either because they are considered necessary to attract an investor, or because they are required by firms as a precondition for undertaking an investment; such inducements, by definition, undermine the pro-competitive effects of FDI. (Naturally, similar protection can also be given to domestic private or state-owned companies for various reasons -- such as, for example, building "national champions" -- with similar scope for anti-competitive effects; these are not within the purview of this volume.) Also important are various exemptions from competition legislation (for example, of corporate governance practices that impede contestability) that act as impediments to FDI. What is common to all of these policies and practices is that they do not allow the pro-competitive effects of FDI to occur and therefore undermine the prospects for enhancing contestability through FDI liberalization.

The relationships between FDI, market structure and competition have several implications for policy. In particular, as countries progressively liberalize their trade and FDI policies and therefore increasingly exhaust the potential of these policy tools to contribute to greater contestability of their markets, the relative importance of competition policy as a tool to increase further and maintain contestability rises. This is not to suggest that trade and FDI policies (and, indeed, other domestic policies, such as deregulation and privatization) have already exhausted their potential to contribute to greater contestability -- in fact, changes that have taken place in this respect vary greatly among countries and industries. Moreover, there are policy objectives other than contestability, and these may require different policy approaches. And, in any event, it is not easy to put in place a well functioning competition policy. Nevertheless, in a liberalizing world economy competition policy is likely to acquire, in the long term, the status of *primus inter pares* among policy tools used to promote contestability and ensure competition. Given that other aspects of the liberalization of FDI and trade policies have been discussed earlier, special attention is therefore given in this volume to the interface of competition policy and FDI.

The task of assuring consumers and entrepreneurs that efficient outcomes are not being disturbed by anti-competitive practices, including restrictive business practices, is likely to become more complex. Given the oligopolistic structures of many of the industries in which TNCs operate, and the competitive strengths that a number of firms have in those industries, liberalization could increase their market power. Another factor that underscores the importance of competition policy in a liberalized environment is the concentrated market structures prevailing in many national economies, especially developing economies, that have liberalized. Therefore, policies related to mergers and acquisitions, as well as business practices, would assume greater significance with FDI liberalization. Countries that have not adopted competition laws might find it increasingly necessary to do so, and some countries that do have such laws might need to strengthen their provisions and the institutional capabilities for implementing them. With regard to implementation, this includes competition authorities taking into account explicitly -- and perhaps even on par with domestic producers and imports -- new FDI when considering supply responses. This is particularly relevant as FDI has become more important than trade in delivering goods and services to foreign markets, and as FDI is by far the most important mechanism for such delivery when it comes to services.

While the competitive and efficient functioning of markets is the overriding objective of competition policy, the balancing of efficiency objectives with competing objectives is a task facing policy makers in both developed and especially developing countries. For example, although concentration remains a rough parameter triggering competition concerns, many governments now apply competition policy in this regard in a flexible manner, permitting highly concentrated markets -- especially where market imperfections exist -- because these are seen as yielding dynamic efficiency outcomes. In other words, limitations exist with respect to competition in the interest of long-term economic growth. This has been the case, for example, as regards competition among firms -- generally TNCs -- in industries with high research-and-development costs or network-related scale economies.

For policy makers in developing countries, the challenge of identifying and pursuing policies and measures conducive to achieving their long-term economic development objectives, while ensuring the positive benefits of increased contestability and competition through FDI liberalization, is particularly complex. Coherent and mutually supportive policies balancing static and dynamic efficiency considerations, as well as other economic and social objectives, are required if competition policy is to support sustainable development (box 3) and, given the characteristics of industries and markets in developing countries, this is not easy. Furthermore, resources and institutional capabilities need to be strengthened if competition authorities in developing countries are to enforce competition rules, advocate competition before their own governments, and educate firms and consumers on the benefits of competitive markets.

Finally, the increasingly regional or global nature of markets and underlying production structures more and more limits the extent to which competition policy can be pursued successfully at the national level. Correspondingly, it increases the need for international cooperation on competition issues. The scope for international cooperation is greatest as regards the exchange of information and finding effective remedies to competitive abuses. Indeed, competition rules may, ultimately, be needed at the international level. These and other policy issues are pursued in chapter V.

Box. 3. Competition, development and competition policy

Competition allows the market to reward good performance and to penalize poor performance by producers. It thus encourages entrepreneurial activity and market entry by new firms, and also provides a stimulus for enterprises to become more efficient, to invest in the production of a greater variety of, or better-quality, products at prices close to costs, and to create new products. This enhances consumer welfare (including for business users of intermediate inputs, whose product quality and cost structure is improved by competition among their suppliers), efficient resource allocation throughout the economy, growth and, ultimately, development.

In the past, many countries, particularly developing countries, have seen competition as leading to excess capacity or diseconomies of scale, and they have also been concerned about weakening the market position of national enterprises vis-à-vis foreign firms. Such concerns have decreased in recent years as it has been realized that exposure to competition is generally the most effective way of promoting the ability of firms and industries to perform effectively in international markets (subject to competing objectives). Conversely, the key role that competition can play in increasing efficiency and, thus, in supporting development, has been better appreciated.

This shift in perception has contributed to the widespread adoption of market-oriented reforms promoting competition. These include deregulation, price liberalization, demonopolization, privatization, removal of barriers to market exit (such as subsidies) and liberalization of trade and FDI policies.

In parallel with these reforms, many countries from all regions have also adopted competition policies, or reformed existing policies and strengthened their implementation. Amongst other things, competition policy seeks to promote competition through the liberalization of governmental policies and measures where they unduly distort competition. Indeed, many governments have tried to ensure that the principles of competition policy are duly taken into account when developing and implementing other governmental policies (competition policy authorities are often given an advocacy role to play in this respect). Competition policy is also concerned with the enforcement of rules of the game to ensure that enterprises do not undertake restrictive business practices and, again, many governments have attempted to ensure that incumbent firms do not take advantage of liberalization to "privatize" governmental restraints and block market entry -- particularly as there may be many disincentives to market entry in developing countries, such as small market size, limited availability of entrepreneurial or technical skills or production inputs, or inefficient distribution and communications systems.

This does not mean that competition policy is formulated and implemented in a doctrinaire and inflexible manner. For example, action against restrictive business practices is usually taken on the basis of economic analysis, which may take into account the likelihood of market entry (including actual or potential competition from imported goods) and efficiency considerations (including economies of scale and the competitiveness of national firms in domestic and overseas markets). Other public interest criteria may be taken into account as well. In several competition laws, exemptions from restrictive-business-practice controls (or relatively lenient controls) may be provided for some types of practices or for joint ventures, for some industries, for small transactions or for cooperative arrangements among small enterprises. Competition principles may also sometimes be modified in respect of some policies relating to trade or industrial promotion.

In the context of developing countries, flexibility in applying competition policy may be even more necessary in order not to impede efficiency, growth or development goals, and policy coherence should be ensured between competition policy and other policies aimed at promoting development (chapter V deals in more detail with such aspects of the development dimension, while box V.18 describes some provisions of the Set of Multilaterally Agreed Equitable Principles and Rules for the Control of Restrictive Business Practices relating to special and differential treatment of developing countries in this area). However, while pragmatic compromises may sometimes be justified, the misuse of efficiency arguments by vested interests needs to be guarded against, and the momentum of progressive movement towards competitive markets should be encouraged. This requires a strong competition authority with the mandates and resources to enable it to act as an effective "watchdog" for competition.

Source: UNCTAD.

Note

For a more detailed discussion of the dimensions of the FDI liberalization process, see UNCTAD, 1994, chapter VII, and UNCTAD, 1996, Part Three.

CHAPTER IV

FOREIGN DIRECT INVESTMENT, MARKET STRUCTURE AND COMPETITION

Introduction

As countries liberalize their foreign-direct-investment (FDI) regimes, and firms increase international investment and production, it is important to consider how the locational and marketing strategies of transnational corporations (TNCs) interact with the competitive structure and behaviour of the markets in which they operate. In a liberalized environment, markets play a major role in determining how economic performance is influenced by FDI (see the introduction to Part Two).

In today's world of freer trade and FDI, the markets for many products -- and competition in them -- are increasingly regional or global. Trade liberalization expands opportunities for firms (or suppliers) to reach buyers located in an increasing number of countries, within a region or across regions. The liberalization of FDI regimes enables firms to locate production -- final or intermediate -- wherever it can be done most efficiently, with a view towards serving buyers not only in host or home countries but also in other countries from locations best suited for reaching them. Global convergence of tastes and demand, and technological improvements in transport and communications, strengthen these tendencies.

What links TNC production in one location and consumers in other locations within a global or regional market is international trade: through exports, firms compete in product markets other than those where production takes place. This has always been the case in natural resource-based industries. However, liberalization and globalization have reinforced the complementarity between FDI and trade by extending it to a wider array of industries, products and activities and a wider set of locations. As a consequence, many more firms today distribute their activities horizontally (at the same point) or vertically (at different points) on their value chains in sites in different countries.

Despite the emerging supranational geographic scope of many product markets, there are good reasons for considering separately the impact of TNC activities on the structure of markets and the strength and nature of competition within host economies. One important reason is that many products in the services sector -- which accounts for more than a half of the economic activity in all developed countries and is the single largest sector in most developing countries -- can only be delivered to buyers by suppliers who are physically present in the same location as the buyers. Although technological advances in information and telecommunications technologies have rendered several information-intensive services transportable across distances, many producer as well as consumer services require the coincidence of production and consumption. Secondly, in some industries, physical proximity to customers carries significant benefits, either because of high transport costs or the need to adapt the product to customers' tastes. Furthermore, in many countries -- especially developing countries -- markets for goods are still integrated only to a limited extent into regional and global markets, either due to continued protection against trade of certain domestic industries and markets, or because their small size and geographic location limits their involvement in international trade. In all these cases, national markets are segmented, to a greater or less extent, from one another, and FDI that enables the entry of foreign suppliers has the potential to influence market structure and industry performance.

Liberalizing FDI regimes is expected to contribute to the contestability of national markets for goods and services, ¹ since it means that foreign firms are now more freely able to establish production operations, including those serving local markets. The entry of TNCs and the activities of their affiliates can influence the structure of host country markets for the products of the industries in which TNCs participate, and, given appropriate conditions -- including the presence of other firms and the openness of markets to competition by domestic and foreign firms -- strengthen competition. However, market structures in host countries might sometimes become more concentrated after TNC entry, providing greater scope for anticompetitive behaviour by firms, including TNCs. That is mainly because TNCs are often larger in size, and have greater resource and marketing strengths than national firms, especially in developing countries.

Section A of this chapter focuses on the nature of the interaction between inward FDI and the structure of, and competition in, host country markets (for goods and services), and the implications for industry performance and consumer welfare. The effects, at TNC entry, on the structure of an industry and on the market for the product of the industry in a host country depend mainly on the mode of entry. Once foreign affiliates are established in the market, their size and competitive strengths relative to those of local or other foreign competitors, their growth strategies, their behaviour with respect to competition and the responses of local firms and other foreign suppliers may further affect the structure of the host country market. Within the context of the post-FDI market structure, the behaviour of TNCs may be procompetitive, with potential benefits in terms of static and dynamic efficiency for the performance of the industries in which they operate and for consumer welfare. Under certain conditions, however, there may be scope for anticompetitive behaviour as well. Government policies and actions to attract FDI, which might grant protected markets to TNCs through special concessions in order to attract their investments, could further expand the scope for anticompetitive effects.

Trade liberalization enables firms to sell to buyers regardless of where they are located, and buyers to obtain products from sellers regardless of the latter's location. The result is that the markets for many (tradable) products transcend national boundaries. Investment liberalization allows firms to combine international production and trade in the most effective manner to access resources as well as markets. This has contributed to increased TNC activity and the proliferation of networks of production facilities both within TNCs and between TNCs and unrelated firms,

with potential implications for supply response in markets through FDI. Furthermore, the efficient combination of FDI and trade and the efficiencies generated by integrated international production that characterize TNCs in some industries often strengthen the competitiveness of the TNCs involved, increasing competition, influencing market structures and affecting the performance of industries. Section B of this chapter focuses on these issues, in particular the impact of integrated international production on competition in regional or global markets, and the implications for consumers and producers located in individual countries that participate in those markets.

A. Foreign direct investment, market structure and competition in host economies

1. Inward investment and the contestability of markets

The opening up of economies and markets to inward FDI and other forms of participation by TNCs can contribute directly towards increasing the contestability of host country markets. First, with the removal of restrictions and establishment of standards of treatment, these markets can now be entered by firms from other countries by establishing affiliates (as well as entering contractual arrangements) that produce goods and services for sale within the countries concerned. In the case of the markets for many services and some goods, producing locally may be the only way in which foreign firms could enter the markets. Furthermore, TNCs may be better able than purely domestic firms in a host country to overcome some of the cost-related barriers to entry that limit the number of firms in some industries (and the markets for their products).

Barriers to the entry of firms to a market arise from regulatory restrictions to the activities of domestic firms, trade and/or FDI, from non-formal impediments to the above due to organizational practices within a host country, and from barriers due to the particular geography of the country. They also arise from high set-up costs that must be incurred in order to produce (and sell) a product, and scale economies that limit the number of sellers who can enjoy positive profits; some of the costs may be sunk costs, or costs that cannot be recovered if the firm were to decide to leave the industry or market. The cost-related structural barriers to entry to an industry (and the market for its product) are typically related to one or more of the following factors: large capital costs for establishing an efficient scale of production; economies of scale (at the plant level) in production; economies of scale (at the firm level) in advertising, marketing and/or research and development (R&D) and organizational complexity which can also involve, in certain industries, high fixed costs and scale economies (Caves, 1996, pp. 83-84).

Foreign direct investment by TNCs is generally based on firm-specific assets that arises from several of these sources of structural barriers to entry. Firms investing abroad face costs that domestic firms in a host country do not face. Overcoming them requires some competitive advantage on the part of a firm, in the form of ownership-specific advantages or proprietary assets (UNCTC, 1992b; Dunning, 1993; Caves 1996). Such assets usually take the form of technological, organizational or marketing knowledge, goodwill and/or brand names; these are typically associated with the entry barriers mentioned above -- especially R&D, advertising and marketing expenditures. Transnational corporations are therefore often better able than host country firms that are not transnational enterprises to enter some host country markets in industries with such high cost-related entry barriers.² They establish affiliates abroad when they find transferring proprietary assets internally advantageous -- that is, when they find such investment more profitable than exporting final products or providing the services of the proprietary assets they possess through contractual arrangements -- and enter into contractual arrangements for production when they find such arrangements more convenient or profitable than either exporting or setting up their own

production operations.

In recent years, FDI by small and medium-sized enterprises, including firms based in developing countries, has assumed increasing importance (UNCTAD, 1993b). The competitive advantages of these enterprises are not conducive to overcoming most of the cost-related entry barriers mentioned above. Most importantly, small and medium-sized TNCs have limited financial capabilities and are therefore at a disadvantage in overcoming barriers due to scale economies. However, they have intangible assets, developed through research and development, in the form of proprietary technology, the ability to adapt or down-scale mature technologies, flexibility of management, experience and knowledge of marketing, and market access (UNCTAD, 1993b, p. 89). Although these advantages seem capable of being developed by any firm, they can give small and medium-sized TNCs an edge over small and medium-sized enterprises that serve only their own local markets. Small and medium-sized TNCs typically exploit their advantages in niche production for markets that do not attract FDI by larger TNCs, adding to the contestability of these markets when regulatory barriers are removed.

Firms' possession of ownership-specific advantages that can be profitably exploited through FDI does not, of course, mean that the liberalization of FDI policies will necessarily result in the establishment of foreign affiliates in every liberalizing country. That depends on whether a country has some locational advantages, such as relatively large and growing markets, or low-cost resources, which TNCs could exploit. Moreover, whether TNC entry into an industry translates into TNC entry into a *market* in the host country depends on the kind of FDI a country attracts: if FDI is market-seeking -- that is, produces goods or services for sale in the market in a host country -- the entry of TNCs into a well-defined industry is tantamount to entry into the host country market for the product in question. If the investment is made mainly for serving markets elsewhere -- by obtaining natural resources, or low-cost labour, or for augmenting the created assets that a TNC possesses -- that might not necessarily be the case, although there may be indirect effects through effects on factor markets. However, even in these instances, the entry of a TNC into an industry generally means entry to the host country market: few foreign affiliates have export-sales ratios of 100 per cent.

The markets in which opening up to FDI is most likely to enhance contestability and inject competition are those for services. Many services cannot be traded across distances, and FDI is the only modality through which foreign providers can enter host country markets for these services. It is therefore in the service industries that FDI makes (or might make) a considerable difference as regards potential and actual competition. In manufacturing, FDI liberalization is likely to affect entry to different host country industries (and the corresponding markets) differently, depending upon the advantages of proximity to the consumer as compared with those of economies of scale at the plant level.³

2. Transnational corporations and host country market concentration

The entry and subsequent activities of TNCs interact with the structure of markets for goods and services in developed and developing host countries in several different ways. Traditionally, the aspect of market structure that has attracted most attention has been that of market concentration. This remains a useful starting point for an analysis of the impact of FDI on host country markets: although high concentration need not be equated with a lack of competition, it facilitates the exercise of market power and anticompetitive behaviour, which is a major focus of interest for competition-policy authorities. However, any observed association between concentration and TNC activity needs to be carefully considered before concluding that there is a

causal relationship. Above all, concentration must be viewed in the light of other elements of market structure, especially the degree of contestability of a market and the extent of product differentiation, and in the light of dynamic changes, such as innovation, that affect the performance of an industry.

(a) The positive correlation between transnational corporation activity and industry/market concentration

Conceptually as well as empirically, there are good reasons for expecting that the extent of TNC activity is typically more pronounced in industries that are more highly concentrated. As discussed, TNCs possess special advantages that are typically generated in industries with relatively high cost -related barriers to entry and that are conducive to their entering such industries in host countries. Moreover, there is widespread acceptance that FDI originates in home country oligopolies (Frischtak and Newfarmer, 1994, p. 6). The positive correlation between the degree of transnationalization of firms and the degree of concentration in industries can be illustrated with respect to intra-European-Union FDI and industrial concentration within the European Union, where, overall, the tendency of firms to engage in and disperse their production activity across borders was greater, the more concentrated the industry (Davies, Lyons, et al., 1996). However, data for the European Union also show that not all concentrated industries are characterized by high degrees of firm transnationalization (table IV.1); in particular, TNC activity was relatively low in industries in which production scale economies were high but in which there were relatively large intra-European Union trade flows. Moreover, high degrees of TNC activity were not necessarily associated with high concentration in industries; this lack of association was typically the case in industries characterized by moderate production economies and low intra-European Union trade that were also subject to significant product differentiation (but not R&D). Nevertheless, the general tendency over the full population of manufacturing industries was that differentiated product industries exposed to trade competition were not only the most concentrated as a group but also recorded the highest TNC participation (table IV.2). Industries with smaller production-scale economies and homogeneous products were the least concentrated and also had the lowest TNC participation.

As regards host countries, numerous studies for individual developing countries as well as developed economies indicate a positive correlation between TNC activity and the concentration of producers in host country industries. A positive correlation between TNC activity and market concentration in host countries has also been observed, to some extent, with respect to small and medium-sized TNCs. Although some of this evidence relates to industry rather than market concentration, it could be (and generally seems to have been) interpreted to indicate a correlation between TNC activity and *seller* concentration in host country *markets*. Strictly speaking, such an interpretation would be correct only if host-country based producers of a good or service are the only competitors in the relevant market, defined to include the market for reasonably substitutable goods and services. This generally would be the case for non-tradables, e.g., many services. In the case of traded goods and services, however, industry concentration would not necessarily reflect market or seller concentration, unless, due to protection or other factors, there is no trade. Moreover, due to limited data availability, production concentration ratios often apply to industries as a whole, not to individual product markets. For example, although concentration in "pharmaceuticals" is typically relatively moderate, concentration in some markets for individual types drugs is high.⁸

Nevertheless, the positive correlation mentioned above, if carefully interpreted and supplemented by other information, can be used as a starting point for examining aspects of the relationship between inward FDI and market concentration. However, two factors make it difficult to generalize as regards the nature of any causal relationship between TNC activity and market

Table IV.1. The most transnationalized and concentrated industries^a within the European Union, 1987 (Index)

Industry		Concentration	
	Transnationalization	index ^c (C5)	Industry
	index ^b		typed
(a) Highly concentrated with high TNC involvement			
Computers	3.52	71	D(R),T
Soaps and detergents	3.13	35	D(AR)
Radio and TV	2.98	37	D(AR),T
Transmission equipment	2.80	33	D(R)T
Glass	2.74	38	T
Rubber	2.49	49	D(R),T
Electric lamps etc.	2.19	65	D(R),S,T
Confectionery	2.12	44	D(A)
Optical instruments	2.00	73	D(AR),T
(b) High TNC involvement, but less concentrated			
Oils and fats	2.61	23	D(A)
Dairy products	2.12	14	D(A)
Concrete	2.06	12	()
Other foods	1.98	17	D(A)
Fruits and vegetables	1.89	14	D(A),T
Soft drinks	1.81	29	D(A)
(c) Highly concentrated, but lower TNC involvement			
Domestic electrical appliances	1.69	46	D(AR),S,T
Abrasives	1.61	36	S,T
Sugar	1.33	32	
Motor vehicles	1.28	63	D(AR),S,T
Domestic and office chemicals	1.24	63	D(R),S,T
Cycles and motorcycles	1.22	39	D(R),S,T
Paint	1.15	36	D(AR)
Man-made fibres	1.13	63	D(R),S,T
Iron and steel	1.12	40	S,T
Tobacco	1.07	56	D(A),S
Steel tubes	1.04	41	S,T
Aerospace	1.03	57	D(R),S,T
Steel cold forming	1.03	34	T
Railway stock	1.00	40	D(R),S

Source: based on Davies, Lyons et al., 1996, table 7.2.

^a These include the 29 industries that are either highly concentrated and/or with high TNC involvement, drawn from a total of 100 industries, covering, in principle, all manufacturing industries.

Transnationalization is measured by the intra-European Union NM index which is the "number equivalent" of the Hirfindahl-index-based M index (explained below). It varies between 1 and an upper limit which cannot exceed the "number equivalent" of the European Union member States -- in practical terms, about 4.5. It reflects the extent to which the leading five firms in the industry spread their production activities across the European Union member States. It is measured, for a given industry (j) as NMj = 1/1-Mj, where Mj = MijVij where Mij is the M index for firm i in that industry and Vij is a weight showing the relative size of firm i in terms of its share in total sales of the largest five firms in the industry. The M index measures the extent to which a firm spreads its production activities along European Union member States. It is measured as $M = 1 - X_k^2/X^2$ where X_k = the firm's output in country K, X=the firms output in the European Union and 11 is the total number of European Union countries.

^c The concentration index (C5) shows the share of total production in the European Union accounted for by the five largest firms.

d Key to the industry characteristics: D = differentiated (A, R, and AR reflect differentiation via advertising, R&D, and both advertising and R&D, respectively); S = significant production scale economies relative to the size of the market; T = typically large trade flows.

Table IV.2. Contestability,^a concentration and TNCs in manufacturing in the European Union and the United Kingdom

Industry	European Union (1987)		United Kingdom (1992)	
	Typical national concentration ^b	Transnationalization index ^c	Typical national concentration ^d	Share of TNCs in sales
Large production scale economies, different	entiated products			
(i) High trade exposure				
Producer chemicals	45	1.6	44	35
Computers	66	3.6	51	76
Electrical (excluding * below)	42	2.3	39	38
Motor vehicles	81	1.3	66	61
Tractors	54	1.7	71	64
Rubber products	46	2.6	46	46
(ii) Law trade exposure				
Consumer chemicals	33	2.4	47	39
Aerospace	70	1.0	85	5
Ships and rail stock	54	1.0	64	••
Processed food, drink, tobacco	46	1.9	62	27
Insulated cables, telecommunications	47	1.9	37	29
equipment etc. * (see above)				
Large production scale economies, homo	geneous products			
(i) High trade exposure	- -			
Iron and steel	61	1.1	80	6
Non-ferrous metals	40	1.9	43	47
(ii) Low trade exposure				
Cement	51	1.1	78	3
Glass	40	2.9	50	22
Smaller production scale economies, diffe	erentiated products			
(i) High trade exposure	•			
Mechanical engineering	24	1.2	21	25
Instrument engineering	33	1.8	29	32
Smaller production scale economies, hom	ogeneous products			
(i) High trade exposure	0 1			
Textiles	24	1.2	28	8
(ii) Low trade exposure				
Basic food industries	34	1.4	34	8
Other building materials	28	1.4	40	10
Metal goods	18	1.3	16	20
Clothing and leather	14	1.1	27	6
Timber and furniture	16	1.0	18	5
Paper, printing and publishing	25	1.5	16	21
Other manufacturing	18	1.1	12	18

Source: based on Davies, Lyons *et al.*, 1996, table 7.2, and data from United Kingdom, Central Statistical Office, 1995.

The industries are grouped into the four groups indicated, using data on typical minimum efficient production scale, advertising and R&D expenditures, and trade flows deflated by total industry sales. The groups are listed in inverse order relative to their contestability based on the above-mentioned characteristics. The industry figures refer to averages for individual 3 digit industries within them and cover, in all, 100 three digit industries that cover, in principle, all manufacturing. Most are self-explanatory; but consumer chemicals refers to paint, pharmaceuticals, toilet preparations, soaps and detergents; basic food refers to grain, milling, animal feeds, meat products and fish products.

b Mean four-firm national (production) concentration ratio of the United States, Japan, the United Kingdom, Germany, Italy and Belgium.

^c Transnationalization is measured by the *NM index* (see notes to table IV.1).

^d Mean four-firm national (production) concentration ratio for the United Kingdom.

^e The proportion of total sales of United Kingdom-produced output accounted for by foreign affiliates.

concentration; they also suggest that, while a correlation can draw attention to situations in which one or the other is more likely, the actual relationship must be examined on a case-by-case basis:

- First, FDI is generally associated with some form of firm-specific or proprietary asset that enables a TNC to overcome the disadvantage of operating in a foreign environment. Such assets -- including technology, organizational or managerial practices and knowledge, brand names or marketing networks -- are usually associated with product differentiation and large expenditures on advertising and marketing and on R&D and innovation.
- Second, product differentiation, high R&D expenditures and high advertising costs are closely related to the degree of concentration in an industry (Curry and George, 1983; Davies and Lyons, 1989). As the size of a market increases, leading firms (in markets with differentiated products) find it profitable to expand their expenditures on "endogenous sunk costs" (R&D and advertising), as they strive for continuous quality enhancement (actual or perceived). The upshot is that concentration remains high, as compared to other markets in which the product is more homogeneous and competition is conducted more simply via price.

Since FDI and industry concentration share common causes, the positive correlation between TNC activity and market concentration in host countries could imply not only that TNC activity leads to higher concentration or that higher concentration stimulates TNC entry; it could also imply that both are related to a third factor: the tendency of firm-specific assets and product differentiation and/or R&D to go hand in hand. Differentiated product industries and R&D intensive industries (and markets) tend to be concentrated and to be populated by TNCs. The importance of each of the above in explaining the observed correlation can be expected to vary in different cases, suggesting that it is important to look at the changes that occur in a market due to the entry of FDI and the activities of foreign affiliates in order to understand whether and to what extent FDI affects market concentration.

(b) The impact of foreign direct investment on host-country market concentration

Moving from the observed correlation to the possible effects of the entry of FDI and the operations of TNCs on the number of firms and the concentration of sellers in the market for a product, such effects may occur, initially, because the very entry of a TNC into a host country industry could affect the number of sellers and their relative shares in the market for its product(s). Subsequently, over the medium and long term, TNC participation and conduct may contribute to increasing or decreasing concentration, depending upon the sizes of the market; its openness to entry by domestic firms, TNCs and imports; the relative size and competitive strengths of foreign affiliates and domestic firms and their respective strategies and behaviour with respect to growth and competition; and the role played by imports.

i. At-entry effects on concentration

Greenfield investment -- investment in new production facilities -- will necessarily add to the number of firms engaged in the production of a good or service and, if the production is for sale in the host country market, to the number of sellers in the market for the good or service. An exception would be when sales through the establishment of a foreign affiliate simply replace (fully) sales through exports by the parent firm or another affiliate of the TNC to the market in question.

On the other hand, FDI through a merger or acquisition invariably leaves the number of producers and sellers of a product unchanged.

This suggests that the initial direct effect of greenfield FDI is normally to reduce -- or, at least, leave unchanged -- the concentration of producers in an industry and, hence, of sellers of the product. An exception is if an entrant's scale of production and sales is significantly larger than that of incumbent firms in the local market (and of imports, in the case of tradables); then, it would immediately secure a large share of the market, increasing concentration; in addition, if a single TNC undertakes greenfield investment for producing a good or service that is new and unavailable through trade, the foreign affiliate will, initially, be a monopoly. In comparison, FDI-entry through a merger or acquisition (M&A) would increase the concentration of producers/sellers in a market if the merger or take-over results in increased sales for the newly created foreign affiliates; or leave it unchanged, if its size is the same as that of the incumbent firm acquired. (It is unlikely that the scale of operations of the new firm would be reduced at the time of entry to such an extent that the degree of concentration decreases.)

About half of FDI inflows worldwide during 1989-1996 (annex tables B.7 and B.8) is estimated to have taken place through M&As, with 90 per cent of cross-border deals being made in developed countries. Until 1992, entry of TNCs into the developing world through M&As was almost entirely confined to transactions in Latin America and the Caribbean (UNCTAD, 1996a, p. 11). Since 1992, the practice has extended to Asia and Central and Eastern Europe. Privatization during the 1990s has contributed to increasing entry through M&As in developing countries and economies in transition.

The choice of the route of entry is related to firm-, industry- and country-specific factors. Entry obviously has to be via new plants when the investment is in an industry in which no local producers are present. Furthermore, initial foreign entrants in a host economy or industry, especially those with strong competitive advantages, as well as small and medium-sized TNCs, tend to prefer greenfield entry (Dunning, 1993, p. 432; UNCTAD, 1993b, p. 82). This is particularly likely when the industry entered is the same as that in which a TNC is based at home. By contrast, TNCs that follow other firms -- often with a view towards protecting their international market positions -may prefer an acquisition or merger that allows a speedier build-up of production capability in host countries (Dubin, 1975; Knickerbocker, 1973). Speedier entry to particular markets through M&As may also be preferred in order to pre-empt competitors from entering it, or to avoid the unfavourable consequences of not being active in it. In some industries, the transaction costs associated with M&As, especially those related to retraining the work force or infusing a new business outlook and culture, may be perceived to be greater than the set up costs of a greenfield venture (Dunning, 1993, p. 432). A merger or take-over may also be preferred if the investing company has only some of the competitive advantages necessary for success and needs to augment its resources; this is likely to be particularly important in industries in which firms produce for a market wider than the host country market. Entry by acquisition has also been observed to be more common in industries that are already concentrated (Caves and Mehra, 1986; Baldwin and Caves, 1991). In fact, at the extreme, in an industry that is a "natural" monopoly due to increasing returns to scale, the only way for a TNC to enter a host economy may be by the acquisition of an incumbent monopoly. whether private or state-owned. Country-specific factors, including the size of the market (which determine whether a new firm can profitably enter) and the institutional mechanisms, especially the structure of capital markets for implementing M&As, also influence the mode of entry. For example, some countries, such as Japan and many developing countries, are reluctant to allow foreign acquisitions, while others such as the United Kingdom or the United States have a more facilitating environment for M&As.

The high incidence of M&As as a mode of entry by TNCs into developed countries suggests that the direct and immediate impact of FDI in reducing concentration in developed host country markets may be limited. However, the specific implications will depend on the counterfactual, i.e., what would have happened to the market structure in the absence of FDI. For example, a cross-border merger involving an ailing firm in a host economy may be quite different from one with a thriving enterprise. If a merger or acquisition is undertaken with a view towards increasing efficiency and reducing production costs, it may well allow the survival of an incumbent firm and its operations in the host country, thereby preventing a reduction in the number of firms and increased concentration in the market. A merger or acquisition may also lead to a down-scaling of the size of operations of the acquired firm (or even its closing down), again raising the possibility of increased concentration. Much depends on the rationale for any merger or acquisition (Dunning, 1993, p. 432).

In contrast, the traditional tendency of TNCs to enter developing countries primarily through greenfield FDI suggests that, in these economies, the direct and immediate effect of FDI would often be to increase the number of sellers and decrease concentration in the relevant markets. The extent to which this follows depends, however, on the product, the degree to which the market for it is already developed, and whether or not there is competition through trade. To the extent that there are well-established incumbent firms/sellers of the products in which greenfield investments take place, reduced concentration is quite likely. However, if FDI takes place in the market for a new product or a market in which demand far exceeds the supply capacities of incumbent firms/ sellers, much depends upon how many TNCs enter a market. The entry of a single TNC could result in its acquiring immediately a large share of the market, raising concentration or creating a monopoly. This is sometimes the case in developing countries, especially in capital-intensive industries, in new products or in segments of markets not served by incumbent competitors. On the other hand, the entry of a number of TNCs will reduce this possibility; for example, in some countries of Central and Eastern Europe, the entry of FDI, especially in small and medium-sized enterprises, has helped to de-monopolize and broaden the structures of markets previously dominated by large state-owned enterprises (chapter II).

ii. Post-entry effects on market concentration

Whatever its mode of entry, inward FDI can make a difference for market concentration in the relevant host-country market, especially in industries with high barriers to entry. In particular, TNC participation could reduce concentration in such industries and in the corresponding markets for their products if the good or service produced by the foreign affiliate is sold in the local market. This effect is likely to be especially important if the product is a good or service that must be produced close to the customer (box IV.1).

However, the actual impact and implications of TNC participation on product market concentration in any particular situation depend upon a number of factors:

• The number and size of TNC operations relative to indigenous and other competitors in host country markets. The average size of foreign affiliates of TNCs often tends to be larger than that of indigenous competitors, according to empirical studies relating to developed as well as developing host countries. The tendency of TNCs to undertake sequential investments to expand their foreign affiliate capacities can widen this gap, if local firms' investments do not rise proportionately. The growth strategies of TNCs (after entry), which often include acquisition of local competitors, could also work in the same direction (Frischtak and Newfarmer, 1994, p. 15). There is some evidence that T N C s

Box IV.1. TNCs, entry barriers and market concentration: three examples from the United Kingdom

Transnational corporations are often able to enter host country markets that are effectively barred to entry by domestic (non-TNC) firms, but the effects on concentration can differ. This is illustrated by three specific examples from recent years, for the United Kingdom.

The first example is the entry of Mars (United States) into the United Kingdom ice-cream market. The market for ice cream is dominated in many European countries by large TNCs, especially Unilever and Nestlé. In the United Kingdom, Unilever had a market share of over 60 per cent. Success on a national scale in this industry necessitates a strong brand image supported by heavy advertising (United Kingdom, MMC, 1994). Given the fragmented nature of much of the retail market, it also requires a firm to have well-developed expertise and facilities in distribution. For many years, the United Kingdom industry had not witnessed significant entry, and this was presumably because of the large sunk costs which would be needed to support that entry. However, in 1989, there was a significant entrant -- Mars, the United States chocolate-bar manufacturer, a firm that had already incurred most of the relevant sunk costs in the adjacent chocolate-bar industry in both the United Kingdom and elsewhere. Importantly, the specific asset (a strong brand image and loyalty) was transferable, and Mars made significant inroads into the market, achieving a market share of 14 per cent within four years. Concentration clearly declined, both in terms of producers and sellers. In addition, Mars expanded the ice-cream market considerably through the addition of new and upscale products, acting as a catalyst for renewed focus on its worldwide activities in ice cream on the part of Unilever.

A second example, from the chocolate confectionary market, was the acquisition in 1989 of one of the two largest United Kingdom manufacturers, Rowntree, by Nestlé (Switzerland). Most informed opinion at the time interpreted the motive for acquisition as the purchase of the brand loyalty associated with two of Rowntree's strongest brands, Kit-Kat and Polo Mints. These complemented Nestlé's product range, placing it in a very strong market position in all segments of product space in the United Kingdom and beyond. In this case, Nestlé was already selling in the United Kingdom market prior to the acquisition, and its entry effectively reduced the number of large competitors from four to three.

A third case is the entry, in the mid-1980s, of the Japanese car manufacturer Nissan through a large-scale greenfield investment, sinking considerable costs, in the United Kingdom market. Nissan previously exported to the United Kingdom. But a combination of voluntary export restraints and a welcoming attitude on the part of the Government of the United Kingdom induced it to invest in the country. Within a matter of a few years, it became a very prominent United Kingdom producer, with a significant, and increasing share of United Kingdom production and sales. In this case, the concentration of producers declined initially, while seller concentration remained the same. In the long-run, Nissan's share in the United Kingdom market rose further, facilitated by the avoidance of tariff and transport costs associated with exporting and a strengthening of its competitive position.

The full impact in the longer-term of these new entries cannot, however, be understood without an appreciation of the changes under way in competition and concentration at the global level. This is especially the case with the automobile market, in which the United Kingdom market (like that of most developed and many developing countries) is substantially integrated into the world market and in which firms are increasingly competing through innovation and relying on knowledge-based interfirm networks for that purpose (Mytelka, forthcoming).

Source. based on Sutton (1991), appendix 12.1; United Kingdom, MMC (1994); Clarke, Davies and Duffield (forthcoming).

because of their access to relatively large pools of resources, dominate M&As in host countries, and that this sometimes leads to increased concentration, although oligopolistic reaction prevented that from happening in some markets (Frischtak and Newfarmer, 1994, p. 15). There are notable exceptions, however: for example, if FDI takes place simply as part of a strategy to follow other firms and maintain a market presence, or to establish foreign affiliates that are truncated or miniature versions of parent companies, they could be smaller than their local counterparts. This was found to be the case in developed countries with small domestic markets and in some developing countries (Safarian, 1969, Jenkins, 1984). Moreover, the presence of other foreign affiliates, outward-investor TNCs based in the host economy, and multiproduct domestic firms which are also of large size, as well as of trade, can make a difference to the relative importance of a new foreign affiliate and its share in the market. In addition, in the case of small and medium-sized TNCs and TNCs from developing countries, the disparity between the size of foreign affiliates and host country indigenous firms may be smaller than that related to affiliates of developed country TNCs, although available data show that small and medium-sized TNCs are larger, in terms of worldwide sales, capital and employment than small and medium-sized firms on the average (UNCTAD, 1993b).

- The reaction of host country firms to TNC entry and operations. In existing product markets, host country firms -- especially if previously protected from competition from trade, FDI or even other domestic enterprises -- may pursue defensive strategies such as combining their operations or entering into joint ventures with TNCs in order to strengthen their competitiveness (box IV.2). Or they may exit the industry, being unused to the kinds of competition (e.g., based on high advertising or R&D) introduced by TNCs or unable to compete. This may result, at least in the initial stages of TNC participation in a country, in increasing rather than decreasing concentration. In cases in which a TNC introduces a new product into an economy, the host country market can be expected, initially, to be a monopoly; its longer-term structure depends upon whether more suppliers enter through FDI and trade, and whether domestic firms have the technological and other capabilities to enter the newly created market or can learn and compete. In developing countries, such entry to new product markets by indigenous firms is often through joint ventures and non-equity arrangements with TNCs.
- The competitive performance of TNCs relative to that of domestic firms, and its effects on indigenous firms in terms of their longer-term survival and strengthening of their capabilities. There is considerable evidence to suggest that, because of their various competitive strengths, stemming from the fact that they are part of TNC systems, foreign affiliates are often more efficient and productive than their local counterparts in the industries in which they operate (see below and UNCTAD, 1995a). This could have varying effects on concentration and the market power that foreign firms may acquire in a host country market: positive spillovers through competition (see below) could improve the performance of local firms, enabling them to survive and maintain their shares of the market, leaving concentration unaffected or decreasing it. On the other hand, if the gap in capabilities is large and/or the economy relatively small, some indigenous firms might be forced to close, with the possibility of increasing concentration and the role of foreign firms, especially in the absence of trade. However, in certain industries and in host countries characterized by relatively small product markets, TNCs focus on market segments that involve limited domestic participation, so that, regardless of their size, they do not crowd out domestic

Box IV.2. Defensive reactions and responses to the entry of FDI: illustrations from the retailing industry in Asia

As part of their liberalization of FDI policies, many developing countries are opening up a number of service industries to FDI. Since FDI is the only modality whereby foreign firms can deliver services to a market, this is likely to enhance competition in the provision of the services concerned. The recent experience of the retailing industry in two Asian economies provides an illustration.

In January 1996, the Republic of Korea lifted almost all legal restrictions on foreign access to its retail-trade industry. A number of TNCs have already entered into the Korean market and others are preparing to do so. Foreign investors are entering almost all of the country's distribution areas, except for those related to grains and gasoline.

The leader of the wave of foreign investment in the industry is a Dutch-based cash-and-carry trade company, Makro, which started as a Dutch-Korean joint venture, Makro Korea, and opened a membership-only warehouse discount store in Inchon. The Makro Inchon store is equipped to sell as many as 15,000 different products, while the average local discount store handles only 3,000 to 4,000 varieties of goods in much smaller space. The distinguishing feature of membership-only warehouse stores is that they reduce expenditures in advertising, interior design and staff, while maximizing operational efficiency by standardizing their operating system. As a result, these stores can offer consumer lower prices for the products they sell. Similarly, by adopting self-service and quick-return systems, many discount stores can lower their selling prices considerably. Consumers experienced the effect of competition in this segment of the Korean distribution industry when simultaneously with the opening of the Makro Inchon store, Price Club of Shinsegae and Kim's Club of New Core Department Store cut the prices of 400 and 200 items respectively, by an average of 2 to 3 per cent.

Competition can be expected to increase further when other TNCs considering entry, such as Carrefour and Promodes of France, Wal-Mart of the United States and Marks and Spencer of the United Kingdom, enter the Korean market. While foreign distribution firms are trying to capture a bigger share of the retailing market, local companies are gearing up to keep this market from the new competitors. In particular, large business conglomerates are aggressively entering the retail business. For example, Samsung Corporation plans to open eight shopping malls, five logistics centres and about 30 supercentres and hypermarkets by the year 2000; in addition, it plans to open two department stores (one of which will include a theme park in a 23-storied complex). Others with similar plans include the Daewoo, Sunkyong and LG groups. Local department stores are also trying to reinforce their competitiveness by expanding their stores and reorganizing their management systems; they are expected to open about 100 new stores by the year 2000 in order to gain advantages in terms of economies of scale and to broaden their existing stores. At the same time, they are developing their own branded goods at low prices, and furnishing their stores with high-priced and high-quality goods.

In the Philippines, steps are being taken to allow TNCs to enter retailing. Since 1995, several bills have been introduced in Congress to liberalize rules regarding the entry of foreign firms to retail trade, long closed to foreign participation. At present, the structure of retail trade in the Philippines is quite fragmented at one end and very concentrated at the other. According to one survey, 2,508 "department stores and supermarkets" accounted for 6 per cent of the number of establishments and 37 per cent of employment in retailing. Among retailers in nine product areas that were among the 5,000 largest companies in the Philippines, the top three accounted for an average of 38 per cent of sales. Another indication of concentration is that the Philippine Retailers Association has only just over a hundred members. The Philippine retailing industry has been characterized as an oligopsony between a few retailers and many manufacturers and an oligopoly between a few retailers and many consumers.

Retailers have responded to the prospect of liberalization and increased competition from TNCs in number of ways. The Philippine Retailers Association neither completely rejected the ideas of retail trade liberalization nor did it articulate a favourable position. Its position was that the opening of the large-scale segment of the retail business be done on the basis of joint ventures between Filipino and

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(Box IV.2, cont'd)

foreign firms in which the foreign partner controlled a maximum of 40 per cent of the shares. It is also recommended keeping small and medium-sized business closed to foreign firms. Through the Philippine Retailers Association, retailers submitted briefs to the Government stating that, despite the industry structure, their profit margins on sales are the lowest in the region. Nevertheless, Filipino retailers were doing well. They also claimed that foreign retailers will have a higher import propensity than domestic ones. And, referring to the experience of other Asian countries, they warned that unconditional entry of foreign retailers will displace small retailers and increase unemployment.

Beyond taking an active role in discussions related to the regulatory process, the largest Philippine retailers have made a number of strategic moves. They have formed alliances with foreign wholesalers to increase efficiency, since foreign entry is already permitted in the wholesale sector. They have continued to expand the number of stores and malls. They have modernized existing stores and malls to make them more attractive. They have incrased foreign sourcing, a major competitive strength of foreign retailers. They have diversified geographically (e.g., Shoe Mart into China) and into other industries (e.g., Ever's parent company into real estate development). Some of the large firms have also begun discussion with foreign retailers about joint ventures in the future. They have taken several other initiatives as well, to upgrade their competitiveness.

The case of the Korean and Philippine retail industries illustrate how well-established incumbent firms and other potential competitors can respond to potential or actual entry of TNCs in concentrated industries to change the industry structure and/or the competition process: influencing the regulatory process, increasing scale, scope and efficiency, lowering prices and margins, diversifying geographically and into other industries and attempting to form alliances with potential entrants.

Source: UNCTAD, based on Y.J. Sohn, "Survival game: defeat or be defeated. Foreign giants coming into the local distribution market", *Business Korea*, February 1996, pp. 23-26; and information obtained from the Philippine Retailers Association.

^a By senator Sergio Osmeña, in the "explanatory note" to S.B. 1890.

firms (box IV.3). In either case, however, openness to entry by FDI and, in the case of tradable products, trade is important for minimizing the possibility of market concentration.

Furthermore, over time, the competitive advantages of foreign affiliates may be eroded, and domestic firms may increase their shares and new ones enter. Indigenous firms may build up their capabilities and reclaim an industry, reducing concentration as well as the role of TNCs as is illustrated by the export-oriented garment industry in Thailand, where most Japanese firms established in the 1970s had, by the 1980s, been taken over by their Thai managers (Petri, 1993), and the same industry in Mauritius, in which local affiliates of Hong Kong, China firms faced increasing competition from indigenous firms (Wells, 1993). Much depends, of course, on the pace of technological capacity-building by domestic entrepreneurs. For example, in the consumer electronics industry of Thailand, unlike in the garment industry mentioned above, capacity building has been slow and foreign-investors have continued to dominate and even increased their dominance of the industry since its inception in the 1970s (Poapongsakorn and Tonguthai, forthcoming).

• The conduct of TNCs and other firms in the market. If TNCs acquire dominant positions (by virtue of their market power and facilitated, in some cases, by their transnationality), some TNCs may be able to indulge in anticompetitive practices against domestic (and other) incumbents, and erect even higher barriers to the entry of new firms (section IV.A.3). The willingness of governments to give market power to TNCs in exchange for FDI could also facilitate the erection of barriers to potential competitors and contribute to further increasing market concentration (section IV.A.4).

Box IV. 3. FDI, market structure and competition in South Africa's banking industry

Transnational banks tend to focus their host country activities on certain market segments, products and services, especially including those related to the banking services required by other TNCs in host countries and those related to trade (UNCTC, 1989). One implication of this is that liberalization of policies restricting FDI in banking does not necessarily result in increasing the competition faced by national banks in all banking product markets, or substantial crowding out of national banks. However, the entry of TNCs does inject competition into host country markets for specific banking products, influencing market structure and the positions of incumbent banks. Recent experience in the banking industry of South Africa provides an illustration.

Soon after the elections in 1994, South African legislation was amended to allow foreign banks to conduct business in South Africa. Very quickly, foreign banks started to return to South Africa. As of May 1997, 10 foreign banks, seven branches of foreign banks and 56 representative offices of foreign banks had established themselves in South Africa (Business Map 1997, p.19). As the foreign banks recognized that the size of the market was relatively small, they focused on penetrating niche markets that were not dominated by the (four) major incumbent commercial banks (and two strongly competitive merchant banks). These niche markets included those for advisory services in industry issues; foreign currency loans; trade finance; large cross-border corporate financial deals; privatization deals; and the distribution of local equities internationally -- in brief, all areas in which they can take advantage of their specific assets, especially their better knowledge of foreign markets, and the sheer size of their operations and financial strength. Areas where local competition was already fierce before the entry were generally not among the main targets of foreign banks. Lending, for instance, has been characterized by relatively small margins, making it attractive to foreign firms only "if it was part of a broader relationship" with a firm involving also other services. According to some sources, however, the entry of foreign firms lead to a further squeeze of profits in this business.

Local banks in South Africa have had some time to gear up for competition with foreign affiliates of transnational banks. Many are apparently planning to enter into joint ventures and partnerships with foreign banks in specific areas. Teaming up with offshore partners to make bids for businesses, for instance, is considered to be of mutual advantage since "both banks earn a fee for packaging the deal, the foreign bank may provide the funding and they get local expertise".^a

Liberalization of exchange controls in the future is expected to increase competition, change the market structure significantly and give foreign banks a competitive edge since it will open the way for many more products. "There are strong signs that they (foreign banks) are biding their time until exchange controls are removed when they will be able to exploit their specific areas of competitive advantage in full". b

Source. UNCTAD.

- ^a Sharon Wood, "In the wings", Finance Week, April 18-24 1996, Johannesburg, p. 34.
- ^b Ibid., p. 31.

In developed host countries, empirical studies suggest that these various factors work, on balance, to reduce concentration or leave it unchanged. According to studies for Australia (Brash, 1966), Canada (Safarian, 1969), France (Fishwick, 1982), the United Kingdom (Steuer *et al.*, 1973), and the United States (Knickerbocker, 1976), no positive association between inward FDI and industrial or market concentration was found and, in fact, the relationship was in some cases negative, i.e., inward FDI was associated with a decrease in concentration.¹¹ In the smaller advanced countries, however, industrial concentration increased in industries in which the participation of foreign firms was most prominent (Newfarmer, 1985). According to a recent study for the United Kingdom, the upsurge of inward FDI into that country between 1986 and 1992 was accompanied by a general tendency for slightly falling concentration, with the share of the top five firms falling in the average

industry (table IV.3). This was because the increase in the joint market shares of leading TNCs (defined as foreign firms within the top five producers in a given industry) was more than offset by a corresponding decline in the share of leading domestic firms. However, the advance made by leading TNCs was less pronounced in industries producing non-differentiated products than for differentiated industries, so that, in the former group of products, concentration fell more significantly. Overall, increasing TNC activity was accompanied by decreasing concentration, but increased TNC activity dampened the general trend towards de-concentration.

Judging from data for the United Kingdom, individual TNCs seem more likely to secure leading market shares than are other firms: in 1992, for all industries, leading TNCs accounted for a higher proportion of the TNC share of total sales than the proportion of domestic firms' share of total sales that was accounted for by the leading domestic firms (table IV.2). In addition, in differentiated industries that are more concentrated, the proportionate share of leading TNCs rises much more rapidly than concentration, but in homogeneous product industries, it rises at almost the same rate as concentration (table IV.2). Finally, TNCs tend to cluster in leading positions in certain industries (table IV.3); in the United Kingdom, over one-fifth of the 100 industries examined were dominated by TNCs in 1992, with three or more of the five leading positions being occupied by TNCs. All but three of these industries produced differentiated products (table IV.3).

In developing host countries, on the other hand, empirical studies suggest that greater TNC participation leads, on balance, to increased concentration. In studies for several countries -- including, among others, Brazil (Willmore, 1989), Guatemala (Willmore, 1976), Malaysia (Lall, 1979; Kalirajan, 1991), and Mexico (Newfarmer and Mueller, 1975; Connor, 1977; Blömstrom, 1986) -- inward investment has been found to be associated with an increase in industry concentration. Given that few foreign affiliates are fully export-oriented, this can be considered to denote also increased market concentration, except where imports are important. In the case of some products, including services, TNCs and local firms were found to operate in different market segments, with TNCs introducing new products for which there was little or no local competition (UNCTC, 1989; Lipsey and Zimny, 1993), at least in the short to medium-term. Furthermore, judging from advertising/sales ratios, foreign affiliates in developing countries have a relatively higher tendency than domestic firms to compete through product differentiation, ¹³ and product differentiation tends to heighten concentration in consumer industries serving primarily local markets (Manrique, 1982; Newfarmer and Marsh, 1992; and Willmore, 1989).

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To sum up, the relationship between FDI and market concentration in host countries is by no means as clear-cut as the observed correlation between TNC presence and concentration might suggest. Although TNCs are often able to enter host country industries and, hence, markets which are sometimes effectively barred to domestic (non-TNC) entrants because of cost-related factors, this does not mean that even the immediate, at-entry effect will be a reduction in seller concentration. Post-entry effects depend upon several factors and, on balance, the risks of increasing concentration, at least in the short to medium term, are likely to be greater in developing countries. More generally, as TNCs consolidate and exploit their specific assets by capturing leading market positions, this may have a concentrating effect, which is often accentuated by a clustering of a number of leading TNCs in certain industries. The relationship between TNC activity and concentration tends to be strongest in industries and markets that are concentrated by virtue of product differentiation and innovation. Within such markets, TNCs often enjoy some advantage over domestic firms in host countries.

Perhaps more importantly, the significance of any increase or decrease in concentration depends considerably upon the existing market structure, the optimum structure of a market, the size of the market, and, above all, its openness to competition, including from domestic firms, TNCs and imports from related products. Increased concentration in a market of two or three firms clearly has implications different from those in a market of 20 or 30 firms. In some industries, increased concentration in production could improve production performance because of economies of scale (given host country market size), but if production concentration implies market concentration -- as would be the case in (non-tradable) services and in goods markets protected from imports -- it could also lead to an abuse of market power and lower consumer welfare. Furthermore, as discussed below, foreign affiliates may be more efficient than local firms, accentuating the conflict between production efficiency and allocative efficiency, including dynamic efficiency in terms of enhancing future production capabilities of an economy. This conflict is likely to be more pronounced in developing countries, particularly in the least developed countries, that are characterized by relatively small markets as well as limited domestic capabilities.

Table IV.3. TNCs, concentration and firms in leading and non-leading positions in the United Kingdom, 1986 and 1992

(Percentage)

	C5 ^a	TNC share			Domestic share		
Year		Total	Leadersb	Non-leaders	Total	Leaders ^b	Non-leaders
			All indu	stries			
1986	42.5	19.2	9.9	9.3	80.8	32.8	48.2
1992	40.9	27.3	14.9	12.4	72.7	25.7	46.9
Change	- 1.6	8.1	5.0	3.1	- 8.1	- 6.9	- 1.3
			Differentiated	d products			
1986	51.4	26.1	15.7	10.5	73.9	35.7	38.2
1992	50.8	36.3	22.1	14.2	63.7	28.7	35.0
Change	- 0.6	10.2	6.4	4.3	- 10.2	- 7.0	- 3.2
			Homogeneou	s products			
1986	31.7	10.6	2.8	7.8	89.4	28.9	60.5
1992	28.0	15.9	5.9	10.0	84.1	22.1	62.0
Change	- 3.7	5.3	3.1	2.2	- 5.3	- 6.8	1.5

Source: based on data from the United Kingdom, Central Statistical Office, 1988 and 1995.

Note: all figures are percentages of total sales in the United Kingdom (100 individual industries).

Regressions (based on 1992 data): Differentiated products: Homogeneous products:		R=0.490, standard error (b)= 0.41. R=0.155, standard error (b)=0.85.		
where $X=C5$ $Y=(TNC sales/TNC total)$				
Clustering of TNCs	1986	1992		
Industries in which all five leaders are TNCs	0.0	1		
Industries in which four leaders are TNCs	2	5		
Industries in which three leaders are TNCs	8	21		
Probability that a leader will be a TNC	0.2	0.3		

a Sales-weighted mean 5-firm concentration ratios.

b Firms within the top five producers in a given industry.

3. Firm behaviour and competition effects

The characteristic features of TNCs that may cause FDI and the activities of foreign affiliates to affect the structure of host-country markets along the lines discussed above can also have consequences for the conduct of competition in a given market and, hence, for the performance of firms and an industry as a whole. These consequences reflect what might be called the "distinctive" features of TNCs (including competitive strengths arising from firm-specific assets, advantages related to internalizing the use of those assets, and an array of locational assets when they operate in a number of countries, and also their transaction cost disadvantages relative to domestic firms), as well as their "circumstantial" features (i.e., those that would hold true, in principle, for any firm with a similar market share in a similar market). This distinction is important because, as noted, TNCs are not distributed across the economic landscape of host countries in the same way as other firms. They tend to congregate in concentrated industries, to have larger-than-average market shares, and to be market leaders. Moreover, they operate, more often than not, in markets for differentiated goods, in which the competitive process operates as much through quality, advertising, R&D and innovation as through price or quantity. Furthermore, high market shares and concentration are more likely to be associated with the possibility and allegations of anticompetitive behaviour; this is especially the case when advertising appears to have an entry-deterring effect. Necessarily, therefore, anticompetitive investigations often concern TNCs (table IV.4) -- but, again, this may not be because of their TNC status per se, but rather because of the circumstances.

In the discussion below, the nature of the (pro-) competitive behaviour of TNCs and its effects on the performance of industries/markets and their implications for host countries are considered first, drawing on studies that have tried to assess the impact of TNCs on host-country performance. This is followed by an exploration of the types of competition concerns raised by TNCs.

(a) Competitive behaviour, the efficiency of firms, and impact on performance

The entry and operations of a TNC can inject competition into a host country market, particularly if the market has a limited number of sellers relative to its size prior to the foreign firm's entry. The process of competition could involve lower prices -- especially if the TNC is more cost-efficient than local firms -- or, as is more likely, product differentiation and advertising. It could also involve the introduction of new products based on innovatory activity by the TNC involved. Inward FDI can then be expected to improve the performance of the industry concerned and increase consumer welfare by lowering prices, improving product quality, increasing variety and introducing new products, provided the relevant market continues to function efficiently. If, however, there are no domestic firms operating in a market, or there is a large gap between the competitive strengths of foreign affiliates and domestic firms, and competition from imports or other foreign affiliates is lacking, the foreign affiliate assumes a dominant position in the market. In that case, the market may not function efficiently and the impact on performance may be reflected mainly in higher profits for the TNC concerned (as well as for the host country firms that remain in the market), and benefits in terms of consumer welfare and/or dynamic growth of the industry may be limited.

Transnational corporations, because of their firm-specific assets, access to a wider array of locational assets, and ability to reap, by their marketing capabilities, economies of scale and scope at the firm-level, are often more efficient in production than domestic firms, or at least those that are not themselves also TNCs, in host economies. A number of studies suggest that average productivity levels are higher in foreign affiliates than in their domestic rivals. ¹⁴ In Canada, for

example, foreign affiliates within given industries enjoyed higher value added per worker than their Canadian-owned counterparts, primarily because they tended to be capital intensive and large (Globerman et al., 1994, p.154).¹⁵ Foreign affiliates exploited economies of scale more fully than their domestically-owned counterparts -- possibly because they enjoyed better access to foreign markets, for example through intra-firm trade and network economies such that they operated at larger scale, and because they could draw upon home country managerial expertise to help manage the greater complexity of larger scale operations. In the United Kingdom, foreign firms enjoyed a 49 per cent differential in labour productivity compared to their local rivals, according to data for 1991 (Davies and Lyons, 1991). However, roughly a half of the differential was related to the fact that TNCs tended to congregate in industries that are innately of high productivity, and a half with superior performance when "like was compared to like" (within the same industry).

Table IV.4. Involvement of TNCs in United Kingdom competition cases, 1990-1995 (Number)

Year	Total number	Number involving TNCs	Examples
1990			
Monopoly	4	1	Petrol ^a (Esso, Shell, BP etc.)
Merger	20	7	Elder/Grand Met (beer, hotels), British Airways/Sabena; Michelin Tyre/NTS
1991			
Monopoly	5	4	Coffee ^d (Nestlé), Soft drinks ^{a c} (Coca-Cola)
Merger	13	7	B.Aero/Thomson-CSF, Stora/Gillette
1992			
Monopoly	4	3	Cars and car parts ^{a b} (Ford, GM, Rover, etc); matches and lighters ^d (Swedish Match)
Merger	7	3	Allied-Lyons/Carlsberg, Sara Lee/Reckitt and Colman
1993			
Monopoly	7	3	Fine fragrances ^b (L'Oréal, Revlon, Unilever, etc.)
Merger	3	1	Gillette/Parker Pen
1994			
Monopoly	7	3	Ice cream ^a (Unilever), Films ^{b c} (Warner, MGM etc.)
Merger	2	1	Alcatel/STC
1995			
Monopoly	5	2	Video games ^b (Nintendo/Sega)
Merger	10	4	Lyonnaise des Eaux/Northumbrian Water; GEC/VSEL
Total 1990-199	95		
Monopoly	32	16	
Merger	55	23	

Source: based on data obtained from the annual reports of the United Kingdom Monopolies and Mergers Commission for the years 1990-1995.

Note: The total number of anti-trust cases considered here comprises all cases considered and reported on by the Monopolies and Mergers Commission with the following minor omissions: mergers in the newspaper publishing industry (which is subject to special attention in the United Kingdom for reasons additional to purely competitive ones); one or two cases brought under the Competition Act; and cases brought under specific acts in specific areas (e.g., broadcasting, privatized industries etc.).

- a Exclusive purchasing.
- b Exclusive distribution.
- c Tied-in sales.
- d Monopoly pricing.

In developing countries, evidence suggests that foreign affiliates are often more efficient in production than their domestic counterparts. According to studies for Brazil (Willmore, 1986), Singapore (Lecraw, 1985), India (Kumar 1990), labour productivity in foreign affiliates tended to be higher than that in domestic firms in the same industry. This was also observed for Malaysia, Singapore and Thailand (Ramstetter, 1993, 1995 and 1996); however, in these cases, more rigorous examination, including at the industry level showed fewer differences and, moreover, significant differences observed in the 1970s disappeared in the 1980s. In the Republic of Korea, no significant differences between the productivity of labour in foreign and domestic firms were found (Koo, 1985). Studies of total factor productivity for a few countries (e.g., Haddad and Harrison, 1994, for Morocco; Okamoto, 1994, for Malaysia) also indicate a tendency for foreign firms to have higher productivity. In some of the cases, the differences diminished when the data were controlled for size of firm, suggesting that the productivity differences observed relate to differences in capital intensity and scale as well as in technology and organizational capabilities. In addition, foreign affiliates typically have better marketing capabilities and networks and higher propensities to export (UNCTAD, 1995a, p. 211; Ramstetter, 1997).

Whatever the source of the greater productivity or sales performance, the entry of a TNC (or any firm) that is more cost-efficient or introduces better quality or new products, or is able to sell better than its competitors, will affect the position of the latter. Either they learn from, and/or imitate it in terms of production performance, or they may be forced to exit the market. The upshot could be an industry of surviving firms that is more efficient in production than it would be without the TNC. This may not, however, be accompanied by market efficiency and optimum social welfare but, rather, higher profits for TNCs, especially if other firms are forced to exit and a foreign affiliate monopolizes the market, unless there is competition from trade and from the entry of more TNCs.

There is some evidence from industry-level studies within developing countries to suggest that TNCs were more profitable than their domestic competitors (Caves, 1974; Donsimoni and Leoz-Arguelles, 1980; Shapiro, 1983). In Brazil, the profits of a foreign affiliate were higher, the more concentrated was an industry and the higher was the share of the foreign affiliate in the industry (Connor, 1977). Similar results for TNCs were found for light manufacturing in South-East Asia (Lecraw, 1983), but no evidence of a significant impact of concentration on profitability was found in the case of India -- where foreign affiliates and domestic firms were found to operate in different strategic groups, with the former protected more by entry barriers than their local counterparts (Kumar, 1990).

There is no systematic evidence on the extent to which the procompetitive effects of TNC participation take the form of lower prices for consumers, although that can happen, particularly in non-differentiated goods and services, as the experience of FDI in Korean retailing suggests (see box IV.2). On the other hand, there is considerable casual evidence to show that competition from TNCs, especially in developing countries, results in the introduction of new products and improvements in the quality or variety of existing products (box IV.4). Non-price competition through product differentiation based on advertising as well as through innovation is an important mode of competition in the industries in which TNCs are concentrated, and TNCs themselves often tend to have higher levels of advertising than domestic firms. ¹⁶ When TNCs move into an industry, they may raise the industry level of advertising and compel domestic producers to counter with increases in their own promotional expenditures. In some cases, resorting to advertising may enable domestic firms to retain or enlarge market shares and profits even if foreign affiliates offer products at lower prices. In the case of the Argentinian pharmaceutical industry, for example, Argentinian producers -- who spent considerable parts of their revenues not only on R&D but also on advertising, trying to establish strong brand names -- were able to sell their products at higher prices than the

local affiliates of TNCs, and retain their profits when faced with competition from TNCs (Chudnovsky, 1979).

Box IV.4. FDI and competition in India's markets for soft drinks and white goods

Economic reforms and relaxation of FDI regulations in India since 1989 have increased competition through new entrants, including TNCs, in markets for consumer goods. This has led to changing market shares for firms, as well as increased supplies, a greater variety of products and the introduction of new products for consumers. These changes are illustrated below with reference to recent developments in the markets for soft drinks and for white goods.

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In soft drinks, Pepsi (United States) entered the Indian market in 1990, soon after liberalization began. By early 1994, Pepsi had captured about 24 per cent of the Indian soft drinks market. Pepsi started with a 44 per cent share in its Indian joint venture, increased subsequently through the purchase of the 48 per cent share held by its chief partner, Voltas Ltd. The remaining 8 per cent of Pepsi Foods Limited was held by the Indian partner, Punjab Agro Industries.

In 1993, after a 16-year absence, Coca-Cola re-entered the Indian market for soft drinks through a joint venture with Indian-owned Parle Exports, which accounted at that time for 60 per cent of the \$400 million Indian soft drinks market. Under the joint venture agreement, Parle would make available to Coca-Cola all of its 60 franchises for production, bottling and distribution. The joint venture, Coca-Cola India, would invest \$20 million to upgrade Parle's bottling plants.

Both Coca-Cola and Pepsi launched advertising campaigns to increase their respective market shares. As of the first quarter of 1997, Coke had a 13 per cent market share in the cola segment (or more than 50 per cent of the total Indian market for aerated soft drinks) and Pepsi had a share of 27 per cent.^a The competition between Coke and Pepsi led to the revitalization of the local cola brand, Thums Up, one of the five local cola brands acquired by Coca-Cola. The popularity of Thums Up was recognized by Coca-Cola India when it found it difficult to replace the local brand's market share by that of Coke. (Thums Up had a share of 17 per cent of India's market for colas as of the first quarter of 1997.^a) The other major player in India's aerated soft drinks market is the indigenous Indian firm Pure Drinks Ltd, the manufacturer of the Campa range of products.

How well local rivals will manage to compete with Coca-Cola and Pepsi is uncertain. India's tea producers have also expressed concern about facing competition from the entry of foreign cola and soft drink firms, as the domestic growth of tea, the nation's main beverage, could be thwarted.

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In white goods, until recently, the Indian market was characterized by a small number of producers and sellers. Imports were restricted. By the mid-1990s, however, a number of TNCs had penetrated the Indian market, introducing a variety of new products. One recent entrant was Whirlpool Corporation (United States), which acquired a majority share in Whirlpool of India in 1991, a joint venture with a local firm. After initial difficulties and restructuring, it obtained an estimated market share of 15-20 per cent of the market for washing machines, in which the market leader is Videocon, a local firm.

In 1994, Whirlpool acquired a majority stake (51 per cent) in Kelvinator of India, the second largest refrigerator maker at that time in the country. It also acquired the use of the Kelvinator brand name until end-1996; Whirlpool was a virtually unknown brand in India. The challenge for Whirlpool

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(Box IV.4, cont'd)

was to hold on and increase its market share on the basis of its own brand name. Whirlpool began to introduce new models, beginning with a 310 litre refrigerator. It also began to invest in no-frost refrigerators, a market segment that is dominated presently by local producers. Competition between Whirlpool, other TNCs that have entered India's white goods market and local firms has provided consumers a wider choice as regards refrigerators.

Whirlpool's sales of refrigerators increased from 538,000 in 1995 to 665,000 in 1996 -- a market share of nearly 27 per cent. In the direct cooled segment of the refrigerator market, Whirlpool captured a 32 per cent market share. The market leader remains Godrej-GE, a joint venture between Godrej, a local firm, and General Electric, with 39 per cent of the market for refrigerators overall in 1996-1997, while two other firms have shares of around 15 per cent each. In the no-frost refrigerator market, Godrej-GE has a market share of 40 per cent. It therefore appears that the largest incumbent firm managed to hold on to its market shares, although in the future Whirlpool may be able to gain additional market shares in segments of the refrigerator market.

In terms of the mode of competition, Whirlpool launched an advertising campaign -- a "scratch-a-gift" offer -- for purchasers of its refrigerators. The scheme, offering mostly inexpensive, but also a few valuable gifts (such as a car and an apartment) to buyers, was declared illegal by the Monopolies and Restrictive Trade Practices Commission of India in February 1997, following a complaint by Godrej-GE on the basis that the scheme would tempt people to buy Whirlpool products in the hope of winning a prize.

Sources: "Raising India", *Beverage World*, vol. 113, issue 1560, February 1994, pp. 46-48; "Coke and Pepsi throw cans into the Indian-market mix", *The Asian Wall Street Journal*, 21 June 1996; and "Making an impact", *Business India*, No. 500, 5-18 May 1997, pp. 82-83.

^a Miriam Jordan, "In India, Coke takes new tack", *International Herald Tribune*, 20 June 1997.

Effects on price and product variety or range reflect the static efficiency benefits of competition in terms of enhancing consumer welfare. Of greater interest, especially as far as developing countries are concerned, are the dynamic effects that result from competition by TNCs, through positive spillovers of efficiency productivity and innovatory capabilities to local firms. Local producers faced with competition from technologically sophisticated foreign affiliates may, in some cases, be forced out of a market. On the other hand, in some countries and industries, local firms may respond competitively, and improve their productivity in their efforts to retain market shares.

The immediate reaction of a local firm to competition from inward FDI may be to enforce stricter or more cost-conscious management and motivate employees to reduce slack or improve X-efficiency. Over time, when foreign firms and local firms are in competition with each other, producing similar products, on the same scale and for the same market, there is often a tendency for local firms to adopt similar production techniques to those of the TNCs, as part of a general survival strategy. When technical capabilities are well-developed, competition by TNCs may induce R&D and innovation by domestic firms. Generalizations in these respects, however, are difficult. Case studies at the firm and industry levels suggest that the spillover effects of competition (combined with those of demonstration, which are difficult to separate) from TNCs vary according to the technological and entrepreneurial capabilities of local firms relative to those of foreign affiliates and the market strategies of TNCs and local firms, as the following examples show:

 For instance, in the Kenyan soap industry, the entry of foreign affiliates led to the introduction of mechanized production of laundry soap and the adoption of mechanized technology by local firms, as the latter found themselves unable to sell handmade laundry soap in the urban markets (despite its acknowledged quality). Local firms were forced to introduce mechanized techniques and new packaging to stay in business. They also had to produce a wider range of products, and to build up turnover, among others, by subcontracting production from TNCs or producing under international brand names (Langdon, 1981). Similarly, foreign entry into the Kenyan footwear industry led to increased competition and changes in the production techniques of local firms (Jenkins, 1990).

- In the Brazilian textile industry, the establishment of an affiliate by a foreign firm brought synthetic fibres into the market; the consequent stagnation of demand for cotton textiles led to the disappearance of some local firms, while others were forced to seek joint ventures with foreign firms to obtain access to competitive technology (Evans, 1979).
- On the other hand, in the Indian pharmaceutical industry, local firms had built up significant technological capabilities since the 1970s, with the support of weak patent protection enabling imitation of patented products and processes, import controls and licensing restrictions but also strict price controls (especially on large firms) limiting price increases which forced them to be efficient imitators. They are now pursuing an offensive strategy of increasing their investment in R&D to prepare themselves for increased competition due to the entry of foreign firms into the Indian market in response to policies liberalizing FDI and trade (Acharya, forthcoming).
- Even when technical capabilities are well developed, however, domestic firms may find it difficult to compete with foreign affiliates through innovation. In the Brazilian telecommunication-equipment industry, liberalization of FDI and the participation of foreign affiliates resulted in a number of domestic firms having to reduce their R&D activities and enter into alliances or joint ventures for production. As the affiliates of TNCs did not have to rely entirely on their own R&D and could draw upon products developed by their parent firms, the time-span required for the introduction of new product generations accelerated and the mode of competition in the local market changed from "competition based on technical proficiency, product differentiation and an effort to search for exploitable domestic market niches to competition on the basis of being 'first' into the market" (Mytelka, forthcoming, ch. 4, p. 14). Lacking comparable technological and financial backstopping from parent companies, Brazilian firms, particularly the smaller ones, found that the only way to survive competition with foreign affiliates was to cooperate with the TNCs concerned. This led to a reduction in local innovative capacity and, finally, to reduced competition, at least between domestic and foreign firms.

Judging from a number of studies, the possibility of positive spillovers of efficiency or productivity to other firms due to competition introduced by TNCs may be related to the extent of TNC activity in a market; domestic rivals have been found to perform relatively better in terms of productivity the more extensive is their exposure to competition from TNCs -- that is, the larger were foreign affiliates' market shares (Cantwell, 1989a; Haddad and Harrison 1994; Blomström, 1983; Kokko 1992). Moreover, these effects are more likely to occur when local firms have already built up some technological capabilities. For example, the entry of United States firms into European markets during 1955-1975 provided a competitive spur in those industries in which local firms had some traditional technological strength and in which national markets were large enough to allow both kinds of firms to operate at efficient scale (Cantwell, 1989b, p. 86). In Mexico and Uruguay, a positive relationship was observed between the presence of foreign affiliates and the productivity

of local firms when the gap between foreign and local firms' productivity was not too large (Kokko, 1994; Kokko, Tansiniz and Zejan, 1994). This suggests that FDI by small and medium-sized enterprises and developing country TNCs may hold greater possibilities for performance-enhancing spillovers through competition. Since these TNCs usually operate in more labour-intensive or lower technology industries and their competitive advantages are more modest than those of developed country TNCs, the prospects are better for domestic firms to assimilate or acquire them. This is likely, for instance, to have been a factor in the emergence of domestic firms as major competitors to Hong Kong, China firms in textiles and garments that invested in Mauritius several years ago (Wells, 1993, p. 183).

Spillovers from foreign affiliates may include not only those related to technological upgrading and productivity improvements but also to the building up of marketing and especially export capabilities. There is increasing evidence to suggest that export-oriented foreign firms act as catalysts for the development of export capabilities by bringing with them access to buyers from the countries in which their products are sold (Wells, 1993, p.183). In Indonesia, for instance, anecdotal evidence suggests that Indonesian firms are taking advantage of the access to buyers that the establishment of affiliates by TNCs from East Asian countries has brought to Indonesia; for example, Nike, Adidas and Reebok all have offices in Indonesia, to be closer to their suppliers -- the Indonesian affiliates of East Asian supplier-TNCs. Indonesian-owned firms are taking advantage of their presence to build up linkages; exporting directly as well as selling components to foreign affiliates that export (Wells, 1993). To the extent that these products are also sold in local markets, the improvement in performance is also likely to affect host country markets for the goods, and local firms emerge as competitors to TNCs in both export and host country markets.

(b) Anticompetitive business practices

The entry of TNCs and their activities may not only have potentially performance-enhancing effects associated with the competition they inject in host-country markets and industries, but may also, under certain conditions, carry a potential for, anticompetitive business practices that could affect the performance of markets and the industries concerned. Although systematic studies in this regard are lacking, TNCs have featured in some of the most conspicuous cases that have come before competition agencies in developed countries in recent years. For example, a substantial proportion of monopolies and mergers reports in the United Kingdom over the period 1990-1995, in one way or another, have involved foreign-owned firms in the country (table IV.4). The specific examples listed relate to the types of markets in which competition worries are most likely to be pronounced: they are typically highly concentrated markets; many involve advertising-intensive differentiated products with strong brand names; and they are often not subject to import competition.

The discussion below introduces some of the main types of anticompetitive behaviour in which TNCs may engage and that are of interest from the viewpoint of host countries. (For a more extensive listing of restrictive business practices, see box V.3.) They are discussed further in chapter V, in the context of policy approaches taken by countries.

i. Collusion

The possibility of collusive practices, ranging from full-fledged cartels to tacitly collusive behaviour, has always been associated with highly concentrated industries protected by entry barriers. Circumstantially, TNCs often operate in such industries, but it is not clear that they

would be more orless inclined to act in a cooperative way than non-TNCs. On the one hand, at least in the early yearsof its existence in a host country, a TNC might be less inclined to join in with cosy collaborative local arrangements (Caves, 1996, p. 95). On the other hand, there are some essential features of TNCs that might strengthen the prospects of collusion. For example, the sheer muscle of a large TNC may provide it with credible means of punishing smaller firms contemplating deviations from a collusive arrangement. Probably more important, however, is the prospect of collusion amongst competing TNCs. Theoretically, one specific reason why such collusion could take place is that a group of firms coming into contact in a series of separate national markets are more likely to recognize their mutual interdependence, i.e., that the outcome of their individual actions depends on the behaviour of the other(s). In certain circumstances, collusion will prove viable even in some of the markets where it would not have been possible had the firms concerned had no contacts (Bernheim and Whinston, 1990). Another possibility along similar lines is "mutual forbearance": firms share out the market, allowing each member of the group certain regions or countries that will be uncontested by the others.

Although the potential for such collusion involving TNCs that is of specific relevance to host countries exists, there is no systematic evidence, particularly for recent years, pointing to such collusion. Most of the evidence regarding collusion, including cartels involving TNCs pre-dates the second world war (Jones, 1986; Caves 1996). In the past few decades, conspicuous instances have been far less common. The decrease in the occurrence of effective collusion involving TNCs could be due to several factors, including, among others, the adoption and enforcement of competition laws by an increasing number of countries; the shift of United States TNCs -- partly in response to antitrust prosecutions, partly in response to opportunities opened up by the immediate post-war reduction in the competitive strength of European firms -- from cooperative to competitive behaviour; the decrease in seller concentration at the world level in most industries due to restored competition from Europe and Japan; and the shift in the product-mix of industries from homogenous goods to heterogenous or differentiated products (Caves, 1996, pp. 92-93). In fact, successful collusion among TNCs seems to have been replaced by imitative rivalry, including reciprocal transnationality: following entry by firm I from country A into country B, its international rival, firm II, located in B, makes a countermove into country A. "The strategic value arises if a subsidiary on the invader's turf establishes both a means of retaliation and a hostage that can be staked out in any subsequent understanding between the two parents" (Caves, 1996, p. 93). Sometimes, companies may pursue "backdoor" collusion through the formation of joint ventures (see box V.4, chapter V).

ii. Monopolizing mergers and acquisitions

Although M&As that involve at least one TNC quite often transcend the purely national level -- posing consequent problems for national competition authorities -- they do not raise conceptually new issues as compared with those involving only national firms. In the case of horizontal mergers, the main issues relate to the increased concentration of market power; in the case of cross-border mergers involving inward FDI, several typical scenarios creating competition concerns are possible. These include:

- acquisition of a firm in a country by a firm that exports to the country;
- merger of parent firms of two foreign affiliates located in a country;
- joint ventures involving potential competitors, one of which is a TNC;
- acquisition of a major firm in a host country;
- acquisition of a firm in the host country by a TNC that may have an incentive to suppress rather than develop the competitive potential of the firm to be acquired.

Each of these can reduce competition in a host country. As far as vertical mergers are concerned, if there is a competition dimension at all, this usually concerns the increased potential for foreclosure of a rival and increasing the difficulty of new entry.

iii. Exclusionary vertical practices

Vertical relationships, as a group, have generated considerable interest in recent years, and competition law related to them are currently under review in a number of countries and in the European Union. The subject is controversial because most specific examples of vertical restraints, and vertical integration itself, entail claims of efficiency gains (removal of pricing distortions, optimized investment levels and avoidance of transactions costs) that must be offset against alleged anticompetitive consequences (foreclosure of rivals reducing contestability and softening of intrabrand and/or inter-brand competition). Invariably, the products concerned in such examples are differentiated, often with leading brand names. Very often, they are produced by TNCs. Although, as a general rule, vertical restraints involving TNCs (or other firms) do not pose competition worries, if combined with market power at one of the stages in the vertical chain, they have the potential to reduce the contestability of markets. This will often depend on the type of industry in which TNCs operate.

iv. Predatory behaviour

Predatory behaviour in general, and predatory pricing in particular, is the practice whereby one, usually dominant, firm undercuts rivals, often new entrants, with the expressed intention to force them out of the market (box IV.5). This can be a rational strategy, for example, if predators achieve monopoly positions and can thereby reclaim their initial losses (assuming that, in the case of TNCs the host country grants or allows such a position), or to create a reputation for toughness. While predatory pricing can be used by domestic firms as well as foreign firms to force competitors out of the market, transnationality may provide additional advantages in this respect -- for example, if there is scope for manipulating transfer prices for this purpose. Underpricing goods and services sold to foreign affiliates could enable them to price products sold in host country markets at excessively low levels. Detecting such predatory pricing would be more difficult, since information on transfer prices is considered an intra-company matter and is difficult to obtain. There is, however, no systematic evidence on the extent to which such practices take place.

Box IV.5. Predatory pricing: an example

One (contested) example of alleged predatory behaviour in the European context involved the Netherlands-based TNC, AKZO, and its behaviour towards a small United Kingdom competitor, ECS. AKZO had a 50 per cent share of the European Union market for a particular type of chemical additive (Utton, 1995); in the United Kingdom its share was 52 per cent, and it had only one substantive competitor, ECS, a small independent firm. It appears that the alleged predatory behaviour was sparked initially by new entry by ECS into the German market -- and an alleged threat from AKZO that, unless ECS withdrew, it would retaliate in the United Kingdom market by "going below cost if necessary" (European Commission vs AKZO, Decision 374/7). ECS applied for, and was granted, an injunction against AKZO. The case continued, and eventually AKZO was fined.

This case illustrates some of the general issues involved. First, because of its sheer size, the TNC (like any large firm) was well-positioned to sustain any losses it might have incurred in a short-lived price war in the United Kingdom for a product. Second, price cutting in one geographical market for one product might make strategic sense if it signalled AKZO's intention to react aggressively to entry by other firms into other markets (in both geographical and product space).

Source: UNCTAD, based partly on Utton (1995), pp. 113-116.

4. Inducing foreign direct investment by granting market power

Governments are sometimes so anxious to attract FDI, or to obtain the highest possible price for the assets they sell to TNCs as part of privatization programmes, that they agree to offer TNCs various kinds of arrangements that grant market power with legal protection against competition in exchange for investment. Market-power inducements, by definition, restrict competition, typically creating monopoly positions or market structures that provide scope for anticompetitive behaviour. Even though there may be positive dynamic effects associated with such inducements, their immediate effect is typically to reduce efficiency; when this occurs, it may affect efficiency -- and, indeed, FDI flows -- in other parts of the economy. Market-power inducements, granted either at the initiative of a government or at the request of a TNC, are examined in this section.

Although some market-power inducements may be combined with fiscal concessions and financial subsidies -- and, indeed, the latter by themselves may lead to market distortions -- fiscal and financial incentives are not the subject of the discussion in this section.¹⁷ There are, moreover, other arrangements such as allowing a TNC to invest in, or take over, a natural-monopoly-type industry (which competitors are almost certain not to enter), especially with few or generous stipulations as regards pricing, that might be attractive inducements because of the market-power they involve. However, the focus here is exclusively on arrangements that involve granting legally-protected market power to TNCs as an inducement to invest in a country. In these arrangements, the main reward obtained by TNCs is not direct financial payment received up-front in the form of financial assistance by the government, or foregone taxes later on, but rather the higher profits (or potential profits) derived from operating in a less competitive environment. The underlying reason for offering these inducements is that, otherwise, an investment would not (or would not be expected to) be made -- and, hence, the benefits associated would not be obtained.

Market-power inducements are generally given to foreign investors in specific "strategic" or key industries -- just as they have long been given to domestic private investors, or have implicitly been retained by state enterprises in such industries. The definition of what constitutes a "strategic" industry in this context hinges on the subjective interpretation of governments. Sometimes, these are industries in which the benefits of FDI in terms of production efficiency, job creation, promotion of technical progress and the acquisition of management and other skills are considered to outweigh the adverse effects in terms of the reduction in consumer welfare by the lessening or absence of competition. The promotion of investments with backward linkages or high domestic value-added is viewed as yielding externalities through economies of scale and agglomeration, and technology spillovers may also be considered sufficiently important to justify creating an anti-competitive environment in the relevant market. The argument is put forward that such benefits could not reasonably have been achieved without offering protection or exclusive rights in the market to the foreign investors involved.

The frequency of market-power inducements for FDI is difficult to assess, and this discussion does not attempt to evaluate their magnitude. Rather it explores, on the basis of concrete examples, the different measures employed by governments to attract FDI and their rationale. (The policies of governments to reduce the potential negative impact of such measures are discussed in chapter V.) The most common market-power inducements used to attract FDI are:

• Granting or transferring exclusive establishment (production) rights. Such exclusive rights of production represent an important market-power inducement in industries (e.g., many services) in which competition could come only from production by local firms (and not from imports). On the other hand, in an industry of tradable goods and in

liberal trade environments, if exclusive rights cover only production, competition may decrease only marginally.

- Granting or transferring exclusive sales (market) rights. Exclusive sales rights eliminate competition by local firms as well as imports. For example, in the case of a lubricant company in Sri Lanka, exclusive sales rights granted to one foreign oil company apparently impeded entry into Sri Lanka's market by other foreign competitors (box IV.6).
- *Introducing or continuing prohibitive import tariffs and non-tariff measures.* Trade protection can be an important market-power inducement for tradable goods and services, especially if supplemented by prohibitions on new FDI and local entry.

Box IV.6. Inducing FDI by offering market protection: the case of Lanka Lubricant Ltd.

The sale of a stake of 51 per cent of the Lanka Lubricant Ltd. (LLL), a state-owned enterprise that was the sole supplier of lubricant in Sri Lanka at the time, to a foreign TNC took place in July 1994. Before privatization, LLL had been controlled by Ceylon Petroleum Corporation (CPC), which produced and sold lubricants through its distribution outlets for the domestic market. CPC had been holding exclusive import, export and sale rights for lubricants since 1964. The acquiring TNC had operations in more than 60 countries, including Sri Lanka.

A 51 per cent share of LLL was sold to the foreign TNC on the following conditions^a:

- (a) LLL was granted exclusive rights of importing and distributing lubricants until 1 March 1997. This period was granted to enable the company to restructure and adjust before being exposed to international competition (the exclusive rights did not extend to lubricants supplied to marine vessels and aircraft within domestic harbours).
- (b) No other company would be authorized to set up manufacturing/blending operations for lubricants until July 2000 (there are at present no other locally based lubricant manufacturers).
- (c) Upon liberalization of imports, the Government agreed to an effective tariff protection of at least 10 per cent for the company. The *ad valorem* duty on base oils and additives (intermediate products for the production of lubricants) imported by LLL would be at least 10 per cent lower than the *ad valorem* duty on lubricants and greases manufactured by the company.
- (d) The company, in spite of the lack of relevant legislation, would receive anti-dumping protection.
- (e) CPC distribution outlets would sell exclusively lubricants and speciality products produced by LLL for a ten-year period starting 14 July 1994.
- (f) LLL would hold exclusive right to store lubricants and greases at CPC warehouses for a period of ten-years starting 14 July 1994.

The TNC put forward a three-year modernization programme involving millions of dollars to upgrade existing blending facilities. The exclusive rights granted to the TNC were given as an incentive to attract the company to invest in the country. This was also expected to have a favourable influence on attracting FDI in general to Sri Lanka.

At present, no other lubricant suppliers play a role in Sri Lanka's national market, although some foreign companies have shown interest in entering Sri Lanka, as the Fair Trading Commission (Sri Lanka's competition authority) discovered after the sale of LLL to the TNC.

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(Box IV.6, cont'd)

Although LLL's sole right of importing and distributing lubricants ended on 31 March 1997, its exclusive blending rights stay in place until July 2000 and its exclusive distributional rights through CPC outlets until mid-July 2004. As regards blending, at present, base oil is imported by LLL with a 10 per cent duty, and this oil is mixed with inorganic additives to produce lubricants. While other suppliers of lubricants may now enter into the market, they have to pay a 20 per cent import duty (duty applicable to the finished products). As for distribution, all CPC outlets will sell exclusively the main lubricant product of the LLL, up to the year 2004. If other competitors wish to enter the market they would have to create their own outlets. As noted by Sri Lanka's Fair Trading Commission, no alternative distribution outlets are now available and the establishment of a new distribution channel would be very difficult and lengthy.

Once it was realized that other TNCs were ready to enter the market without requesting exclusive rights, the Government of Sri Lanka considered the possibility of renegotiating the contract. However, such renegotiation was not pursued because of the fear that the TNC might pull out of Sri Lanka, thus giving a negative signal to other foreign investors considering to invest there. The only mechanism in place to minimize the potential abuse of market power in the lubricant market is the monitoring of LLL by the Fair Trading Commission. In fact, the Commission has the power, under section 23 of the Industrial Promotion Act No. 46 of 1990, to investigate any unreasonable price increase arising from abusive exploitation of market power.

Source. based on information obtained from the Fair Trading Commission of Sri Lanka.

^a The terms of the exclusive rights granted to the TNC were disclosed in the LLL Share Offer Bulletin in June 1996, when 30 per cent of LLL shares were offered to the public.

Quite often, different market-power inducements are combined and reinforce each other. Indeed, trade protection is a type of market-power inducement that often accompanies other measures, as illustrated by the cases of FDI in pineapple products in Kenya (box IV.7) and the privatization of Lanka Lubricant Co. and the Colombo Gas Company (boxes IV.6 and IV.8). Another example is provided by the tobacco industry in the Czech Republic (then the Czech and Slovak Republic) where the previous state monopoly, Tabak, was sold in June 1992 to a TNC in the tobacco industry in its entirety. The inducement in that case was inheriting a legal production monopoly, along with a 65 per cent import tariff, which gave that TNC 80 per cent of the local cigarette market.

Furthermore, especially in privatization programmes, governments in some cases prefer to maximize immediate financial gain and reduce budget deficits by selling monopolies to foreign investors, and pay less attention to long-term effects. An example is the privatization of the Czech tobacco enterprise, mentioned in the paragraph above, in which immediate financial gains were apparently viewed as more important than the long-term impact on consumers.

Finally, sometimes governments may not be fully aware of all the consequences of their decisions on competition and, consequently, on consumer welfare and general economic performance. Asymmetry of information is a major issue for developing countries when facing TNCs with typically more information about international market conditions. Such asymmetry may relate to both the start-up costs involved in an industry and the prospects for alternative sources of FDI.

For their part, TNCs often base their requests for dominant power and/or protection on efficiency arguments. Thus, it is argued that a dominant position, protection and exclusivities compensate for high sunk costs and ensure a minimum scale of profitable operations. When the venture is mainly

Box IV.7. Granting exclusive rights to induce FDI: two examples from Kenya

In Kenya, a large TNC had obtained (at independence and during the country's import-substitution phase) exclusive rights for the production and processing of pineapple products in the country for a 99-year period. The firm also enjoys substantial protection from imports: a 50 per cent tariff on imported canned pineapples. Imports are further restricted by the requirement of obtaining prior ministerial approval for imports of fruits preserved in sugar (GATT, 1994). The reasons for the exclusivity and protection seem to lie in the importance of processed fruits and vegetables as sources of export revenues for Kenya, the world's fifth largest exporter of tinned pineapple (GATT, 1994). In terms of sales revenues, the affiliate was among the ten largest industrial affiliates in Kenya (UNCTAD, 1997a).

Another example is Kenya's soda ash market where another large TNC holds an exclusive mining and processing concession at Lake Magadi. In addition to the mining concession, the exclusivity was extended to contiguous markets, such as the Magadi-Konza railway line that may be, in principle, separate and competitive. The rationale for the exclusivity is probably related to the importance the Government ascribes to the development of the soda ash industry and to the related export earnings. Domestically, some limited competition to the TNC-affiliate's position comes from the small salt mines at the Mombasa coast, which, however, are not able to match that affiliate's market power in the foreseeable future. Imports might create a more credible threat to that affiliate's quasi-monopoly position, but they are discouraged by a 31 per cent import tariff. Furthermore, foreign trade in minerals is restricted to persons in possession of a mineral dealer's licence issued by the Commissioner of Mines.

Source. based on information obtained from the Monopolies and Prices Commission, Kenya.

^a In 1994, GATT estimated that soda ash and fluorspar provided over 2 per cent of Kenya's export revenue (GATT, 1994).

Box IV.8. Inducing FDI by offering market protection: the case of the Colombo Gas Company in Sri Lanka

The privatization of the Colombo Gas Company (CGC), the Sri-Lankan State-owned enterprise, took place in November 1995. A TNC acquired 51 per cent of CGC and was granted an exclusive right to produce and sell gas in Sri Lanka for 5 years and a mandate to increase the price of gas by 10 per cent every year. The major points in the contract were the following:

- The affiliate managed by the TNC would have the exclusive right in Sri Lanka to produce, import, store, and distribute liquid petroleum gas (LPG) and fill cylinders for a five-year period.
- The Government would actively enforce the exclusive rights and prosecute any breach of those rights.
- The company would be allowed to expand in other related activities, or be present in other geographical markets (such as export markets).

Among the factors that apparently influenced the Government's decision to grant the TNC monopoly rights was the fact that the TNC, being a leading company in the petroleum and gas industry, was expected to adopt superior technology and better safety standards than other firms. Furthermore, the company offered to build a new terminal and a pipeline for an estimated investment of \$33 million.

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(Box IV.8, cont'd)

The 10 per cent price increases that were imposed in 1995 and 1996 led to consumer resistance. Given this situation, the Government had another look at the contract. The matter was referred to the Sri Lanka Attorney General's Department to seek an opinion on how to go about renegotiating the terms of the exclusivity.

The Fair Trading Commission (FTC) of Sri Lanka, the country's competition authority, has closely observed these developments. However, it has not been able to play an active role, since Sri Lanka's privatization process has been taking place quite independently from its activities.

Once the exclusivity period is over, the Government envisages permitting and encouraging competition in the concerned market. The terminal facilities will be made accessible on "reasonable" commercial terms to new entrants for import, unloading and distribution of LPG.

Source. based on information from the Fair Trading Commission of Sri Lanka.

export oriented, the dominant position, protection and exclusivities may be justified as being just leverages in building global competitiveness. In the case of public utilities, on the other hand, a request for monopoly position in exchange for investment may be justified in order to ensure universal service requirements: an overall monopoly position is required so that the TNC can provide certain services at below-cost prices to all consumers. These arguments are not unique to TNCs; they are also routinely put forward by domestic producers who seek such privileges. Transnational corporations can, however, make it explicit that, given these considerations, they would invest in other countries should they not receive market-power inducements.

To sum up, granting market-power inducements is generally likely to affect negatively competition as well as consumer welfare in host country markets. While there may be offsetting considerations related to the long-term development contribution of FDI, the need for market-power inducements involving the creation of anticompetitive market structures should be examined carefully, with a view towards minimizing their use and negative effects (see chapter V).

B. Foreign direct investment, market structure and competition in a globalizing world economy

1. The emergence of regional and global markets

As barriers to trade, FDI and the movement of capital between countries have come down and transport and communication costs have decreased, the options available to firms of where to produce and where to sell, and to consumers of from where to buy, have increased. As a result, markets in many industries have shown an increasing tendency to transcend national boundaries, with firms from many countries competing to sell to buyers located in many countries. At the same time, international production has grown rapidly as firms invest abroad, seeking to serve, not merely the national markets of individual host countries, but the larger regional or global markets that are emerging.

Under conditions of liberalization and globalization, TNCs, like other firms, serve markets through international trade whenever they find it possible and profitable to do so, and through FDI and various non-equity arrangements when cross-border trade is not possible or is less profitable

than delivery through the establishment of local production facilities or non-equity arrangements with local firms. The difference between TNCs and other firms in this respect is that TNCs can serve the markets for tradeable products from any production location that suits their strategic objectives, while uninational firms, by definition, cannot or choose not to do so. Increasingly, TNCs organize their international production to combine resources and markets as effectively as possible, locating production activities in different countries according to their overall strategy and integrating them through intra-firm (and/or inter-firm) networks of trade in tradeable goods and services for serving markets through domestic sales in host countries or through trade (UNCTAD, 1995a). The resulting complementarity between FDI and trade is indicated by the more rapid growth of sales by foreign affiliates than arm's length world exports (chapter I), the high share of exports by TNCs in total world exports -- an estimated two thirds (UNCTAD, 1995a) -- and the decreasing share of sales in host countries in total affiliate sales. ¹⁹ The decrease in the share of local sales in total sales is most noticeable for United States and Japanese affiliates in the European Union, reflecting the fact that the elimination of national borders to trade and FDI has proceeded further within the European Union than elsewhere.

With trade liberalization, regional or global markets can emerge for most goods, since they are tradeable and can be delivered to buyers by sellers regardless of their respective locations around the world. Such an expansion of the scope of markets has important implications for the contestability of those markets and, depending upon the characteristics of an industry and the strategies of firms as they respond to the opportunities and challenges presented by larger markets, for the structure of, and competition in, these markets and the resulting impact on performance of the different industries concerned. Foreign direct investment, closely intertwined with trade for obtaining inputs to production as well as for serving these markets effectively, can play an important role in influencing the market structures and the processes of competition in such markets and, hence, the performance of the industries concerned.

The emergence of regional or global markets in the narrow sense described above does not apply in the same manner to services, most of which remain non-tradeable (although modern computer-telecommunication systems are making some of them increasingly tradeable). For them, the geographical scope of the market remains national or even local. Since trade is virtually impossible, markets cannot be integrated regionally or globally through trade. Local production by domestic firms and foreign affiliates is the only means of contesting and serving these markets. However, globalization and liberalization are affecting the structure of these markets and their functioning as well (box IV.9). First, convergence in tastes and demand patterns has meant that some non-tradable products can be standardized: Sheraton, for example, delivers more or less the same set of services -- typically a standard core product with local adaptation -- to consumers in host-country markets anywhere in the world through its affiliates, as does McDonalds. This implies that even if these markets may not be linked regionally or globally through trade, they are regional or global in the sense that they are standardized across borders. This standardization or harmonization makes it easier for TNCs to serve markets through the establishment of affiliates or non-equity arrangements. Furthermore, such standardized markets are likely to create regional or global markets for the tradable inputs that form part of the value-added process in the final (nontradable) products.

(a) Foreign direct investment, efficiency and the structure of regional/global markets

Markets that are regional or global in scope are, in principle, more contestable than markets confined within national borders: other things remaining the same, the number of firms that can serve a consumer in a global or regional market should be greater than if the consumer were served by locally based producers alone. Normally, therefore, one would expect that the actual number of firms

Box IV.9. The globalization of telecommunications and competition

Exchange carriers, the providers of basic telephone services, are becoming increasingly global players, driven by competition and facilitated by deregulation at the national level and technological developments. Although national carriers are still the predominant providers of basic telephone services to their national market, the world telecommunication industry is moving rapidly towards a global structure dominated by a few cross-border firm consortia, alliances, partnerships or distributorships that supply consumers wherever they are located. And in the future these alliances are likely to include not only exchange carriers, but information and entertainment companies as well (Kraemer, 1996). Despite the fact that the configuration of many of these alliances is not yet firmly established, exemplified recently by Telefonica of Spain to pull out of Unisource, a strategic alliance of European-based carriers, and form an alliance with Concert, an alliance that includes British Telecommunications and MCI,^a competition is moving increasingly from the national to the regional and global levels in terms of defining the relevant markets, and from competition between mostly national firms (such as AT&T and MCI in the United States) to competition between international alliances (such as Concert and WorldPartners).

One example of these trends is Global One, an alliance between the national exchange carriers of France and Germany (France Télécom and Deutsche Telekom, both of which have a monopoly position for the international calls of their respective countries) and Sprint (a United States-based carrier which does not have a monopoly for international calls in the United States). Global One "can deliver a common set of telephone services simultaneously in several countries" (ITU, 1996, p. 23) to TNCs, business customers, other carriers and business travellers. In other words, the place where a call originates and the place where it is completed may well be outside the place where the firms in Global One are located. And Global One competes as a group both with other alliances, as well as with national carriers.

Competition authorities allowed Global One only after safeguards were negotiated for competing carriers. Potentially, alliances such as Global One could yield important benefits to consumers in terms of price, quality of service and range of choice through price discrimination and special concessions to customers as long as simple international resale is allowed (the connection of an international private (leased) line to a public switched network) and nondiscriminatory local access and interconnection terms exist. But they may also result in lesser competition if the supply of telephone services is controlled at both ends of an international line by the firms in an alliance.

Sources. UNCTAD, based on Kraemer, 1996, and ITU, 1996.

^a Alan Cane, "Everybody is talking", *Financial Times*, 27-28 March 1997.

that serve any consumer, located anywhere, should increase (and competition intensify), when the market for a product becomes regional or global due to trade and FDI liberalization. This would indeed be the case if the number of firms producing in the industry at the regional or global level remains unchanged when national barriers separating markets are removed.

In actual fact, the number of firms in an industry and in the market for its product and their concentration in terms of shares in regional or global markets could well change when markets shift from being primarily national to being regional or global. The nature of the change would depend on the cost structure and the production characteristics of the industry and the response of firms to the expanded geographical scope of markets for goods. Several possibilities exist as regards concentration (at the supranational level) and competition (in markets for products that are tradable and do not involve prohibitive transport costs):

• In industries in which the capital costs of entry are low, products are relatively standardized, and/or technologies relatively simple and economies of scale (at the plant

as well as the firm level) relatively unimportant, increasing numbers of firms located in different countries are likely to enter (the industry and) the market for the product in response to its increased size due to regionalization or globalization. Such entry may often be through exports, since in such industries there may not be strong enough advantages from internalizing transactions based on ownership-specific advantages. Foreign direct investment and, especially, non-equity arrangements between firms located in different countries, may, however, play a role in increasing the number of suppliers and quantities supplied to such markets, through the transfer of technology for export-oriented production, as well as by providing marketing know-how and access to trade networks to locations and firms lacking these capabilities. In such industries (for example, many kinds of apparel), the structure of regional and global markets in the products themselves is likely to be highly competitive, which brings benefits to potential consumers but also requires considerable adjustment among producers as they compete on the basis, essentially, of the combined competitive advantages of particular locations in production and particular firms in international marketing.

- In industries with high set-up costs, large production scale economies at the plant level, and organizational complexity, production is likely to be concentrated in a few locations and goods delivered to regional or global markets through export. Such markets could become highly concentrated as the limited number of firms that existed in the markets prior to globalization respond to the larger size of regional or global markets by increasing their scale further, including through mergers with other firms. (The aerospace industry and the proposed Boeing-McDonnell Douglas merger are possible examples.) In principle, the few firms in such an industry could be located anywhere that they find suitable, and firms based in different countries could combine or form alliances for specific purposes of raising capital, conducting R&D, marketing, or undertaking intermediate activities, involving specific factors of production that could be performed in countries other than those where the main production activity takes place. Competition and its impact on performance will depend mainly on how many firms or groups of firms worldwide have the capacities to invest on the scale required for participating effectively in such markets.
- In industries in which economies of scale at the firm level (due, for example, to R&D, advertising and/or marketing expenditure), economies of scope, and/or plant level economies in intermediate production activities are important, and in which the value chain can be separated into discrete activities, firms respond to the expanded regional or global scope of markets by combining international production (through FDI or nonequity arrangements) and trade efficiently; they organize (or in the case of firms that are already transnational, reorganize) their production activities internationally in an integrated manner to augment their resources, minimize their resource cost, reap economies of scale at various points in the value chain and reach as large a market as possible. In such industries, the number of firms operating in markets that are regional or global could either decrease or increase (in comparison with those prevailing before globalization), depending upon how many firms are able to build up and manage effectively the intra-firm or inter-firm networks necessary to compete successfully. Moreover, regardless of market structure in terms of the number of firms or concentration, as long as entry is open, competition could be quite intense and industry performance could improve, mainly because of the efficiency gains that can ensue from integrated international production, and especially when such integration facilitates innovation.

The interaction between FDI and competition in regional and global markets is likely to be most evident in the third type of industry, in which firms are most able and likely to take advantage of the opportunity to combine trade and FDI efficiently. Firms in such industries are rationalizing their production across borders and pursuing complex integration strategies through intra-firm production rationalization and inter-firm agreements and strategic partnerships (chapter I; see also UNCTAD, 1993b).

Firms are doing this to become more cost-efficient and competitive. This restructuring in production takes place through FDI that is efficiency-seeking/asset-acquiring and through cross-border inter-firm agreements with similar objectives. Through FDI, some firms are strengthening their core competencies and market positions, by establishing new production facilities, shedding unrelated activities and merging with, or acquiring, related firms (witness, for example, the recent wave of cross-border mergers and acquisitions). For TNCs that already have a network of foreign affiliates, the response to the globalization of markets and increased competition is frequently an intra-firm rationalization of production across the corporate network (UNCTAD, 1993b). Firms are also establishing links with their international competitors for well-defined activities at specific stages of the production process through strategic partnerships. In sum, firms in several industries are locating production anywhere in the world from where they can supply products wherever the markets are located, in a constant search for efficiencies in production and marketing.

The process of international restructuring has led to a reduction in the overall number of producers in some industries at the regional or global levels. In the hard disk-drives industry, for example (discussed below) -- an industry characterized by high R&D expenditure, scale economies at the production stage, growing global markets and significant international production -- the number of manufacturers worldwide has decreased from 59 in 1990 to 24 in 1995, with most of the decline taking place after 1993. In pharmaceuticals, another industry characterized by high costs of entry due to high capital and R&D intensity, the top 16 firms worldwide accounted for 35 per cent of the global market in terms of sales in 1989, up from 33 per cent in 1981 (OECD, 1993, p. 140).

The reduction in the number of producers worldwide and the greater concentration at the regional or global level provide greater scope for the emergence of international oligopolistic structures. This is indeed the case in some industries, as illustrated by the market for hard disk drives (see discussion below). However, these new international oligopolistic structures are often qualitatively different from similar structures of earlier times. Like their predecessors, the new oligopolistic structures involve a high degree of concentration; but they tend to be less hierarchical and more network-based, and/or less stable and more loose than their predecessors. One example is the formation of global knowledge-based networked oligopolies in bio-pharmaceuticals (box IV.10) and another, the integrated international production structures in hard disk drives (see below).

Of particular interest are oligopolistic networks that take the form of strategic partnerships involving a single component of the value chain, namely, R&D. Traditional concentration measures defined in terms of shares in product markets do not capture the greater concentration in (the market for) R&D that may be the outcome of such partnerships. Yet, greater concentration in (the market for) R&D can, in turn, affect competition in product markets, for example, by giving the TNCs involved in a partnership the power to reduce innovation competition for the creation of substitute products.

Ease of entry (and exit) is a key determinant of market structure at the regional and global levels. High cost-related barriers to entry (e.g., sunk costs) in industries in which TNCs tend to be found imply that even when markets are regional or global, TNCs are often likely to compete in highly concentrated markets. And to the extent that the integrated production structures of TNCs strengthen entry barriers

Box IV.10. Knowledge-based oligopolistic networks in bio-pharmaceuticals

Within the pharmaceutical industry, there is evidence that a global networked, knowledge-based bio-pharmaceutical oligopoly is emerging. By the end of the 1980s, the top ten pharmaceutical firms in the world, all TNCs, had begun to consolidate their position in biotechnology through a wave of acquisitions of smaller biotechnology firms facing financial difficulties because of sharply rising R&D costs: for example, Genentech was acquired by Hoffmann La Roche, Chiron was acquired by Ciba-Geigy and Affymax was acquired by Glaxo. At the same time, pharmaceutical companies began to weave a net of cross-border R&D or knowledge-based alliances with other firms and research institutions: SmithKline Beecham is reported to have more than 140 such alliances worldwide as of 1995 and Glaxo has more than 60 such alliances, 50 with universities in the United States. But despite the proliferation of cross-border strategic alliances in pharmaceuticals in recent years, most alliances are still undertaken between national firms, within countries.

Recently, however, the formation of cross-border alliances in pharmaceuticals has intensified. Indeed, all of the largest pharmaceutical companies are now involved in R&D or technology partnerships with other pharmaceutical or biotechnology firms. The outcome of this is the reconfiguration of the industry and the emergence of a networked knowledge-based oligopoly. In contrast to the 1980s when the pharmaceutical industry was consolidated primarily through mergers and acquisitions, national R&D alliances and cross-border marketing alliances, in the 1990s the international reconfiguration of that industry is taking place increasingly through cross-border R&D alliances. These alliances create oligopolistic structures not in the market for the final products, where pharmaceutical companies continue to compete vigorously, but in the market for technology and know-how. These structures potentially may become barriers to entry, in which case the international market for pharmaceuticals might become less contestable. This would have negative implications for competition in the market for pharmaceutical products. On the other hand, to the extent that strategic partnerships strengthen innovatory capabilities of the firms involved in the partnerships, they may also strengthen innovatory competition, with potential benefits for the long-term performance of the industry.

The experience with strategic R&D partnerships to date has shown that, although the firms involved cooperate with their international competitors in research and product development, they continue to compete vigorously in the final goods market, as illustrated by the bio-pharmaceuticals industry. However, the dynamic effects of these partnerships may give rise to anticompetitive practices, especially as regards setting industry standards that may act as barriers to future entrants.

Source: UNCTAD, based on Mytelka, forthcoming.

(by, for example, increasing the minimum scale of efficient production, as in the case of hard disk drives, discussed below), the contestability of the market for an industry's product could be reduced and concentration increased.

At the same time, when international production is integrated, the intra-firm specialization and rationalization of production on a regional or global scale enable TNCs to reduce costs and achieve economies of scale and scope at more points along the value chain (UNCTAD, 1993b and 1995a):

 Through an international specialization within TNC systems (each comprising a parent firms and its foreign affiliates) at the stage of intermediate or final goods production, TNCs can increase efficiency by accessing low-cost inputs and/or reaping economies of scale and scope.

- Efficiency gains in marketing and distribution arise from economies of scale associated with a functional division of labour that makes one (or few) affiliates within a TNC system specialize in distribution, taking charge of the regional or global marketing strategy and distribution to a number of locations for the firm's product (e.g., developing an overall theme for advertising that may then be slightly modified in campaigns targeting individual countries).
- By integrating R&D functions performed within their systems at different locations on a regional or global scale, TNCs can access inputs to the innovation process and exploit economies of synergy and time zone differences to speed up development, reduce costs and innovate more effectively.

As already mentioned, TNCs are also integrating specific activities of the value chain by concluding cross-border inter-firm agreements and strategic partnerships with other firms (chapter I; see also UNCTAD, 1993c). The principal motive for concluding such agreements is to improve efficiency by sharing costs, expertise and knowledge or distribution outlets with other firms:

- Research-and-development partnerships can improve efficiency by lowering the costs for each partner, and improve economies of scale through the pooling of financial resources, accessing new sources of finance, or spreading risks over a broader base (chapter I).
- Efficiency gains for TNCs engaged in cross-border agreements at the stage of final goods production come from reducing production costs through component sharing arrangements (e.g., Mazda and Ford sharing auto body platforms and transmissions), "integrated" subcontracting agreements with local suppliers and from synchronizing production cycles.
- Efficiency gains in marketing and distribution arise from economies of scale and from cost-reduction through sharing outlets with other firms through inter-firm agreements. By using each other's distribution network (for e.g., as in the case of alliances in telecommunications or airline reservation systems), TNCs in a strategic alliance can reach more consumers. Marketing costs can be reduced by sharing know-how and information, or through joint advertising campaigns.

However, integrated international production also involves transaction costs related to managing and coordinating functions, activities and flows of information across borders. Although technological innovations in communications have reduced some of these transactions costs, they can be substantial, and the inability of TNCs to manage such structures effectively can lead to inefficiency and misallocation of resources. To the extent, however, that TNCs become more efficient by pursuing complex integration strategies and that such TNCs dominate their industries, production performance of the industry as a whole (as, for example, automobiles and electronics) could improve in terms of cost per unit, quality of products produced and innovation (UNCTAD, 1993c).

(b) Competition effects

If the regional or global markets in which TNCs operate remain contestable (especially through liberal trade and FDI policies in goods and a liberal FDI policy in services, as well as the application of competition law), the scope for non-competitive or anticompetitive behaviour by firms is likely to be limited. In that case, TNC activity is likely to increase competition through cost,

quality or innovation; and improved efficiency due to integrated international production is likely to be procompetitive and benefit industry performance and consumer welfare in static as well as dynamic terms -- that is, through cost reduction or increased range of products within existing technological and resource constraints as well as through innovation and the introduction of new products. The distribution of the gains from this improved industry performance will depend, in the long term, on how productive factors in different countries are linked to an industry and the spillover effects to domestic firms from competition with foreign firms. Productivity spillovers from parent firms or affiliates to domestic firms in particular locations will depend to some extent on factors similar to those discussed in section A. Given, however, that integrated international production for regional or global markets implies a greater degree of specialization in each location, much depends on the particular activity that a country can attract: here, building up the human capital and infrastructure conducive to higher value-added activities and especially R&D becomes crucial for benefiting from spillover effects. In their absence, the scope for TNC activity to contribute to the dynamic comparative advantages of a particular location through contributions to innovatory capacity is limited, both because of the reluctance of TNCs to locate such activity in such a location and because of a lack of indigenous enterprises to compete with TNCs in the relevant market (regional or global as well as national) and benefit from spillovers.

If contestability in regional or global markets is low and competition lacking, however, efficiency improvements due to integrated international production could lead to the emergence of additional barriers to entry and anticompetitive results might emerge, in the form of a monopoly (or tight oligopoly) or scope for restrictive business practices by the firm(s) that remain. The business practices that TNCs might implement in concentrated and/or non-contestable global or regional markets are, in many cases, similar to those that might be practised in host country markets, although they may involve more complex geographic patterns. However, a number of practices can apply specifically to TNCs that are involved in integrated international production through either equity or non-equity (contractual) arrangements. These arise when a TNC has control over more stages of the production process and a wider range of activities than do competing local or foreign firms. Such control can give rise to a number of practices, with procompetitive or anticompetitive effects: for example in the airline industry, to discourage customers from spreading purchases across different sellers, TNCs could offer quantity discounts, fidelity rebates or frequent flyer programmes to their customers and link these across national markets. This could leave local firms at a competitive disadvantage by reducing their ability to sell and could, under certain conditions, be considered as constituting predatory pricing. The scope for predatory pricing may also be increased due to the greater significance of intra-firm trade for TNCs that engage in integrated international production; such TNCs are in a position to utilize transfer pricing, e.g., to engage in anticompetitive crosssubsidization to a greater extent than other firms. Integrated TNCs could also create more formidable obstacles to new entry in a market than could separate firms operating at each stage of production. With separate firms, a new local entrant has the opportunity to enter just one stage of the production process, and sell to downstream firms or buy inputs from upstream firms. Facing an integrated TNC reduces the size of the potential market available to the new entrant (and possibly also its sources of input supply), thus limiting chances of successful entry.

In addition, integrated international production through contractual arrangements and alliances carries some specific practices that may be restrictive and might have anticompetitive effects, while at the same time enhancing the efficiency of the firms involved. One important example relates to innovation which has become a crucial element of competition in a globalizing world economy. Transnational corporations in strategic partnerships can not only influence the speed of innovation for substitute products, but they may also set industry-wide technological specifications and technical standards while new products are still at the innovation stage, and such standard

setting could hinder the development of substitute products and could lead to market dominance in the future. In other words, by cooperating in precisely those areas that form the basis for future competition in product markets, TNCs in partnerships could become exclusionary networks controlling the pace and type of innovation and flow of privileged information to firms that are not members of that partnership.

The above set of competition concerns raises the issue of possible responses of local firms when faced by integrated TNCs. Horizontal market power is normally harmful to consumers, but can be attractive to local firms that benefit from higher market prices. However, the same is not true of vertical integration. The possibilities of foreclosure and predation raise concerns to rival producers, and ultimately also to consumers. Rival producers may also be worried by enhanced efficiencies and the elimination of successive mark-ups by integrated TNCs because these tend to reduce prices -- but these are likely to benefit consumers.

(c) Integrated international production, market structure and competition: the hard disk-drive industry

The hard disk-drive (HDD) industry, an important segment of the electronics industry, ²¹ which is highly globalized in terms of international production as well as trade, serves to illustrate some aspects of the interaction between FDI, market structure and competition under conditions of globalization and integrated international production. It shows that, under certain circumstances, globalization and the growth of integrated international production can go hand in hand with high and increasing concentration of markets at the global level. Nonetheless, market positions of individual firms can be volatile, and there can be several new market entrants, all leading to a highly unstable global oligopoly and fierce competition in an industry.

i. Industry characteristics and market-entry conditions

Hard disk drives are widely used in computers of all sizes, from the most powerful supercomputers to laptop PCs. They are high-precision machines that contain and rotate rigid disks on which data are magnetically recorded, and that control the flow of information to and from those disks. These machines combine the characteristics of mass production with very short product cycles and periodic trajectory-disrupting innovations (Ernst, 1996). Product differentiation is relatively unimportant. Barriers to entry are high, deriving mainly from economies of scale in production (at the assembly stage as well as in the production of the various components and parts that go into a drive), and from demanding engineering requirements. High R&D costs, as firms race to improve technology in order to squeeze ever more memory into diminishing space, are another factor affecting the ability of firms to enter the industry. ²² At the same time, the subassembly activities involved in the production of HDDs are labour-intensive and difficult to automate. All this means that, to enter and remain competitive in the industry, firms must combine technological and financial strengths with organizational efficiency to keep manufacturing costs low and deliver the product rapidly to markets.

ii. Integrated international production in hard-disk drives

The internationalization of HDD production has proceeded rapidly since the early 1980s, when Seagate (United States), only three years after its founding, decided to move a large part of its drive assembly to Singapore. One year later, Seagate established a second affiliate in Bangkok (Thailand). In 1984, Maxtor (United States), another leading HDD manufacturer, established an

affiliate in Singapore. Since then, all leading HDD manufacturers have shifted most of their final assembly to Asia. The outcome has been a degree of reliance on international production well beyond that in other product areas of the electronics industry, such as semiconductors (Ernst, 1983 and 1992) and consumer electronics (Bloom, 1992). In 1995, less than 5 per cent of the final assembly of HDDs remained in the United States, while 64 per cent was conducted in South-East Asia.²³

Manufacturers in the industry have progressively integrated their operations into increasingly complex international production networks. They have broken down the value chain into discrete functions and have located each function wherever it can be carried out most effectively or wherever the penetration of important growth markets is facilitated. Reduction of transaction costs and improvements in efficiency are important motivations behind this. Of equal importance, however, are access to low cost and skilled labour, clusters of specialized capabilities and contestable rapidly growing markets, and the need to speed up response time to technological change and to changing market requirements. A typical network includes not only a parent firm and its affiliates, but also its suppliers and subcontractors, its distribution channels and value-added resellers, as well as its R&D alliances and a variety of cooperative agreements (such as standards consortia). The parent firm derives its strength from its control over critical resources and capabilities, and from its capacity to coordinate transactions between the different network nodes. One such source of strength is the intellectual property and knowledge associated with setting, maintaining and continuously upgrading a *de facto* market standard. This requires constant improvements in product features, functionality, performance, cost and quality. The lead firm outsources not only manufacturing, but also a variety of high-end support services, such as engineering and R&D.

The current industry leader, Seagate, operates 22 plants worldwide, 14 of them in Asia. Asia has absorbed most of the company's high-volume labour-intensive assembly activities and the production of low- and mid-range components. High-end, knowledge-intensive stages of the value chain, such as precision component manufacturing and R&D, remain in the United States, in a few highly specialized regions in Minnesota and California. Furthermore, Seagate's production network in Asia has evolved to include a regional division of labour to take advantage of the differing labour-cost advantages of countries in the region. Bottom-end work is done in Indonesia and China. Malaysian and Thai plants make components and specialize in partial assembly, with the latter accounting for the largest share of low labour cost manufacturing. Singapore is the centre of gravity of this regional production network: its focus is on higher-end products and some important coordination and support functions. It completes the regional production network by adding testing, which requires precision. Increasingly, the managers and engineers in its Singapore operations are drawn from the international labour market, including developing countries such as China, India and the Philippines.

iii. Market structure and competition in the industry

a. Increasing concentration

The production of HDDs is one of the most highly concentrated segments of the electronics industry despite the highly globalized markets for its products. Concentration at the global level is increasing. Furthermore, in 1995, nine companies went out of business, and only three companies entered the industry, all of them in niche markets. During the same year, Seagate, the current market leader, acquired Conner Peripherals, the company that was the world market leader in 1992. Two big companies, Hewlett Packard and DEC, left the HDD segment of the electronics industry altogether in 1996.

The four largest HDD firms account for over 50 per cent, and the eight largest for 90 per cent of total revenues in the industry. United States' companies are clearly dominant, accounting for the top six HDD producers.²⁵ (One, Maxtor, has recently been acquired by the Hyundai group (Republic of Korea)). ²⁶ Concentration ratios are also quite high for the two main components of HDDs: heads and media.

b. Factors fostering concentration

Integrated international production has influenced concentration in the industry by enabling the leading firms engaged in such production not only to reap the scale economies characterizing certain aspects of the production process, but also to increase the minimum scale requirements for efficient production and complex capability requirements.

- *Economies of scale.* Scale economies, of critical importance in HDDs, relate largely to costly overhead investments such as the construction of "clean room" environments and expensive test equipment needed in final assembly, and to the production of precision tools, moulds and dies that are needed for producing the various high-precision components and parts that go into HDDs. Driven by growing demand, leading firms have adjusted their scale of operations so that minimum economies of scale in HDDs have grown rapidly over time. In 1989, an annual production capacity of between 900,000 and one million units²⁷ was regarded as the minimum scale requirement (Ernst and O'Connor, 1992, p. 194). Subsequently, it was estimated, that "...the minimum efficient scale in the disk drive assembly business is about 4 million units (per annum)" (Christensen, 1994, p. 18). Minimum scale requirements have recently increase further. Maxtor, for example, reported a production capacity of 4 million drives *per quarter* in its main plant in Singapore for 1996.²⁸
- *Complex capability requirements.* The industry is characterized by rapid technological change: areal density (the amount of information that can be stored on a given area of magnetic disk surface) is increasing by about 60 per cent annually.²⁹ The speed of access to data is also important. To cope with both requirements, HDD producers must be able to tap into scientific knowledge across a wide technological front. Success in the HDD industry also depends crucially on developing innovative architectural designs that can provide cost-effective solutions to trade-off between size, storage capacity and access time of drives. Leading-edge software capabilities are another important prerequisite.

Hard disk-drives require a variety of high-precision engineering capabilities, mastery of complex process technologies, and skills for implementing leading-edge automation techniques for final assembly. Transnational corporations with integrated international production networks that have access to engineers and skilled technicians at reasonable cost and are, moreover, able to combine them effectively with other activities located elsewhere, are likely to have a competitive edge in this respect.

iv. Globalization and volatility of market positions: the dynamics of competition in hard disk-drives

a. Volatility of market positions

Despite its tight and concentrated oligopolistic structure, the market for HDDs is characterized by continuous price wars, very short product cycles and highly volatile market positions. No firm,

even the market leader, is safe from a sudden reversal of fortunes. Market leadership positions change very frequently.

This means that the development of technology, products and markets in HDDs is not dominated by a small group of (United States) firms. In other words, concentration in this industry does not indicate a low degree of market contestability and competition. While concentration is fostered by the large investment outlays and cost economies necessary to reap economies of scale and scope in the industry, firms' positions cannot be taken for granted. Only companies able to get the right product at the right time to the highest volume segment of the market can survive. Entering a new market on time can provide substantial profits. Being late can be a disaster that can force a company out of business. Probably of greater importance, however, is the increasing uncertainty that results from periodic trajectory-disrupting innovations.

b. Forces conducive to market disruption

Disruptions of market positions in the HDD industry can be traced to three main sources:

- *Very short product cycles.* In HDDs, on average, a new product is generated every 9 to 12 months, in some cases in as little as 6 months.³⁰ This leads to rapid depreciation of plants, equipment and R&D. It also leads to spurts of capacity expansion for rapidly bringing new products to the market.³¹ The result is a built-in tendency for an overshooting of investment in relation to the growth of demand. This has a paradoxical consequence: as mismatches between demand and supply occur periodically, the capacity to exit rapidly becomes as important as the capacity for rapid expansion of production.
- *Complex supply chains.* Procurement of the wide range of high-precision components and sub-assemblies that HDDs require involves a variety of sources spread over different time zones and continents. Such global supply chains are prone to frequent disruptions. Suppliers can cause disruptions through late deliveries or through the delivery of defective materials. Of equal importance are periodic supply shortages for key components, such as heads, media, integrated circuits and precision motors. Geographical distance often magnifies the impact of such disruptions.
- Volatile demand patterns. The main market for HDDs is the computer industry. Computer companies therefore exert considerable influence on the product mix, the product cycle and the pricing strategies of HDD vendors. But because breakthrough innovations in architectural design and in component technology have periodically caused serious turmoil in HDDs (Christensen, 1993), passive subordination to customer needs may lead to dangerous complacency. Market leaders have often listened too attentively to their established customers and ignored new product architectures whose initial appeal was in seemingly marginal markets (Christensen, 1993, pp. 21-22). To be competitive, firms must combine technological strengths in the development of key components and architectural design with the capacity to identify and develop new markets for new applications.

* * *

The HDD industry illustrates that, in contrast to what might be expected when FDI and trade become freer and expand together, globalization may well increase concentration, and this process may be accentuated by integrated international production. As high-technology industries characterized by significant scale economies and sunk costs become more globalized, and firms seek to take advantage of the larger markets that open up while minimizing costs through integrated production networks, both sunk costs and scale economies increase, giving rise to further increases in concentration. Price wars may cause higher concentration by forcing out marginal producers and by reducing profit margins for potential new entrants. However, a high degree of concentration need not necessarily be equated with the absence of competition or of the competitive discipline of potential entry. Market disruptions -- caused, in the case of HDDs, by short product cycles and volatile demand patterns, as well as interruptions in the complex supply chains of integrated producers -- can give rise to unstable market positions for firms. The experience of the HDD industry suggests that, as competition increasingly transcends national boundaries in a liberalized and globalized world economy, while firms are free to combine FDI and trade in the pursuit of efficiency, there is the need for a fresh look at the determinants of market structure and firm behaviour.

2. International production, supply response and competition

Under conditions of globalization and the liberalization of policies related to FDI and trade, international production may not only affect the structure of, and competition in, supranational markets in some industries, but may also affect the ways in which -- and the speed with which -- firms respond to non-transitory increases in prices in markets. Such price increases sometimes, for example, when they follow a merger or acquisition or are undertaken by a dominant firm, trigger concern on the part of competition authorities and lead to an examination of whether new supplies are likely to enter a given market ("supply response" by potential competitors).

For a supply response to be relevant, it needs to be rather fast: between the time that an opportunity (e.g., a non-transitory price increase) arises and the time servicing a market can begin, not more than, say, one to two years should elapse. If this condition could be met, FDI and non-equity arrangements by TNCs would, indeed, represent an important supply response by potential competitors, a possibility that needs to be taken into account explicitly and fully by competition authorities (alongside that by local producers and imports). Its potential importance arises from the fact that the value of sales of foreign affiliates is higher than that of world imports (of which, in turn, about one-third are intra-firm) and that, for many services, FDI is the only way in which an international supply response can take place.

There are a number of reasons which suggest that FDI and non-equity arrangements for production by TNCs today allow a supply response to market opportunities that increasingly rivals that by local firms and imports. Transnational corporations, of course, also respond, like other firms, through trade and the expansion of supply by local facilities already in place. In the case of trade, TNCs sometimes have greater flexibility to respond as they might rapidly be able to bring to a specific market supplies of a product that they did not previously sell in that market, by rerouting supplies of goods from other affiliates through distribution networks that have already been established in the country in which a supply response is profitable; by concluding marketing agreements with independent firms; or, simply, by using arm's-length trade. The expansion of supply by local facilities already in place may be facilitated because of the financial and technological strengths of TNCs, which may make it easier to acquire firms or enter into mergers or alliances, so that existing capacities could be strengthened in the relevant product market -- for example, by using more fully or efficiently previously unused and underused facilities and assets, and by drawing on the resources available in the TNC system. Transnational corporations may also be able to rely on internationally recognized brand names which could make entry into a market easier.

Most importantly, TNCs may be in a position to provide a supply response by adding production capacity to their existing facilities, by entering into non-equity arrangements or alliances, or by undertaking greenfield investment to establish new production facilities in order to enter a market for the first time. This would be particularly important in services. In today's world economy, such a supply response is facilitated by a number of factors, with many of them being based on the fact that all countries seek to attract FDI, firms have already foreign affiliate networks in place, technological developments make the establishment of new affiliates relatively easy and competitive pressures often make the exploitation of new opportunities irresistible:

- Scanning for opportunities. Transnational corporations, and especially large ones, constantly scan markets for business opportunities that would strengthen their competitive position. Because of their worldwide networks of affiliates and flows of information within them, they are often in a better position than other firms to know about changes or developments in markets that create profitable opportunities.
- Experience. Experience gained through exporting (which often precedes FDI) and, in the case of TNCs that already have networks of foreign affiliates, experience gained through the establishment of those networks, make it easier for many TNCs to overcome the costs and problems associated with setting up a new production facility in a foreign location relatively quickly.
- Access to resources within TNC systems. The ability of TNCs, especially those with large networks of affiliates, to access, within their corporate systems, assets needed for production and marketing such as hard and soft technology and brand names (in which costs have already been incurred in other parts of their transnational corporate networks), as well as finance and other resources, such as managerial expertise, available outside their corporate systems at low cost, wherever these may be located.
- Access to markets. The ability of TNCs to access larger geographic markets through FDI and trade, thereby reducing the risks associated with entering any single national market and, therefore, reducing vulnerability to business cycles.
- *Spreading risks.* The ability of TNCs to spread risks over a wider, internationally diversified corporate base.
- *Alliances.* The ability of TNCs to overcome R&D and other barriers related to high entry cost by engaging in strategic alliances.
- Assistance from affiliates. The ability of TNCs to draw upon affiliates already established in or near a given location for assistance on specific matters related to a new investment.

All this does not mean that TNCs do not face disadvantages related to transaction costs and other difficulties of operating in a foreign environment. But, overall, the above factors facilitate and, in some cases, give TNCs a competitive advantage in entering a market through new investment; and, presumably, the more TNCs are established internationally, the greater this advantage becomes.

Of course, the actual length of time it takes between identifying a profitable opportunity in a market on the one hand, and creating new capacity and begin selling a product in a host country's market on the other, varies according to a number of factors, including the nature of the product and the industry, the capabilities of the TNCs involved and the characteristics of the market in question. But the considerations mentioned above suggest that the response by TNCs could be quite quick.

In general, moreover, supply response may be faster in services and in manufacturing activities that do not require sizeable new physical capital outlays for production. For example, Citibank got its credit-card operations in Pakistan up and running in under one year. Both, Citibank's experience and the nature of the service are likely to have been important factors in determining the relatively short duration within which supply capabilities were established, despite the fact that the product was new to the country.

In some manufacturing industries as well, duration can be quite short (box IV.11). There are also signs that it is decreasing further: in hard disk drives, for instance, the time taken from the start of production to bringing the product to the market on the basis of full capacity operations has decreased to nine months. Even in such highly capital-intensive manufacturing industries as automobiles, the time needed for establishing a production base and delivering the product to the market is not that long. For example, large scale investments of some \$500 million in passenger-car production by BMW (Germany) and Daimler Benz (Germany) in the United States, and by Daimler Benz jointly with Swatch (Switzerland) and SOFIREM (France) in France, took between two and a half and three years after the start of construction of production facilities for the product to be ready for delivery to customers.³²

All this suggests that the supply response by TNCs which have not yet invested in a country, or are not yet producing the product in which a profitable opportunity arises in the relevant market, should be considered routinely, along with the responses of domestic producers and imports, in assessing competition in a market.

Box IV.11. Supply response through FDI

It took Siemens Semiconducters (Germany) under two years from the time of its decision to locate the production of semiconductors in North Tyneside (United Kingdom), to have its facilities ready for commercial production. Hyundai (Republic of Korea) announced its decision to invest in semiconductors (64mb-drams) in Scotland in October 1996; the facility is expected to begin production in October 1998. Similarly, the announcement of the decision to invest in Scotland was made by Chungwa Picture Tubes (Taiwan Province of China) in November 1995, and production is expected to start in September 1997.

Source: UNCTAD, based on information obtained from Siemens and Neil Hood.

C. Conclusions

As countries liberalize their FDI regimes and rely more on market forces to determine the volume, nature and impact of TNC activities in their economies, the question of ensuring competition and keeping markets functioning efficiently assumes increasing importance. Transnational corporations can inject competition into markets for goods and services and contribute to improving

their efficient functioning. This is especially relevant in the case of markets for the products of industries that have high start-up costs and economies of scale and scope that make entry difficult, because TNCs tend to be particularly active in such industries. However, the same competitive strength that enable firms to expand their international production activities could, under certain conditions, also create opportunities for TNCs to eliminate competitors and assume dominant positions within markets, leading to possible reduction in market efficiency, and to engage in anticompetitive behaviour.

The product markets that are affected by FDI include those that are confined, in terms of geographic space, to individual national economies, as well as product markets that span several countries or the globe. With respect to national product markets, the principal interest centres around markets in host countries, especially developing economies. Past experience suggests that the entry and operations of TNCs may reduce concentration in host developed countries, although the increasing trend towards entry by M&As could mean that this may be changing. In developing host countries, the entry of FDI per se usually adds to the number of firms in an industry, with the potential to decrease concentration and increase competition in the market. Foreign affiliates are, however, often larger in size than their local rivals, and have greater technological, marketing and innovatory capabilities; this could lead to increased concentration in the industry due to the crowding out of domestic firms or the exit of some of them due to insufficient capacities to compete successfully. Concentration, by itself, is not a problem if markets remain open to competition, including also from imports in the case of goods and from TNCs in the case of services, and especially if the local firms that remain in an industry are able to withstand competition from foreign affiliates and further build up their own capabilities in response to it. In that case, competition from foreign affiliates not only benefits consumers by improving market efficiency, but affects the production performance of the host industry (and economy) through spillovers of efficiency and productivity from foreign affiliates to local firms. It could also influence dynamic efficiency if competition takes place through innovation.

However, if local firms have not yet built up the capabilities (as is often the case in developing countries and especially the least developed countries) to compete with foreign affiliates, the impact of FDI on competition and market efficiency in host countries depends upon the extent to which foreign affiliates compete among themselves and also with foreign suppliers (in the case of traded goods and services). If a concentrated market structure emerges, competition effects will also depend on the conduct of the dominant firms, including TNCs. Over time, if domestic firms are able to build up the capabilities necessary to re-enter an industry, competition would again increase.

If concentrated markets emerge as a result of TNC entry and participation, there may be scope for firms to indulge in anticompetitive and restrictive business practices in host countries. Some of these practices are related to, or facilitated, by cross-border relationships and contacts that are specific to TNCs. In addition, granting TNCs market-power inducements (in the form of legal restrictions on entry and competition by other firms) in order to attract their investments has, by definition, anti-competitive effects, resulting in welfare losses that may not be necessary.

Moreover, in a liberalizing and globalizing world economy, TNCs operate increasingly in markets that are no longer national but rather increasingly regional or global in scope, with sellers and buyers from several different countries transacting across national borders. In several industries, these TNCs integrate their value-added activities internationally, either within their corporate systems or through inter-firm agreements, achieving efficiencies in production associated with functional specialization and economies of scale and scope. This influences the nature of competition at the regional and global levels in a number of ways.

Firms that achieve gains in production efficiency can lower prices, introduce better quality and introduce new products to capture a greater market share; in this way, integrated TNCs can compete vigorously with other firms -- both single-nation firms and other TNCs. This may lead to increased concentration in the relevant market but could also yield benefits for consumers. The degree of concentration (at the supranational level) in these markets is, nevertheless, a matter of interest from the viewpoint of competition.

Integrating various activities located in different parts of the world through integrated international production within TNC systems and through cross-border strategic partnerships between firms is an increasingly important characteristic of several industries. This may appear to reduce an industry's contestability due to concentration among firms and, hence, to reduce competition as well. However, a reduction in contestability is not due to integrated production or strategic partnerships per se, but to the fact that sunk costs (and risks) and scale economies associated with certain activities, such as R&D, innovation and new product development in some industries are high. In fact, R&D partnerships could increase contestability by allowing firms, especially small and medium-sized ones, that would not otherwise have the resources to do so, to enter an industry, or put new products on the market faster than they would have been able to do in the absence of partnerships. Integrating R&D through partnerships need not, therefore, necessarily give rise to anticompetitive effects. In addition, how firms compete in the final goods markets depends, more and more, upon what happens to competition at the stage of innovation. Intra-firm integration of R&D activities within TNCs, as well as strategic cross-border R&D partnerships could play an important role in fostering innovation for dynamic competition but could also, under conditions of high concentration at the R&D level, reduce innovation-competition in a market.

Finally, the existence of networks of TNC affiliates enhances the role of a supply response through FDI in markets. It is, moreover, the only kind of international supply response for most services and other location-bound activities. This suggests that the speed of a supply response through FDI must be considered when defining the relevant market or assessing the implications of certain arrangements for competition in markets.

In sum, in a globalizing and liberalizing world economy, the number of actual or potential entrants into foreign markets increases. This gives rise to a greater potential for competition in markets regardless of their geographical scope. Entry barriers are less the outcome of government policies and more associated with costs and know-how or technological advances. Thus, despite the openness of the world economy to new competitors, entry barriers may lead to increased concentration (followed perhaps by increased market power). On balance, the effects of liberalization and globalization on market structure and competition depend substantially on industry characteristics influencing market contestability. But in certain industries, especially those in which integrated international production holds efficiency gains for firms, TNCs can play an important role in the process.

Notes

- It should be emphasized that the term "contestability" is used here simply to denote the ease of entry, or openness of markets to competition and not in the narrower (specific or rigorous) sense in which it is used in "contestability" theory (see Introduction to Part Two, box 2).
- There is some evidence from statistical studies for Canadian and United Kingdom industries to support the idea that TNCs find entry to host country industries/markets easier than do domestic firms (see Goreski, 1976; Shapiro, 1983 and Geroski, 1991).
- For a discussion of the factors determining the decisions of firms with respect to serving a market

- through export or through FDI (i.e., local sales), see UNCTAD, 1996a, chapter III and IV.
- Concentration can be measured in various ways (see Vanlommel *et al.*, 1977). One common measure is the Herfindahl index (HI) (also known as the Herfindahl-Hirshman index (HHI)), defined as the sum of squared market shares and calculated as:

where x is the output/sales of plant/firm i, X is the output/sales of the industry, and n the total number of firms in the industry/market. Another common measure is an absolute concentration measure showing the share of the largest firms in an industry, e.g., the share of an industry's output or sales accounted for by the four largest firms.

- The correlation between the degree of transnationalization ("NM" in table IV.1) and concentration for the full sample of 100 industries examined by Davies, Lyons *et al.* was (+0.5). The correlation involved the "common causes" of product differentiation and R&D. Sixteen of the 20 most concentrated industries in the European Union were intensive in advertising and/or R&D, while none of the least concentrated were. Similarly, 15 of the most transnationalized industries were characterized by high advertising and/or R&D expenditures, while only three of the least transnationalized industries were associated with high R&D and none with high advertising; 2 of the 3 exceptions were industries in which public procurement was substantial (see Davies, Lyons *et al.*, 1996, chapter 7).
- See, among others, Dunning, 1958, and Steuer, 1973, for the United Kingdom; Fishwick, 1981, for France, Germany and the United Kingdom; Parry and Watson, 1978, for Australia; Blomström, 1989, for Mexico; Connor, 1977, for Brazil; and Davies, Lyons *et al.*, 1996 for the United Kingdom.
- According to a survey conducted by the United Nations, about 32 per cent of developing country affiliates of small and medium-sized TNCs belonged to industries in which a handful of firms controlled the bulk of the market, compared with 35 per cent for affiliates of large industries (UNCTAD, 1993b, p. 78). The affiliates of small and medium-sized TNCs accounted, moreover, for a sizeable share of the markets for their primary products in host developing countries -- an average of 38 per cent, as compared with 32 per cent for affiliates of large TNCs (UNCTAD, 1993b, p. 78). This suggests that the specialized industry niches in which small and medium-sized TNCs operate conform to the oligopolistic pattern associated with TNC activity.
- Attempts have been made to "correct" production-concentration data for the effects of imports (e.g., Utton, 1982; Clarke, 1985). The typical finding is that this reduces the degree of concentration observed, but that nevertheless the ranking of industries remains broadly similar. Other studies have looked at the relationship between concentration at the aggregate (say, "3 digit") level and concentration in constituent (say, "4 digit") markets. Here, the typical result is that "4 digit" concentration is higher (especially where firms are not diversified across "4 digits"), but that, nevertheless, typically, a "3 digit" concentration measure gives a reasonable indication of average constituent "4 digit" concentration values. (Hart and Clarke, 1980, included a detailed analysis of concentration at different levels of aggregation.)
- This estimate is based on M&A sales that resulted in business combinations in which the foreign investor acquired at least 50 per cent voting shares.
- See, e.g., studies for Belgium, Canada, the Netherlands, New Zealand, Norway, and the United Kingdom, and for Brazil, Malaysia, Australia, India, Singapore and Morocco, cited by Dunning, 1993, p. 433.
- See Dunning (1993), for a brief summary of findings.
- According to the regression coefficients in the simple regressions shown in table IV.3; for differentiated industries, this is nearly 1.5, while for homogeneous product industries, it is almost exactly 1.
- See, for example, Willmore (1986) for Brazil; Lall and Streeten (1978) for Malaysia; and Dunning, 1985, for the United Kingdom.
- Earlier studies, based on rather aggregate data, include Caves, 1974 and Globerman, 1979. For a summary of the findings of several of the studies cited here, see Dunning, 1993, p. 25.
- A number of previous studies also identified higher average productivity levels of foreign affiliates compared with those of Canadian-owned firms (see, e.g., studies cited in Globerman *et al.*, 1994). However, since they were based on cross-section comparisons of industry level data, it was not clear

- whether the higher productivity levels reflected a different mix of activities undertaken by the firms or the efficiency with which resources are used to carry out the activities.
- A study of Canadian industry found that the share of an industry accounted for by foreign firms was positively related to advertising levels (Caves, 1980). Similar findings were reported from studies for Brazil and Mexico, which showed that the level of foreign ownership was positively associated with levels of industry advertising (Connor and Mueller, 1977). A study for Brazil found that the share of TNCs in a market was a principal determinant of the level of product differentiation in 16 electrical sub-industries in Brazil (Newfarmer and Marsh, 1981). However, studies of advertising conduct of TNCs and domestic firms in Colombia found no differences in the behaviour of the two (Lall and Streeten, 1977); nor did a similar study for India (Kumar, 1990), in which it was argued that the dependence of Indian affiliates of TNCs on their parents' advertising may have been responsible for the observed lack of difference
- See UNCTAD, 1996e, for a comprehensive discussion of fiscal and financial incentives.
- See "Investing in the East offers one advantage: overnight monopolies", *The Wall Street Journal Europe*, 8-9 October 1993, pp. 1-8.
- During 1957-1990, the share of sales in local host-country markets by United States majority-owned affiliates abroad decreased from three-fourths to two-thirds, while that of Japanese affiliates abroad decreased from three-fourths to three-fifths (Van den Bulcke, 1995) (also see UNCTAD 1996a, table IV.5, for data in this respect or United States foreign affiliates in Europe).
- DISK/TREND, Inc., 1995 DISK/TREND Report. Rigid Disk Drives, Mountain View, California, October 1995, p. 4.
- The world market for HDDs was estimated to be almost \$26 billion in 1995. See DISK/TREND, Inc., 1995 DISK/TREND Report. Rigid Disk Drives, Mountain View, California, October 1995, p. 9.
- According to one estimate, in the future, disk-drive makers with less than \$500 million in sales will find it difficult to afford the steeply rising development costs of new generations of drives. See Ernst and O'Connor, 1992, pp.193-194, from which this information has been summarized, for a fuller account.
- By the end of 1996, the United States share of HDD final assembly had fallen to 1 per cent. This figure is taken from Gourevitch, Bohn and McKendrick (1997).
- Another widely quoted figure is that "...80% of Seagate's production..." takes place in five Asian countries: Singapore, Thailand, Malaysia, Indonesia and China (*South China Morning Post*, 16 May 1995 and *Asiaweek*, 17 March 1995). The problem with this type of figure is that it is not clear what it measures exactly.
- A note of caution is in order here. Most statistics on HDDs are generated by the private consulting company Disk/Trend Inc. which defines the nationality of a manufacturer by the location of the firm's headquarters, regardless of the location of individual manufacturing plants. This creates no problem for Seagate, even though the firm manufactures most of its HDDs abroad. For Quantum, however, this definition becomes problematic, as Matsushita Kotobuki today has moved from the position of a contract manufacturer of low-end drives to the sole source of Quantum disk drives, including its leading-edge products. The definition becomes outright misleading in the case of Maxtor: while the headquarters of that company are located officially in Milpitas, California, Maxtor has been acquired by the Hyundai group. In terms of ownership, Maxtor is no longer a United States' firm.
- As of 1995, the four leading HDD manufacturers controlled almost 73 per cent of the world market (in terms of revenue shares). The market shares of Seagate and Conner Peripherals have been lumped together because Seagate acquired the latter in September 1995. See, DISK/TREND, Inc., 1995 DISK/TREND Report. Rigid Disk Drives, Mountain View, California, October 1995.
- The basic unit for counting HDD shipments are spindles or spindle disk assemblies. A spindle disk assembly consists of the disk drive mechanism required to utilize a single disk of disk stack. Note that Matsushita Kotobuki, already since 1984, has been a contract manufacturer for Quantum Corp., which currently is the third largest vendor of HDDs.
- This reflects the fact that, with almost \$26 billion worldwide in sales revenues, the HDD industry has become a major industry. Capacity requirements in this industry are driven by a rapid growth of demand: unit worldwide shipments increased by 35 per cent in 1994, almost 26 per cent in 1995, and are projected to increase by around 18 per cent in 1996. COMLINE Daily News Service from Korea, 6 March 1996.

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- DISK/TREND, Inc., 1995 DISK/TREND Report. Rigid Disk Drives, Mountain View, California, October 1995, p. 6.
- Product cycles for HDDs have been drastically cut. For high-end products such as drives for servers and mainframe computers, they have fallen from 24 months to about 12 months. They are considerably shorter for desktop applications, where new drive generations are introduced about every nine months, and for laptop PCS where the product cycle has been reduced to roughly six months. Product life cycles in the HDD industry thus follow the same hectic rhythm that is now characteristic for the computer industry. For some segments of this industry, like for instance multimedia home computers, product cycles are now almost as short as those for fashion-intensive garments.
- "If you're early to market there's a reward for that. You get gross margin, you get a lot of customer action. If you're late, you've missed it. There's no recovery from that." William Roach, executive vice president for worldwide sales at Quantum Corp. of Milpitas, California, quoted in *Electronics Business Asia*, January 1995, p. 35.
- Based on information from BMW, *Annual Report, 1995*, Daimler Benz AG, "press information", 21 May 1997; and Micro Compact Car AG, Smart, "Press information" (Reningen, Germany, 1997). It should be noted that the duration mentioned above does not include search time. However, it should also be noted that TNCs often have plans on the basis of which they can move relatively quickly to establish new production facilities in a foreign location when the time is ripe. Such a move can be triggered, among others, by changes affecting the profitability of markets, for example, a currency appreciation or a price increase.

CHAPTER V

POLICY IMPLICATIONS

Introduction

As the analysis in the preceding chapter suggests, there is a direct, necessary and enlarging relationship between the liberalization of foreign-direct-investment (FDI) policies and the importance of competition policy: on the one hand, FDI liberalization is a means of promoting competition among firms; on the other hand, in order to benefit fully from FDI liberalization, countries need to ensure that, as statutory obstacles to contestability are reduced, these are not replaced by anticompetitive practices of firms, be they foreign or domestic. This objective was unanimously endorsed by countries members of the United Nations in 1980, when they adopted the Set of Multilaterally Agreed Equitable Principles and Rules for the Control of Restrictive Business Practices. The UNCTAD Set emphasizes the need to ensure that anticompetitive practices "do not impede or negate the realization of benefits that should arise from the liberalization of tariff and non-tariff barriers affecting international trade" (UNCTAD, 1996d, p. 134). In fact, the adoption and efficient enforcement of competition legislation, including a merger-review system, can strengthen the way in which FDI liberalization can enhance market efficiency and consumer welfare and, ultimately, promote the development of developing countries.

Building on the preceding chapter, the present chapter draws policy implications concerning the interface between FDI and competition. It begins (in section A) by looking at the implications of FDI liberalization for competition in national markets. Recognizing the benefits of FDI liberalization, governments have gone beyond liberalization by actively seeking to attract FDI in a number of ways. However, some of the methods governments utilize to attract FDI come with certain competition costs. This is particularly the case when governments use market-power inducements to promote investment. The first section of this chapter therefore also examines measures that governments can take to minimize the negative effects on competition associated with such inducements. The chapter then turns to an examination of the relationship between FDI and competition law, focusing in particular on issues relating to FDI entry and post-entry activities of TNCs (section B). Next, the discussion considers broader policy implications relating to the interface between FDI liberalization and competition policy

at the national and international levels (section C). Recognizing that contestability may not always lead to desired market outcomes, the chapter's concluding section (D) deals with the question as to whether there are limitations regarding the pursuit of competition, including through FDI-contestability, especially in the light of competing objectives pursued by governments.

A. Investment liberalization

1. Liberalization of entry and operations

As discussed in chapter IV, the liberalization of FDI policies can lead to an increase in competition in national markets. Most countries, in particular developing countries, are indeed liberalizing the entry of inward FDI and have gradually extended this process to traditionally closed industries, in particular such service industries as telecommunications, public transport and other public utilities. Previous ownership and control requirements imposed on FDI have also been considerably reduced, while general authorization requirements have tended to disappear, except in certain strategic activities or industries. Operational conditions -- such as performance requirements or those relating to hiring foreign managerial personnel -- are becoming less significant. Furthermore, it is now common practice to allow foreign investors to transfer their profits abroad freely as well as to repatriate the capital invested, subject to limited exceptions for balance-of-payments considerations. Of course, the reduction of such barriers has an immediate effect in terms of reducing market-entry costs and increasing, at least in principle, the contestability of markets.

Most restrictions and controls on outward FDI have also disappeared in developed countries and are being gradually reduced in a number of developing countries (UNCTAD, 1995a), thus opening the way for local firms and foreign affiliates in traditional host countries to access international markets through outward FDI.

The gradual abandonment of many FDI restrictions has been complemented by the adoption of standards of non-discrimination, national treatment and most-favoured-nation treatment for FDI. Host countries are also granting foreign investors legal protection and guarantees against non-commercial risks. By 1997, most countries had become signatories to international instruments dealing with the treatment and protection of FDI at the bilateral, regional or multilateral levels (UNCTAD, 1996d), thereby reducing risks and enhancing the stability of FDI rules, thus further reducing the costs of FDI entry. Indeed, going beyond liberalization, virtually all countries have put in place promotion programmes designed to attract FDI.

Just like trade liberalization, the FDI liberalization process can be compared to the peeling of an onion (Feketekuty, 1994). As the process advances, non-traditional barriers to entry appear. Some of these barriers are due to government measures, such as the granting of exclusive rights (including state monopolies), privatization, technical standards, public procurement practices and licensing requirements. Others -- and these are receiving increasing attention -- concern anticompetitive private business practices (Gifford and Matsushita, 1996).

Some of these practices are prohibited *per se* for their anticompetitive effects, including various types of horizontal cartel agreements. The situation becomes more difficult when moving to practices that may have anticompetitive effects but are not considered illegal under the laws of the countries in which they occur. While such practices do not necessarily discriminate between domestic and foreign firms, they may constitute barriers to competition. Traditional vertical or reciprocal dealing arrangements, for instance, may fall into this category,² as do

corporate governance practices that prevent other firms from taking over corporate control, be it because only a limited number of shares are traded, or corporate by-laws inhibit foreign firms from acquiring significant equity stakes in domestic firms (Janow, 1996).³ Such corporate governance practices are of particular relevance for foreign firms seeking entry, as mergers and acquisitions (M&As) are a principal mode of entry into markets (see chapter I).⁴

Therefore, while many governments generally seem to be becoming less tolerant of most types of anticompetitive behaviour, some such practices are tolerated, and sometimes encouraged by governments, especially if their effect is primarily felt abroad. Often, moreover, the scope for anti-competitive practices depends upon country differences in legal standards and enforcement procedures and capabilities. In terms of policy implications, transparency as regards permissible private business practices and their underlying rationale should be encouraged so that their effects -- and especially their economic development implications -- can be assessed. Indeed, to the extent that a competition culture takes hold, anticompetitive business practices should become increasingly difficult to justify.

As liberalization progresses and non-traditional barriers come within the purview of policy makers, care must be taken that, in their eagerness to attract FDI, governments do not end up in situations in which they agree to inducements which, by their very nature, restrict competition (see chapter IV). Precisely because such inducements have direct anticompetitive effects, they deserve special attention.

2. Limiting market-power inducements

(a) Assessing costs and benefits

When governments consider offering market-power inducements to attract FDI,⁵ the trade-offs between the benefits associated with new or additional FDI on the one hand,⁶ and the immediate costs associated with a reduction of competition as regards economic welfare due to anticompetitive effects in the markets in which exclusivity is granted, on the other hand, need to be identified as clearly as possible. Moreover, since there may be downstream markets that rely on inputs provided by upstream monopolized industries or other critical industries, including many services, they may operate in suboptimal conditions and therefore attract less FDI. Naturally, the costs and benefits of market-power inducements vary significantly across industries. Hence, individual cases need to be evaluated carefully, taking into consideration the principal elements of a specific FDI project.

Once the basic assessment is made, host countries need to be as well informed about the impact of their decisions on competition, as is the case with investors wishing to invest in exchange for dominant positions and/or protection usually are. Ideally, the level of information should be sufficient to allow the authorities to judge whether an investor would still make the investment even if not granted as much monopolistic power. In addition, it would be useful to know whether checks on market-power abuses can be established. Governments need also to engage in market analysis to determine whether other investors would consider entering the market; in many cases, countries give exclusive rights only to discover that other companies would be ready to invest with less or even with no protection from competition. National competition authorities can be of assistance in this respect, and should be consulted before such inducements are given. If the needed advice is not available from experts in the host country, or if what is available is not considered sufficient, advice may be obtained, on an *adhoc* basis, from international organizations.

(b) Minimizing anticompetitive effects

One of the most intractable problems associated with market-power inducements lies in evaluating how much market power needs to be given away, for how long and for what range of activities in order to attract a particular investment. Firms contemplating an investment may "shop around" for the best deal among several countries with similar characteristics. Still, a number of options exist that can be utilized to minimize negative effects on competition:

• *Pre-entry competition (auctioning)*. Competitive bidding can be a tool to identify whether other firms may be interested, and how much protection from competition they require as an incentive (boxes V.1 and V.2).

Box V.1. The privatization of Manila Metropolitan Water and Sewage System

The Philippines' Manila Metropolitan Water and Sewage System (MWSS) was originally operated by a Government agency. In the early 1990s, less than 70 per cent of houses in Manila had access to piped water. Half of all water flowing in the system was either lost or stolen, water prices were high, the MWSS was losing money and to upgrade and extend the system would have entailed an expected investment of about \$7.5 billion over 25 years. The Government did not have such resources and decided to privatize the water system through a bidding process to a consortia which could include foreign partners.

In broad terms, the Government proposed that it would turn over the operation of the MWSS (but not the ownership of its assets) to two private consortia, one for the Eastern and one for the Western part of Manila, for a period of 25 years; each of the consortia would have to commit to meeting specified performance criteria over time (box table) but did not have to make any specific investment commitments to meet this performance.

Summary of performance requirements ^a

(Per cent of currently prevailing water rates)

Item	1996	2001	2006	2011	2016	2021
Services						
Water ^b	67	87	98	98	98	98
Sewage ^b	8	7	15	26	38	54
Non-revenue water c	56	37.1	31.8	29.4	27.2	25.0
Estimated capital						
expenditure requirements						
(million pesos)	1996-2001	2002-2006	2007-2011	2012-2016	2017-2021	Total
Water	16,947	18,797	15,275	9,452	8,520	68,991
Sewage	2,618	19,861	11,889	36,304	35,970	106,633
Estimated tax						
revenues (million pesos)	-	5,608	24,905	33,188	43,490	107,191

a These are performance requirements that the winning firms had committed themselves to meet.

/...

b Percentage of households that have (or will have) these services.

c Water that enters the system but is not accounted for. A loss rate of about 25 per cent is normally considered an acceptable loss rate.

(Box V.1, cont'd.)

The composition of the bidding consortia was also specified. In particular, each consortium was required to have a foreign partner with a minimum of 20 per cent and a maximum of 40 per cent equity ownership. Each member of the consortia was also required to meet specified minimum criteria in terms of experience/expertise, size (revenues, capital, equity) and operating history. In particular, the foreign partner was required to have experience (on several dimensions) of constructing and operating large-scale water and sewerage systems, while the Filipino partner was not.

Four consortia that met these criteria bid on the project. Each consortium was required to bid on both the East and the West areas, but no one bidder could win the operating rights to both concessions. This method was used to try to gain some measure of competition between the two concessionaires over time and to have access to two sets of cost data on which rate increases would be granted. To reduce collusion among the bidders, there was a stipulation that the losing bidders would not be allowed to participate in the project as subcontractors for the winners.

The bidding was in terms of percentages of the current prevailing water rates. With a bid of 26 per cent, the consortium led by Ayala (including Bechtel (United States) and United Utilities (United Kingdom)) was by far the lowest bidder and won the East area. Benpres (including Lyonnaise des Eaux (France)) won the West, with a bid of 56 per cent. Even through the Ayala consortium had bid 28 per cent for the West area, it could not win both concessions under the bidding rules. The bids of the other two consortia were in the range of 55-60 per cent.

Source. UNCTAD.

- Circumscribing exclusivity in terms of time and scope. Once some form of exclusive position is envisaged for an investor, the exclusive rights to serve a market should only be granted for a clearly defined period of time (which should be as short as possible), subject (where possible) to periodic review, re-bidding and/or phase-out. For example, a 99-year period of exclusivity appears to be rather long (box IV.7).
- Circumscribing exclusivity through alternative sources of competition. Even if an enterprise obtains exclusivity over an operation or product, it might not be able to exploit market power if there was competition from alternative operations or products, i.e., if the scope of the exclusivity were as circumscribed as possible. For example, a foreign investor may obtain exclusive rights to build and operate a railway connection between two cities in a country because traffic between these two cities might not be heavy enough to allow for competition between two or among more railway networks. However, other modes of transportation -- such as road, river or maritime links -- might constitute important sources of alternative competition. Competition from these alternative connections might constrain the ability of the foreign railway affiliate to raise prices excessively. In the telecommunications industry, the monopoly power of the incumbent firm owning the public fixed network is increasingly threatened by competition from wireless networks. In these two cases, policy makers should make sure that exclusive rights on a given operation or product are not extended so as to restrict competition from alternative products or operations. In some cases, this may require procedures (such as competition-law proceedings) to decide, for example, disputes about interfaces, shared networks or predatory pricing of certain services attractive to new entrants.

Box V.2. BOT in the electricity-generating industry of the Philippines

In 1991, the Philippines faced a major crisis in its electricity-generating industry: base-load capacity was substantially below demand, resulting in eight-hour scheduled blackouts for most of the country. Power rates in the Philippines were among the highest in the world. The National Power Corporation (Napocor) was the state-owned monopoly for the generation and long-distance transmission of power. Privately-owned distribution companies, such as Meralco in Manila, then distributed the power on a regional basis.

Against this background, a build-operate-transfer (BOT) programme was initiated to encourage investment in base-load electrical generating capacity. It had two major features:

- It unbundled the electrical delivery system into its two components, generation and distribution. This procedure allowed the separation of the natural monopoly of long distance distribution from the power-generation function. Even in power generation, there are substantial economies of scale relative to market size. Hence, in order to have low-cost production of electricity, the power-generation industry would have to be very concentrated.
- It allowed individual proposals for smaller generating plants and competitive bidding for the larger plants. The essential feature of the proposals and the competitive bids was the cost of electricity delivered into the transmission system. Unlike the case of the MWSS, in which the investment amount and the costs of operating the system could not be modelled accurately, for power generation, these costs can be determined with considerable precision. Hence the Government could model the investment amount as a function of capacity, operating costs and revenues to project return on investment for these projects and as a function of the length of the "operate" phase of the BOT project. Although the BOT regulation allows up to 50 years of operation, most of the contracts that have been negotiated have been in the 25 year range.

Initially, given the time pressures for increased base-load capacity, delivered prices from the BOT were in the 1.80-1.90 pesos per-kilowatt-hour range for relatively small gas turbine projects that could be implemented quickly. More recently, a 1,200 megawatt project has been negotiated with Korea Electric Power (for \$1.5 billion), with costs of .78 pesos per kilowatt hour. The relatively high costs for the initial projects were due to two factors. First, these were relatively small and the cost of gas turbine generated power is high. Second, the situation in the Philippines at that time was such that the required rate of return (based on long-term bond interest rates plus a risk factor) was high. Third, given the urgency of the situation, higher returns were allowed to these investors. Over time, however, all these factors have been reversed: the power situation has improved; the proposals were for larger, coal-fired projects; and the bond rating of the Philippines and the risk of these projects has fallen.

Source: UNCTAD.

• Fair and non-discriminatory access to essential facilities. Where a firm is allowed to acquire essential facilities (such as transmission and distribution grids, harbours, local telecommunications services), it should be constrained, where possible, in its potential to expand its dominant position to separate but vertically related markets, or to deny rivals access to such markets. For example, the owner of an electricity-distribution grid might negate access to competing electricity generators willing to supply the market (box V.2). Therefore, before granting exclusive rights to such facilities, non-discriminatory and cost-related access conditions should be clearly defined, or it should be possible later for excluded firms to obtain relief from the competition authority. Increasing attention is being paid to the question of access to essential facilities by competition authorities, especially in service-oriented industries.

- Break-up of a national monopolist into regional firms. In some cases it may be possible to break up an enterprise horizontally into local or regional monopolies and to sell them separately to independent investors. Such a break-up facilitates the task of supervision and regulation. In fact, the performance of each monopolistic company can then be compared with that of neighbouring firms ("yard-stick competition"). Also, local or regional monopolists will generally have less financial and economic power than a national monopolist. This type of solution has been adopted, for example, in the Philippines (box V.1).
- *Periodic review by competition authorities.* The competition authority could be requested to monitor periodically whether exclusivity has been abused; it could also be empowered to receive complaints about the exclusion of rivals.
- The role of direct regulation of prices. For products and services whose provision is supplied monopolistically to final consumers, direct regulation may be needed, although not necessarily by the competition authority. Such regulation has to take into account consumer interests, as well as investors' expectations of adequate rates of return on their investment. It may also be useful to establish certain performance criteria (box V.1), including by using comparisons with analogous industries in other countries as performance benchmarks.

In conclusion, the inherently anti-competitive nature of market-power inducements calls for a cautious scrutiny of such deals. This scrutiny should entail two steps: first, assessing whether a market-power inducement is necessary in the first instance to attract the investment in question; second, circumscribing as much as possible the market-power inducement granted.

B. The interface of foreign direct investment and competition law

1. The growing emphasis on competition law

One of the recommendations of the UNCTAD Set was that member countries adopt, improve and effectively enforce laws for the control of restrictive business practices. In 1980,

less than 40 countries had competition laws (figure V.1). The pace of adoption increased rapidly after 1989, when former centrally planned economies in Central and Eastern Europe introduced comprehensive programmes of investment liberalization, deregulation, privatization and competitionlaw enforcement, and a number of developing countries also adopted competition laws. Currently, over 70 countries worldwide have competition laws (figure V.1 and annex table A.22). Moreover, many of these laws have been strengthened in the past decade, in terms of stricter and broader rules and higher penalties.

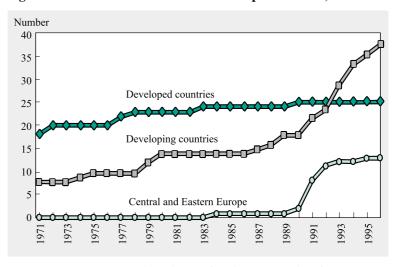


Figure V.1. Number of countries with competition laws, 1971-1996

Source: UNCTAD, based on national reports and various sources.

Investment liberalization and the adoption of competition laws have received impetus from the growth of regional free trade and integration agreements. The European Union, for example, includes the institution of a system for ensuring that competition is not distorted in the internal market as one of the means of attaining the basic goals of the Union. Competition is covered in the Treaty of Rome; in addition to the traditional goal of competition policy, it aims at reinforcing the unity of the internal market by eliminating obstacles to trade resulting from the behaviour of firms or governments. When NAFTA was created, Mexico introduced important reforms in its investment legislation and adopted a competition law comparable to that of its NAFTA partners. Since then, other countries in the Western Hemisphere have concluded free-trade agreements reflecting approaches similar to NAFTA, while discussions are proceeding on the establishment of a Free Trade Agreement for the Americas, covering, among other things, FDI and competition matters. This process may receive further impetus in the future. For example, at the multilateral level, the Agreement on Trade-Related Investment Measures (TRIMs), concluded as part of the Agreement creating the World Trade Organization, provides (in its Article 9) for the possibility, as part of its five-year review, of complementing the Agreement with provisions on investment policy and competition policy.

2. Main elements of competition law

The main objective of competition laws is to preserve and promote competition as a means to ensure the efficient allocation of resources in an economy, resulting in the best possible choice of quality, the lowest prices and adequate supplies for consumers (UNCTAD, 1996f). In addition to promoting efficiency, many competition laws make reference to other objectives, such as the control of concentration of economic power, promoting the competitiveness of domestic industries, encouraging innovation, supporting small and medium-size enterprises and encouraging regional integration (Goldman, Kissack and Witterick, 1997). Some of these additional objectives may sometimes be in conflict with the efficiency objective (see below). The manner in which efforts are made to reconcile these conflicting objectives can be relevant to the way TNCs are allowed to enter and operate in domestic markets.

Most competition laws deal with enterprise *behaviour* by prohibiting such restrictive business practices as competition-restricting horizontal agreements, acquisitions and abuses of dominant positions, ¹⁰ as well as substantially restrictive vertical distribution agreements (box V.3). ¹¹ In addition, an increasing number of competition laws deals with alterations to the *structure* of markets, through the control of M&As, as well as joint ventures (hereinafter referred to as "merger control") aimed at avoiding the creation of dominant firms, monopolies, or even oligopolies. In some laws, the divestment of parts of monopolies is also authorized, to change the structure of markets.

Most competition laws contain exceptions (basically sectoral) and exemptions (in most cases adopted in respect to categories of practices) to the application of their provisions. These can cover, among others, labour, regulated industries (e.g., telecommunications, defence, agriculture), small and medium-size enterprises, and certain types of cooperative arrangements, including R&D joint ventures. The rationales behind exemptions vary. In some cases (market failures, for example), competition and market forces are not viewed as the best tools leading to the maximization of economic efficiency; rather, direct regulation of prices or entry is used. A number of countries, however, are reviewing the soundness and validity of those across-the board exemptions. The emphasis is increasingly on applying competition law to all business practices not explicitly imposed on firms by statutory provisions. It is then the task of the competition authority or courts to consider business practices, and focus on those that have the highest probability of anticompetitive effects and the least justification based on efficiency.

Box. V. 3. Selected restrictive business practices addressed by competition law

There are four main types of business practices that can have anticompetitive effects: practices undertaken by a single firm (when a firm enjoys a dominant position); anticompetitive mergers and acquisitions; horizontal restraints (i.e., arrangements between competitors to restrain competition) and vertical restraints (anticompetitive arrangements between firms along the production-distribution chain). Horizontal and vertical restraints include the following arrangements, which can be undertaken individually or in combination:

Horizontal restraints^a

Price fixing Competing suppliers enter into cooperative agreements regarding prices and

sales conditions.

Restraint of output Competing suppliers enter into agreements regarding output and product

quality.

Market allocation Competing suppliers allocate customers amongst themselves, who therefore

cannot benefit from competition by other suppliers.

Competing suppliers employ practices that inhibit or preclude the ability of **Exclusionary practices**

other actual or potential suppliers to compete in the market for a product.

Collusive tendering

(bid-rigging)

Competing suppliers exchange commercially sensitive information on bids and agree to take turns as to who will make the most competitive offer.

Conscious parallelism Competing suppliers generally set the same prices, but without an explicit

agreement.

Other restraints on

competition

Generally characterized by suppliers entering into cooperative agreements not to undertake certain actions of competitive value (e.g., advertising).

Vertical restraints

A producer supplies distributors and guarantees not to supply other **Exclusive dealing**

distributors in a given region.

A producer supplies on the condition that the distributor does not carry **Reciprocal exclusivity**

anybody else's products.

Refusal to deal A supplier refuses to sell to parties wishing to buy.

Resale price maintenance A producer supplies distributors only on the condition that the distributor

sells at a minimum price set by the supplier.

Territorial restraint A supplier sells to distributors only on the condition that the distributor does

not market the product outside a specified territory.

Discriminatory pricing

Predatory pricing

A supplier charges different parties different prices under similar circumstances.

Suppliers sell at a very low price (or supply intermediate inputs to competitors

at excessive prices) in order to drive competitors out of business.

Premium offers or

loyalty rebates

A dominant supplier offers discounts or other inducements only to certain parties on the condition they do not sell someone else's products.

Producers force purchasers to buy goods they do not want as condition to sell **Tied selling**

them those they do want, or force resalers or wholesalers to hold more goods

than they wish or need.

Full-line forcing A supplier requires distributors, for access to any product, to carry all of the

supplier's products.

May involve over-invoicing or under-invoicing of intermediate inputs between **Transfer pricing**

foreign affiliates. Under -invoicing can be used to facilitate predatory pricing.

Sources. UNCTAD, 1996g; Boner and Krueger, 1991, pp. 50 and 56.

a These may take the form of domestic cartels, import cartels, export cartels and international cartels.

Usually, such cartel practices as price fixing, collusive tendering and market allocation are prohibited without need for market analysis, while distribution, joint ventures and merger agreements are assessed in a market context and increasingly under a rule-of-reason standard taking into account the efficiencies likely to be achieved and passed on to consumers.

At the heart of the analysis of non-cartel anticompetitive practices is the assessment of the extent of dominant position of market power held (or to be acquired) by a firm in question. "Dominant position of market power" is defined generally as the ability to affect prices and other conditions without being challenged by competitors. To determine whether a firm has dominant market power, a competition authority must first define the relevant market (i.e., the market of reasonably substitutable goods and services), both in terms of the geographical area and the product or service involved. After the relevant market is defined, the next step is to examine the relative position of the firm(s) involved in the market, using various measurements of concentration. Once the degree of market concentration is estimated, ¹² another main element in competition analysis is to look at entry barriers, i.e., contestability. In the absence of significant barriers to market entry, incumbent firms are not likely to behave anti-competitively because any attempt to do so is likely to bring about supply responses, including entry into the market of new firms.

3. Competition law and foreign direct investment

Competition laws apply to all firms operating in the national territory and supplying a particular market, whether through domestic sales, imports, foreign affiliates or non-equity forms of FDI. They do not, in principle, discriminate between national and foreign firms or between foreign firms from different national or regional origins when it comes to competition analysis. Competition law therefore monitors the competitive behaviour of TNCs having effects in host countries, with a view towards ensuring that these firms (like other firms) do not abuse dominant positions of market power; it also protects TNCs from anticompetitive practices by national firms. On a wider geographical scale, competition law intends to prevent inefficiencies arising from agreements designed to lessen trade or investment.

Some of these agreements can take the form of international market-allocation investment cartels between potential rival firms in different countries. They can include promises not to invest in certain markets or not to compete when investing. For example, in the United States v. Diebold, Inc. case (United States, District Court for the Northern District of Ohio, 1976), the United States antitrust prosecutors charged that Diebold, a leading United States manufacturer of safes and bank equipment, and Chubb, the leading British firm in the same field, had agreed to stay out of each other's national markets. The case resulted in the payment of criminal fines. By their very nature, such market- allocation investment cartels restrict competition occuring through FDI, typically to the detriment of host countries, and therefore require action on the part of competition authorities (box V.4).

But such cases appear to be comparatively infrequent. Usually, the main interface between competition law and FDI occurs when a foreign affiliate is established by means of a significant merger, acquisition or joint venture. This is especially the case when a large competitor acquires another. (It should be noted, however, that most of the some 40,000 TNCs in existence are small or medium-sized firms; a number of them, however, may be large in relation to the markets in which they compete.) Such transactions may be examined by competition authorities under merger-control review, especially when they occur between competing firms, such as when the acquiring foreign investor was competing through exports with the domestic firm it plans to acquire. They may also be subjected to anti-monopoly

provisions if they are viewed as a means to achieve or preserve a dominant market position. Sometimes, furthermore, joint ventures may involve a market-allocation investment cartel to restrict FDI. Countries are therefore increasingly adopting merger-control regulations. Among countries with such regulations, four broad types can be identified, based principally upon the territorial scope for review (annex table A.23):

Box V.4. Market-allocation investment cartels

The National Lead case is an instructive example of a situation in which the major worldwide competitors in titanium pigment technology formed a series of joint ventures in new markets such as Japan, and allocated those markets among themselves as exclusive territories. As part of the overall scheme, National Lead signed a contract with its principal North American competitor of the day, Canadian Industries, Ltd., under which the two companies established a Canadian joint venture, which became the beneficiary of all present and future titanium patents of both companies.

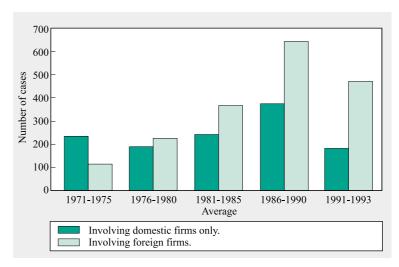
One of the most notable cases involving market-allocation investment cartels was Timken Roller Bearing Co., where United States Timken had agreed with its major international rival in the ball bearing business, a British firm also called Timken, to set up a scheme pursuant to which they entered new markets as partners (such as by creating French Timken), fixed prices in each others territories, allocated territories, cooperated to protect each other's markets, and participated in cartels to restrict exports.

Source. United States, Southern District Court of New York, 1945; United States, Supreme Court, 1951a (which contains the decision on the National Lead case), 1951b.

- Regulations that apply only to locally registered companies. For example, up to 1997, the competition authority of Hungary only reviewed M&As between locally registered companies.
- Regulations that cover acquisitions by foreign firms of domestic firms. Most countries with merger regulations examine M&As between foreign and domestic firms, just as they would review purely domestic M&As. This reflects the increasingly important share of M&As that involve foreign participation. Hungary, for example, changed its merger regulations in 1997 to cover M&As involving foreign and domestic firms. The importance of such cases can be illustrated for Canada: foreign firms accounted for about a third of M&As during 1971-1975, with domestic firms accounting for the balance -- a ratio that was more than reversed by 1991-1993 (figure V.2).
- Regulations that cover acquisitions of foreign firms by domestic firms. This aspect of merger regulation relates to outward FDI and can be motivated by potential domestic effects. For example, 6 per cent of notified mergers in Germany in 1993 were of this nature, and 19 per cent in the United Kingdom (OECD, 1997).
- Regulations that cover M&As between foreign firms. In this case, the examination can be motivated either by the presence of one of the merging firms in the domestic market or, through the effects doctrine, by the potential for the merger to have anticompetitive effects on local consumers. In Germany, 6 per cent of notified M&As in 1993 did not involve German firms (OECD, 1997). The recent European Union challenge to the Boeing-McDonnell merger is an example of this situation.

The following analysis of how competition law interacts with FDI distinguishes between competition rules applying to FDI at the time of entry and competition rules relating to foreign affiliates after entry. Given the multiple interactions between FDI, market structure, firm behaviour and market performance, such a classification has many limitations. It is therefore intended only for purposes of clarity and simplicity of presentation.

Figure V.2. Foreign firms in publicly reported mergers in Canada, 1971-1993



Source: UNCTAD, based on national reports and various sources.

(a) At-entry inward merger review

i. General trends

Data from enforcing countries indicate that merger control is usually not greatly restrictive of investments. For example, in 1987, United States officials conducted antitrust reviews of about 2,000 M&As in which one party had a turnover exceeding \$100 million and in which more than \$15 million in assets were being acquired. About 10 per cent of these transactions were subjected to a full investigation, and about 1 per cent of them were challenged, resulting in partial divestitures or abandonment. The percentage of international transactions (FDI) investigated (10 per cent) and challenged (1 per cent) was about the same as for domestic transactions (Davidow and Stevens, 1990). Similarly, the European Union has only prevented about one transaction in a 100, and has required alteration of about 5 transactions out of each 100 during the early 1990s (Fine, 1994).

Because M&As are dependent on current stock values and are difficult to unscramble once achieved, merger control requires a carefully calibrated system providing for prior notification, rapid analysis, temporary injunctions and prompt decisions. Most countries use turnover or other thresholds to exempt transactions unlikely to have anticompetitive effects in order to minimize unnecessary interference and limit the number of cases screened by the competition authorities. In this respect, countries interested in introducing merger control need to select an appropriate threshold. Too low a threshold would overburden the competition authorities by forcing them to review a large number of cases; too high a threshold would allow a number of M&As with competition problems.

For these reasons, many countries with a competition-law tradition, such as the United States and Germany, have long complemented their competition rules dealing with firm behaviour with special provisions and procedures concerning M&As. In recent decades, this practice has been followed by other countries which, as they adopted or strengthened their competition laws, included merger-control regulations, sometimes under a separate statute. The list of countries which now have merger-control provisions is growing, although it is much

shorter than the list of countries with competition laws (annex table A.23). These trends underline the increasing importance of merger-control as a means of promoting competitive behaviour and efficiency in an open FDI and trade environment.

At the regional level, too, merger control is gaining increasing attention. The European Union introduced a Community-wide merger-review system in 1989 (Council of the European Communities, 1989). To qualify for Community merger review, the aggregate turnover of the companies involved in a transaction must exceed ECU 5 billion; and the turnover of at least two of the companies involved must exceed ECU 250 million in the European Union. Regional competition-law review of large concentrations has created the advantage of "one-stop shops": although a majority of member states of the European Union have merger-control laws of their own, where the transaction has a "Community dimension", it will only be reviewed at the Community level. If a transaction's effects will be felt almost entirely within one member country, that country will have jurisdiction. Such a process is meant to result in there being only one authority evaluating a transaction. Similar systems could eventually be developed by other regional treaty organizations as well, although it is not an easy task.

It is a premise of most merger-control laws to be neutral about the nationality of the acquiring or acquired party. Occasionally, however, factors other than simple competition questions affect decisions on cross-border M&As. The United Kingdom statute (United Kingdom, Fair Trading Act, 1973, as amended by the Company Act, 1989), for example, lists a series of factors in addition to what would normally be regarded as competition factors, including:

- maintaining and promoting a balanced distribution of industry and employment in the United Kingdom;
- maintaining the competitiveness on foreign markets of producers and suppliers of goods and services in the United Kingdom.

The latter point has in the past given rise to some controversial rulings. For example, the proposed merger of Davy Limited, then the largest engineering contractor in the United Kingdom, with the United States-based energy group, Enserts Corporation (United Kingdom, Monopolies and Mergers Commission, 1981), was rejected by the Monopolies and Mergers Commission of the United Kingdom for three reasons (Hawk, 1995): that the Davy group would lose its character as a British bidder on foreign markets; that the merger would unproductively lengthen the chain of management command; and that the merger would expose the company to United States law, in particular the Foreign Corrupt Practices Act 1977. ¹⁶

The United Kingdom is not the only country to have provisions in its competition law that allow for the consideration of national interest issues. ¹⁷ In Germany, for example, parties to a prohibited merger can appeal the prohibition directly to the Federal Minister of the Economy under Section 24.3 of the Act Against Restraints of Competition who may grant permission for the merger to proceed:

"in those cases where the restraints on competition are outweighed by the overall economic advantages of the merger, or where the merger is justified by an overriding public interest; in this connection, the competitiveness of the participating enterprises in markets outside of the territory of application of this Act shall be taken into consideration... " (Rowley and Baker, 1991, p. 188).

This power was used by the Minister in permitting the merger of Daimler Benz and MBB in 1989 (Germany, Federal Cartel Office, 1989; Germany, Ministry of Economics, 1989). In this case,

Federal Cartel Office prohibited the merger; however, the Government of Germany overrode the Cartel Office's decision and permitted the merger to go forward.

ii. Typical scenarios involving mergers and acquisitions

In practice, a distinction can be made between vertical and horizontal M&As. Most interventions by competition authorities occur with horizontal agreements between competitors. A new challenge in this regard are strategic alliances, i.e., cooperative ventures that do not involve equity arrangements. In rare cases, a major vertical acquisition (i.e., of a customer or supplier) may lessen competition horizontally by foreclosing outlets or sources of supply, and by raising the cost and difficulty of new entry. For instance, if a firm that has captured 40 per cent of a market by means of exports then purchases a local chain of outlets, usually accounting for 60 per cent of local sales, such acquisitions might enable the acquiring firm to raise its local market share towards 60 per cent by forcing its products through the outlets it acquired. Therefore, FDI involving the acquisition of a supplier or customer will usually be analysed in terms of the market shares involved, the likely foreclosure of rivals, and the substitute supplies or assets available to rivals.

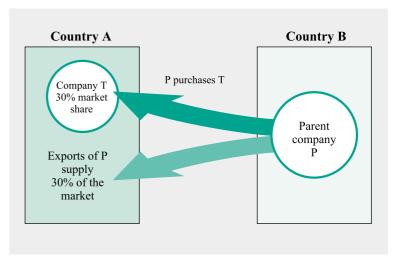
A number of countries allow a failing firm contention to be raised as a defence to what would under normal circumstances be regarded as a M&A that leads to excessive concentration. When this defence is raised in the home countries of TNCs, competition authorities in third countries need to consider whether it reasonably applies to foreign affiliates. In particular, where a foreign affiliate is capable of standing on its own, and is not failing in the same manner as the rest of the corporate system, the third country merger authority could consider whether it should force the sale of that affiliate, in particular where the merger of the affiliate with a local affiliate of the acquiring firm would be anticompetitive.

There are a number of typical scenarios of horizontal cross-border M&As. The evaluation of each case depends on whether the firms involved are competing with each other or not, and whether the guiding principles of the competition authorities concerned emphasize potential

exercise of market power or dominant positions:

Inward FDI could competition create issues when it takes the form of acquisition of a firm in a market in which that firm was competing with the acquiring firm prior to the M&A. This would occur if the acquiring firm had exported to the market before acquiring a firm in the market (figure V.3), or if a foreign firm, owning one firm in the market. acquired another firm in the

Figure V.3. Reduction of competition in country A by exporter P purchasing domestic rival T

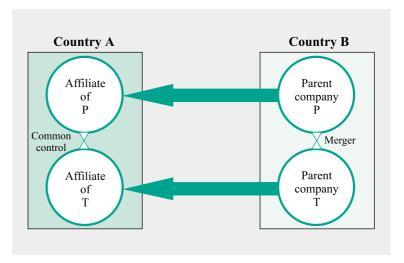


Source: UNCTAD.

same market (figure V.4).

Competition problems may also occur where one foreign firm uses FDI to set up a major plant in a market, another firm does the same thing, and then the two foreign firms agree to merge (or one takes over the other), thereby eliminating local competition between their two affiliates (figure V.5). In the case of the merger of the Swiss firms Ciba and Geigy. United States

Figure V.4. Reduction of competition in country A by parent P of affiliate T acquiring foreign rival S

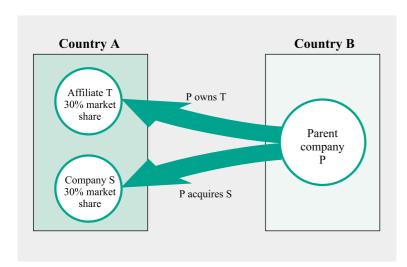


Source: UNCTAD.

Antitrust Division initiated legal proceedings because the United States affiliates of the merging firms were substantial competitors of each other. The case was settled by means of a consent decree obligating the newly merged firm to sell off one of the two United States affiliates (United States, Northern District Court of Ohio, 1970). A similar case occurred in Mexico (box V.5).

• Sometimes joint ventures that have elements of cartel-like behaviour can be examined under merger-control law, primarily in terms of the elimination of potential competition. Thus, if a foreign firm enters a market by means of a joint venture with a local firm, the issue arises as to whether the foreign firms would

Figure V.5. Reduction of competition in country A by merger of parents P and T in country B



Source: UNCTAD.

have been likely to have entered the market separately and competed with the local firm in the absence of the joint venture. For instance, the United States antitrust authorities ruled that a joint venture involving FDI was illegal in the "Mobay" case (United States, District Court of Pennsylvania, 1967) in which the company Monsanto headquartered in the United States had formed a United States joint venture with the German company Bayer to manufacture plastic foam. **Because** Bayer was a large European competitor in this industry and had planned to enter the United States market by means of a greenfield project, the joint venture with Monsanto was regarded as preventing Bayer's independent competition in the United States market.

- Competition-enforcement officials have sometimes tried to encourage greenfield investment by means of merger-control prosecutions. But, as the case of the United States Federal Trade Commission v. British Oxygen Corporation shows, this is not always easy (box V.6).
- Some cases turn on whether the acquiring firm will have an incentive to suppress rather than develop the competitive potential of the firm to be acquired (box V.7).

A major ruling under the new system related to the proposed acquisition of Scott Paper by Kimberly Clark. Both firms were headquartered in the United States, but each had foreign affiliates in Mexico, which had captured a significant share of the Mexican paper-products market. In particular, a combination of the affiliates would have given the merged firm 67 per cent

major brands of napkins and towels, and three major brands of feminine hygiene products, thus reducing the resulting market shares to 50 per cent or less.

*Source: Mexico, Federal Competition Commission, 1996.

of the paper-napkin and towel market, and 63 per cent

of the feminine hygiene products (pad and tampons)

Commission ordered Kimberly Clark to divest two

The Mexican Federal Competition

Box V.5. Merged parent firms, merged foreign

affiliates

under the NAFTA agreement, Mexico enacted its new competition law, including a regime for merger review.

Just prior to liberalizing its investment rules

• The merger of two foreign parent firms can sometimes create more significant competition issues in countries other than the host or home countries of the merging firms, i.e., in third countries. The merger of the leading suppliers of tea in the United Kingdom and their affiliates in Pakistan, e.g., appears to have had important implications for Kenya as a producer of tea (box V.8).

(b) Outward merger review

In principle, outward FDI can be expected to be competition-neutral for the home country -- since its effects would be primarily felt abroad -- or even to have pro-competitive effects, as it enhances access to foreign markets and to foreign productive resources by domestic

Box V.6. Encouraging greenfield investment

The United States Federal Trade Commission challenged British Oxygen Corporation's (BOC) acquisition of the number three United States firm in its field, arguing that BOC had entered Canadian and South American markets by means of greenfield investment and thus had eliminated the deconcentrated effect of its probable greenfield investment in the United States by acquiring a major United States' firm. The reviewing court, however, upheld the acquisition on the grounds that, since BOC had no proved time-specific plans for greenfield investment in the United States in lieu of the acquisition, the charge against it was purely speculative.

Source: United States, Second Circuit Court, 1997.

I to foreign productive resources by domestic firms, thereby making the outward investing firms stronger to compete in local and foreign markets. For countries supporting national champions, such effects are particularly desirable. However, competition authorities in some home countries will review outward M&As that can have anticompetitive effects in their

domestic markets, or on their foreign trade.

The definition of "domestic effects" with respect to outward M&As needs to be seen in the context of the purposes of the competition laws in the relevant home country. In essence, however, the basic concern tends to be the same for most jurisdictions, namely whether the outward investing firm acquires control of a foreign firm that otherwise would have been

Box.V.7. Suppressing versus encouraging competitive potential

In 1988, Irish Distillers had a monopoly of the manufacture of Irish whiskey (owning all the major brands) and was regarded as poorly performing and thus a candidate for acquisition. At the same time, the Scottish whisky (Scotch) industry was highly concentrated, its major brands being largely owned by three major companies, one of which was Grand Metropolitan. Grand Metropolitan launched a takeover bid for Irish Distillers. The bid illustrates a number of complicated problems. First, although different products, Scotch and Irish whiskey compete for the same markets, and Irish whiskey is usually regarded as the closest substitute for Scotch. Nonetheless, Grand Metropolitan promised in its bid to invest substantial sums in promoting Irish whiskey and developing the industry. However, historically the major Scotch whisky producers had bought numerous competing Scottish distillers and closed them down, eliminating Ultimately, the Irish authorities blocked decision made easier because a third company, Pernod Ricard, was waiting in the wings to purchase Irish Distillers.a

Prior to Grand Metropolitan's solo takeover bid for Irish Distillers, there was a hostile takeover bid by a consortium of all three of the large Scotch whisky distillers, Allied Lyons, Guinness (United Distillers) and Grand Metropolitan. After Irish Distillers complained to the European authorities, this takeover bid was the first acquisition blocked by the Commission by threat of imposing interim measures.

Sources: Rowly and Baker, 1991; Morrissey, 1989.

likely to compete in the acquirer's country (figure V.6). This is reflected, for example, in the German merger guidelines (box V.9).

Normally, a country would review an outward M&A if the acquiring firm is established in that country or is under the control of a firm established in that country and acquires control of another company abroad, provided that certain threshold tests are met. For example, in the United Kingdom for an outward merger to be reviewed, it must meet either of the following tests: the enterprise that ceases to be distinct must supply or acquire goods or services of a similar kind and must together supply or acquire at least 25 per cent of all those goods or services supplied in the United Kingdom or a substantial part of it; or the gross value of the worldwide assets been acquired must be more that £70 million (United Kingdom Office of Fair Trading, 1995).

Box V.8. Third country effects of mergers of parent firms and their foreign affiliates

As a result of the merger of Lipton and Brooke Bond into Unilever Plc., both headquartered in the United Kingdom, two leading tea suppliers to Pakistan, Lever Brothers Limited and Brooke Bond Pakistan Limited, fell under common control, with 75 per cent and 58 per cent of their shares respectively being owned by Unilever. An investigation by the Pakistan Monopoly Control Authority found that prices for Kenyan tea paid by Lever Brothers Limited and Brooke Bond to related companies in Kenya were higher than prices paid to unrelated international buyers to those related companies. The Pakistan competition authority entered into negotiations with Unilever as a result of which Unilever agreed to withdraw one of its brands and reduce its shareholding in Brooke Bond Pakistan to 40 per cent.

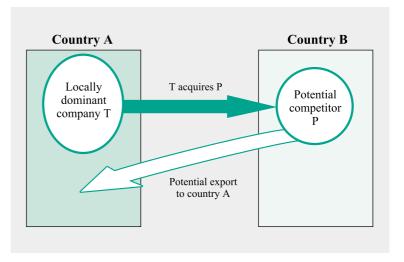
What is particularly interesting about this case, however, is the effect the merger of the parent companies and consequently their affiliates in Pakistan may have on tea-growing countries from which the former separate affiliates purchased their tea. The problem, perhaps for Kenya, is that two major purchasers of Kenyan tea have merged. This could mean that Unilever had become a dominant purchaser of Kenyan tea, allowing it to a much greater degree to control the prices at which tea is sold to its various companies. It is unclear if a practical remedy would be available to such a supplier country.

Source: UNCTAD, 1995d.

Since the European Merger Regulation entered into force in 1990, outward transactions having a "Community dimension" are being reviewed by the European Commission.

Competition authorities have intervened on various occasions when outward FDI choices made by their domestic companies are likely to stifle a possible source of competition (box V.10). Countries that do are likely to face situations in which the same transaction is also reviewed by other countries -- at least by the host country in which the transaction takes place and, possibly, also other jurisdictions affected by the transaction. Of course, all affected countries

Figure V.6. Reduction of potential competition in country A by locally dominant company T acquiring potential foreign competitor P



Source: UNCTAD.

would want to be sure that their interests are safeguarded. There is, therefore, a tendency for a (especially large) transaction to be reviewed by multiple jurisdictions, which involves, among other things, subjecting the parties to a transaction to increasing uncertainty (which, in turn, might deter desirable mergers from taking place). Moreover, individual national merger reviews might in some instances lead to results unacceptable to the other countries having an interest in the transaction. In such situations, the results in the first reviewing country might be met with objections from the other countries. A number of countries have tried to resolve some of these problems by increasing cooperation among their national competition authorities (see below).

Box V.9. The German Federal Cartel Office Guidelines on "domestic effects" for the review of outward mergers

The guidelines on "domestic effects" issued by the Federal Cartel Office of Germany specifically refer to outward mergers as follows:

- "B. <u>Mergers completed abroad</u> have domestic effects if the merger affects the structural conditions for domestic competition and if a domestic enterprise (including subsidiaries and other affiliated companies) is a party to the merger.
- 1. As regards mergers effected abroad between two directly participating enterprises only (all merger situations except for the formation of joint ventures, e.g., acquisitions of the assets or the shares of a foreign enterprise by a domestic enterprise):
 - a) there are domestic effects if both enterprises were already operating in the Federal Republic before the merger either directly or through subsidiaries, branches or importers;
 - b) there may be domestic effects, if only one of the enterprises was operating in the Federal Republic before the merger but if, for instance,

/

(Box V.9, cont'd)

- aa) after the merger a foreign party to the merger is likely to deliver goods to the Federal Republic due to production links with the domestic party (preceding or subsequent production stages) or links relating to the range of products. Where such future deliveries to the Federal Republic are likely usually depends on whether goods of the same or similar kind are already covered by trade between the countries involved and whether there are no technical and administrative trade barriers to such deliveries;
- bb) the know-how of a domestic enterprise is perceptibly enhanced or industrial property rights accrue to it as a result of the merger.
- 2. As regards the formation of joint ventures abroad, the domestic effect primarily depends on the product and geographical markets on which the joint venture operates. The question of when a joint ventures's activities have domestic effects is determined on the principles set out under B.1; in this connection the production links and /or links affecting the range of products have to be judged by the relationship between the joint venture and the domestic party.

Furthermore, the formation of a joint venture abroad may also have domestic effects, if

- a) a foreign enterprise participating in the joint venture was already operating in the joint venture's field of activity with the Federal Republic before the merger or if it can be reasonably expected to enter the market without the merger (cf. B.1.aa);
- b) the domestic party to the joint venture thereby obtains additional production capacity which perceptibly alters its capacity available for domestic supply (substitution or domestic production destined for exportation by production abroad). In general, it is a prerequisite for a change in capacity being perceptible that the domestic party already enjoyed a strong market position before the merger."

Source. Germany, Federal Cartel Office, 1975, p. 45.

Box V.10. Outward FDI reviewed

The United States challenged in 1968 the acquisition by its largest supplier of safety razors and blades, Gillette, of the third largest European manufacturer of electric razors, Braun, on the basis that Gillete would prevent Braun from competing vigorously in the United States market. The case was settled with a consent decree which required Gillette to divest the right to sell Braun razors in the United States to a company to be established.

The German competition authority prohibited, in 1993, the acquisition of the Allison Transmission Division of General Motors by the German company Zahnradfabrik Friedrichshafen. This latter company was the main supplier of gearboxes worldwide, whereas Allison was the second largest supplier in Germany and Europe. There were only two other competitors worldwide, both with much smaller market shares. In its decision, the Federal Cartel Office also took into account that the merged entity would have a dominant position worldwide.

In 1996, the German company Mahle took over the Brazilian firm Metal-Leve. Both firms produced automobile components. Mahle had a rather strong market position for special automobile components in Germany; but as Metal-Leve had only a very small market share in Germany (less than 2 per cent), the merger was allowed.

Sources: UNCTAD, based on OECD, 1994; United States, District Court of Massachussetts, 1968, 1975a, 1975b; Germany, Federal Cartel Office, 1993, 1996.

(c) Worldwide dominant positions

Certain cross-border M&As might have dimensions that are specifically international, i.e., that are not perceived purely from a host or home country perspective. For example, a certain merger might have the effect of facilitating global oligopolistic coordination among a limited set of producers, reducing the contestability of markets worldwide. This could be the case if global production networks were concentrated in the hands of a small number of TNCs. Such cases typically arise in situations in which a transaction affects product markets in which firms compete at the regional or global level.

There have been a few cases that illustrate competition authorities' desire to scrutinize investments that are likely to lead to, or augment, a worldwide dominant position. Such cases may involve inward FDI in one investigating jurisdiction and outward FDI in another. Each jurisdiction would typically focus its review on the competitive effects of a transaction on its national market. But, beyond that, one or more jurisdictions involved may object to the increase in worldwide concentration (box V.11).

In this respect, a distinction should be made between M&As that affect worldwide product markets discussed so far (and illustrated in the Aérospatiale-Alenia/ De Havilland case) and M&As involving firms that supply multiple but segmented regional or national markets worldwide, such as, for example, the merger between Gillette and Wilkinson Sword which was investigated in fourteen jurisdictions (European Commission, 1992). In the first type of situation, the competitive effects within national jurisdictions are indistinguishable from worldwide effects because the market is global. In the second type of situation, the competitive effects differ from market to market. In either case, the task of sorting out the costs and benefits lies at present largely with national competition authorities.

Box V.11. Worldwide concentration

The merger case of the *Aérospatiale-Alenia/De Havilland* involved the proposed sale by Boeing of the United States of a Canadian company, De Havilland to a Franco-Italian consortium, Aérospatiale-Alenia (better known as ATR). De Havilland and ATR are the two most successful manufacturers in the world of mid-size regional turboprop airliners, in particular the De Havilland DASH series of aircraft and the ATR 42 and 72. In certain size categories, there were, at the time of the proposed merger, no significant competitors worldwide for the DASH and ATR 42 and 72 aircrafts. The transaction was reviewed by both the United States and European Union merger authorities. The European Commission, acting first, blocked the merger. Apart from its international implications, Aérospatiale-Alenia/De Havilland is considered significant as the first merger transaction enjoined by the European Commission.

The Canadian Competition Bureau decided not to challenge the merger because of the efficiency gains in Canada, and limited anticompetitive effects on the small Canadian market for commuter aircraft, and because of the potential that De Havilland was a failing firm.

A recent outward FDI case was the acquisition, by Gencor Limited of South Africa and Lonrho Platinum of the United Kingdom, of joint control of the whole of the company Impala Platinum Holdings Limited ("Implats"). The acquisition was blocked by the European Commission after conducting an investigation in which it concluded that the result of the operation would be the creation of a dominant duopoly position in the platinum and rhodium market worldwide between Amplats/LPD and Implats/LPD, as a result of which effective competition would be significantly impeded in the common market within the meaning of Article 2 (3) of the Merger Regulation.

Sources: European Commission, 1991, 1996a.

(d) Post-entry competition issues

While the liberalization of FDI and trade regimes can be a means of promoting competition, the possibility of anticompetitive practices by firms requires the continuous attention of competition authorities. In fact, even in a national framework in which "trade" and investment are fully liberalized, the possibility of such practices provides one of the rationales for the existence of competition laws. In other words, the removal of international barriers to trade and investment alone would not ensure competitive behaviour in all instances. Therefore, while a FDI entry transaction may be competitively unobjectionable, or even beneficial in itself, it may raise competition issues in the longer term. These could be because of the existence of ancillary restraints or because FDI entry might be followed by practices that require the attention of competition authorities (secondary effects). Cross-border corporate alliances -- especially technological alliances -- raise special issues.

(i) Ancillary agreements restraining competition

There can be instances when FDI, although approved at entry, is accompanied by ancillary agreements that may involve various restrictions of competition. For example, international franchisors establishing themselves in a country might require local franchisors to source certain inputs from specific sources they control, with the justification that this guarantees quality. Competition authorities might be persuaded that this is, indeed, necessary -- or they might insist on neutral quality standards, non-exclusive buying arrangements, or buying arrangements of relatively short duration.

In this context, the Mexican Competition Commission analyzed ancillary restraints as follows:

Asset or stock sale agreements usually provide that the seller is under the obligation not to carry out activities or make investments in the same market in which the buyer operates. After analyzing several cases, the Commission has ruled that these covenants are not necessarily inconsistent with the provisions of the Federal Law of Economic Competition. In general terms, the conclusion is that these covenants shall be valid, from a competition point of view, provided that they are limited as to the number of parties involved, the geographic extension, the products or services to which the covenants refer to, and the period in which the obligation is in effect. These last elements are analysed on a case-by-case basis, taking into consideration the structure of each market. The Commission carefully analyses covenants not to compete for periods of more than five years, or whose purpose is not the transfer of distribution channels or similar assets, as these types of covenants may imply restrictions harmful to competition. The Commission reviews the justification or efficiency of the covenants on a case-by-case basis (Mexico, Federal Competition Commission, 1994, p. 28).

Joint ventures are particularly susceptible to the combination of a pro-competitive basic transaction and ancillary restraints raising competition issues (box V.12).

Box V.12. Ancillary constraints in joint ventures

In the Brunswick/Yamaha case, a Japanese firm entered into a joint venture in the United States with a domestic firm to develop and sell an improved outboard motor for pleasure boats. It was agreed, however, that Yamaha would not compete with Brunswick in the United States in any product, and that Brunswick would not use the new technology to compete with Yamaha in regard to land vehicles (e.g., motorcycles) propelled by such engines. The United States Federal Trade Commission invalidated the restraints and its ruling was upheld by the reviewing court.

Source: United States. Federal Trade Court. 1981.

(ii) Secondary effects

Even after the establishment of a foreign affiliate, competition authorities have a continuing role in ensuring that market situations do not develop that jeopardize competition in the economy and hinder entry by other competitors. A recent example of a post-FDI entry intervention to preserve a competitive market-place involved Mexicana and AeroMexico, two Mexican airlines (box V.13).

A recent commentary on a present FDI situation -- the potential acquisition of the Czech Brewery, Budejovich Pivovar (brewer of the Czech beer Budweiser Budvar) by the United States company Anheuser Busch (brewer of the United States beer Budweiser) -- illustrates the need for continued monitoring of TNC operations. In this case, this was done in reference to established principles of European Union competition law in order to address the secondary problems that may result after a TNC entry:

Box V.13. Secondary effects after FDI entry

In Mexico, a foreign TNC that owned part of a Mexican airline, chose to sell its stake in that airline to a horizontal competitor. The two airlines involved were AeroMexico, which was sold by the State to a consortium in 1988, and Mexicana, which was sold by the State to a consortium of domestic and international investors in 1989. In the period following the privatization, Mexicana integrated its operations closely with AeroMexico, until Mexicana's new owners finally sold 55 per cent of Mexicana to its larger competitor. The result was to create a conglomerate with control over 71 per cent of Mexico's domestic airline traffic, with a market share of 100 per cent on many routes. This merger occurred four months before the introduction of an antitrust law in connection with NAFTA and thus was not subject to review. However, subsequently the Mexican authorities imposed a requirement that the companies demerge within three years as a condition of their approval of a financial restructuring plan in August of 1995.

Source: UNCTAD, based on Hanson, 1994, pp. 199-216.

"[T]he application of EC law principles to cases involving acquisitions of Czech firms by foreign investors may be valuable. By modelling its economic laws so as to comply with the broad standards of EC law, the Czech legal system is creating an environment that might reassure foreign investors, while at the same time providing legal tools for the control of monopoly power that are internationally acceptable. In particular, EC legal principles can help in the process of bargaining over foreign direct investment proposals; first by indicating whether the results of the entry of a foreign investor will create a more or less competitive business environment in the market concerned; and, second, in justifying controls over the foreign investor, where needed, by reference to familiar principles of European business regulation, thereby showing that decisions are not the outcome of governmental caprice" (Muchlinski, 1996, pp. 667-668).

This advice is particularly applicable in situations where a foreign investor ends up in control of an essential facility, and the competition authority must intervene. In such circumstances, competition authorities may risk being accused of interference in the contractual and property rights if they force divestitures, or of favouritism towards competitors, particularly indigenous competitors, if they impose terms of access.

Therefore, one of the long-term issues that competition authorities must consider in dealing with FDI is preserving the competitive environment in their markets, including access to such essential facilities as energy grids and telecommunications networks. The first investor in a privatized or deregulated market may be foreign, especially if large capital sources or special expertise are needed. Such an investor -- for straightforward commercial reasons -- takes control of the best assets for a particular line of business. These assets may be, for example,

ports, networks or licences. When access to these facilities is foreclosed, new competitors may find themselves at a distinct disadvantage. In other circumstances, the first investor may, sometimes with state aid, construct essential facilities for a business, such as specialized harbour facilities at the best location, or may acquire such a facility as part of a privatization. Later, competition authorities may decide, or be asked, to order the holder of the essential facility to grant access to potential rivals in some aspect of the business (box V.14).²²

Finally, as transfer pricing can be used for predatory purposes, i.e., to drive competitors out of business, competition authorities may have to monitor events in the area. Given the nature of this practice, international cooperation is often required. 23

(iii) technology alliances Cross-border

Box V.14. Access to essential facilities

An example of the type of problem that can arise from allowing an investor to take control of an essential facility is found in the privatization of the Chilean electrical power industry. The major Chilean generating utility, Endesa, was privatized in such a way as to leave it in control of almost all the best unexploited hydroelectric power water concessions. In addition, ENDESA is now controlled by ENERSIS, which owns the most important electricity distribution grid -representing an essential facility for competing in the industry -- in the country. Competitors -- and, in particular, foreign investors who might build hydroelectric power facilities, particularly at those sites that offer low costs per kilowatt hour generated -- may therefore face difficulties in entering the market. Thus the privatization of Endesa, partly to foreign direct investors, may have the effect of blocking new investment. However, competition law might provide a remedy by compelling Endesa to deal with rivals on reasonable terms.

*Sourc*e: Bitran and Serra, 1994, pp. 179-197.

As noted in chapter I, intercorporate R&D alliances, which involve agreements between two unaffiliated firms, are becoming more numerous. At the same time, certain types of long-term alliances exhibit many characteristics of joint ventures (UNCTC, 1992), especially where they involve transfers of stock or interlocking directorates; thus, they may be subject to merger control. Given the many types of alliances, and the many different purposes for which they are created, they constitute a grey area of competition law (UNCTAD, 1994b).

In view of the mix of procompetitive and anti-competitive elements that might be involved in these agreements (see chapter IV), some jurisdictions (which otherwise have a strict approach to competition-law enforcement) have tended, during the past decade and a half, to narrow the range of activities that constitute violations of their competition laws in this context; in other words, the scope of *per se* violations has been reduced. Therefore, an increasing number of agreements and business practices are examined by courts under the "rule-of-reason" standard of interpretation.²⁴ And given the potentially positive economic implications that especially R&D alliances have, an increasing number of authorities appear to exempt them from competition regulation.²⁵

In this respect it is useful to recall that R&D alliances encompass arrangements in which two or more firms provide a certain degree of technical collaboration or partial integration in R&D operations. The conclusion of a R&D alliance implies a compromise between a desire to collaborate and the underlying intention of partners to maintain as much independence as possible in order to take advantage of the potential results and new skills to be acquired through the partnership. This is particularly true where partners are required to disclose certain background information that may be necessary for the development of a given product. In the case of horizontal arrangements involving competitors engaged in the same segment of the

market, the parties may fear that their partners will considerably strengthen their competitive position at their own expense. A geographical partition of markets may therefore be considered as a solution to overcome these concerns, but such an agreement would of course restrict competition and may thus require competition-law intervention. In vertical arrangements -- where complementarities allow the benefits to be distributed according to the respective activities and products -- this kind of situation is less likely to arise. It should be added that alliances can also be a way for large or dominant firms to avoid competition through innovation, by co-opting potentially innovative rivals and by controlling and slowing down the innovation competition.

In the European Union, R&D intercorporate arrangements were first addressed in a Commission Notice of 1968 regarding agreements, decisions and concerted practices in the field of cooperation between firms (European Commission, 1968). The notice stated that cooperation agreements relating only to R&D normally do not fall under Article 85(1) of the Treaty of Rome (which prohibits, in general, agreements between firms, decisions by association of firms and concerted practices that may affect trade between member States and which have as their objective or effect the prevention, reduction or distortion of competition within the Union (box V.15)). The Notice was complemented by a block-exemption regulation that granted automatic exemption to certain categories of R&D agreements. Through this regulation, favourable treatment extends to arrangements that make provision for joint exploitation of the results. "Joint exploitation" includes joint manufacturing and joint licensing to third parties. Some conditions must be met for an agreement to receive favourable treatment. In particular, R&D must be carried out in the framework of a defined programme. In order to guarantee that several independent poles of research can exist within the European Union, the regulation excludes from its application agreements between competitors that exceed a market share threshold of 10 - 20 per cent. In any event, agreements not covered by the regulations can be notified to the Commission to obtain individual exemption (box V.16).

Under certain conditions, therefore, R&D agreements receive a favourable competitionanalysis treatment. Beyond that, they also raise issues related to intellectual property rights (among them as regards ownership and the protection and the exploitation of results) and in relation to licensing

Box V.15. Exemption of R&D arrangements

In the Henkel/Colgate case, two large manufacturers of detergents operating on a worldwide scale (one a German and one a United States' firm) decided to set up a joint affiliate entrusted with the task of carrying out research relating to detergents. The agreement enabled the two parties to have access to the results of the joint R&D on the same conditions and to use them without limitations. The arrangement did not restrict the freedom of the parties to carry out individual research but provided that each one would make available to the joint affiliate the results of such research.

The European Commission considered that the agreement infringed Article 85(1) of the Treaty of Rome, mainly for two reasons: it restricted individual research since parties were bound to license the results of their own research activities related to the R&D agreement to the common entity; and the fact that parties had to communicate their results to the joint venture and that neither of them could license the results to third parties without the authorization of the partner had the effect of reverting each of the parties from securing a technological advantage over the other and thereby improving its position on the market. However, the Commission granted an individual exception on the basis that the joint research carried out by partners might make a contribution to technological progress; it contained no restrictions on either partners; and joint research was limited in time and scope.

Source: European Commission, 1972.

Box V.16. Main features of the exemption of R&D agreements in the European Union

A 1984 regulation, as amended in 1992, dealing with cooperation in R&D and the exploitation of the results of cooperative efforts, specifies the restrictions of competition that may be included in such R&D agreements in order to allow cooperating partners to concentrate their research activities, with a view towards improving their chances of success, and to facilitate the introduction of new products and services to the market. The regulation recognizes that these restrictions are generally necessary to secure the desired benefits for the partners and consumers.

Scope. The regulation covers agreements entered into between firms for the purpose of joint R&D regarding products or processes and joint exploitation of the results of that R&D; joint exploitation of the results of R&D of products or processes jointly carried out between the same firms according to prior agreement; joint R&D of products or processes excluding joint exploitation of the results.^a

Conditions for the grant of an exemption. In order to benefit from an exemption, R&D agreements should meet the following conditions:

- the joint R&D activities to be carried out within the framework of a programme defining the objectives and the field of the work:
- all partners should have access to the results of the work;
- where the agreement is limited to just joint R&D, each partner should be free to exploit the results of the work and any pre-existing technical knowledge necessary therefore independently;
- joint exploitation should relate only to results that are protected by intellectual property rights or
 constitute know-how which substantially contributes to technological or economic progress and that
 the results should be decisive for the manufacture of the products or the application of the processes;
- firms charged with the manufacture of the products should be required to fulfil orders for supplies from all partners.

Duration of the exemption and market share limitation. There are a number of limitations with regard to the duration of R&D agreements and combined market shares of the partners:

- for non-competing firms (manufacturers of products capable of being improved or replaced by the contract products), the exemption applies for the duration of the R&D programme and, if the jointly exploitation is involved, for five years from the time the product is first put on the market within the European Union;
- for competing firms (manufacturers of products capable of being improved or replaced by the contract
 products), the exemption applies also for five years, but only if at the time of the agreement the partners'
 combined production of the products capable of being improved or replaced by the contract products
 does not exceed 20 per cent of the market for such products in the European Union or a substantial
 part thereof;
- after five years, the exemption will continue to apply as long as the production of the contract products together with the partners' combined production of other products that are considered by users to be equivalent in view of their characteristics, price and intended use does not exceed 20 per cent of the total market for such products in the European union or a substantial part thereof;
- in case an agreement covers the distribution of the products subject of the joint activities, the exemption applies only if the partners' production of the products referred to above does not exceed 10 per cent of the market for all such products in the European Union or a substantial part thereof.

Exempted restrictive practices: The list of main restrictions of competition that are allowed to be included in an R&D agreement is as follows:

/...

(Box V.16. Cont'd.)

- restrictions on independent R&D;
- restrictions concerning entering into agreements with third parties on R&D in the field to which the programme relates or in a closely connected field;
- restrictions on procuring the contract products exclusively from partners, joint organizations or firms or third parties, jointly charged with their manufacture;
- restrictions regarding the manufacturing of the contract products or application of the contract processes in territories reserved for other partners;
- granting one of the partners the exclusive right to distribute the contract products or granting the exclusive right to distribute the contract products to a joint firm;
- obligation imposed on partners to communicate to each other any experience they may gain in
 exploiting the results and to grant each other non-exclusive licences for inventions relating to
 improvements or new applications.

Intellectual property rights. The exemption also applies to a number of restrictive clauses involving intellectual property rights such as:

- obligation to communicate patented or non-patented technical knowledge necessary for the exploitation of its results:
- obligation not to use any know-how received from another partner for purposes other than the programme and the exploitation of its results;
- obligation to preserve the confidentiality of any know-how received or jointly developed under the programme; this obligation may be imposed even after the expiry of the agreement.

However, the exemptions do not apply to clauses that prohibit, after completion of the R&D or after the expiry of the agreement, challenging the validity of intellectual property rights which the partners hold in the European Union. Similarly, the exemptions do not cover clauses by which partners are required not to grant licences to third parties to manufacture the contract products or to apply the contract processes even though the exploitation by themselves of the results is not provided for in the agreement or could not be carried out.

Source. European Commission, 1984a and 1993.

^a The R&D of products or processes means the acquisition of technical knowledge and the carrying out of theoretical analysis, systematic study or experimentation, including experimental production, technical testing of products or processes, the establishment of the necessary facilities and the obtaining of intellectual property rights for the results.

agreements (Ullrich, 1995). At the international level, licensing agreements, in particular, have attracted attention in the framework of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) (Roffe, forthcoming); section 8 of this Agreement contains a set of rules and standards regarding the control of anti-competitive practices in international licenses (box V.17).

* * *

Most competition laws have two basic provisions, one dealing with restrictive agreements (i.e., cartels and vertical arrangements) and one dealing with single firm conduct (i.e., monopolization or abuse of a dominant position). Increasingly, competition laws are complemented by special regulations on M&As and joint ventures. These transactions often require before-the-fact analysis and remedy, due to, among other things, the high cost of

uncertainty of ex-post facto scrutiny. Generally, the main interface between competition law and FDI occurs when TNC entry is accomplished by means of a significant M&A, or joint venture. Anti-competitive control of such transactions requires a carefully calibrated system providing for prior notification, rapid analysis, temporary injunctions and prompt decisions. In this respect, experience indicates that there are a number of typical scenarios of cross-border M&As and joint ventures that can create competition issues. An important characteristic of current merger-review analysis is that it focuses mainly on the effect of a transaction on the national market in question, not on international markets. After FDI entry, competition issues may arise in the host country that could involve TNCs. Therefore, competition authorities have a continuing role to play in ensuring that market situations do not develop that jeopardize competition in the economy and hinder entry by other competitors.

Box V.17. Anticompetitive practices and licensing arrangements concerning intellectual property rights

In connection with FDI, various licensing arrangements on the use or the exploitation of intellectual property are often concluded between firms. These arrangements may contain restrictive clauses or concerted practices that could affect competition in the relevant markets. Therefore, the use of intellectual property rights in transactions among firms could, in certain circumstances, give rise to the possibility of anticompetitive behaviour: the exclusive rights conferred by an intellectual property law may be exercised to enhance or to abuse monopoly power by extending the protection of intellectual property rights beyond its purpose.

How competition authorities deal with these issues depends in large part on their approach to vertical restraints. Thus, there are large differences in the fundamental approaches to intellectual property rights-related restrictive practices between the United States and the European Union, both with a long experience in this area. For example, the United States Antitrust Guidelines for the Licensing of Intellectual Property, issued by the Department of Justice and the Federal Trade Commission in 1995 (United States, Department of Justice and Federal Trade Commission, 1995), follow the principle of dealing with intellectual property as with any property. The competition authorities are concerned mainly with horizontal restraints, as they are in other areas. In contrast, the European Union focuses on the control of horizontal as well as vertical restraints (territorial, quantity or customer restrictions) imposed upon licensees or agreed upon between them or with the licensor, respectively. The European Union's main purpose is to control vertical agreements that may result in a partitioning of the market. The European Union is more concerned than United States authorities with maintaining consumer choice regarding suppliers of the same brand (intrabrand competition).

In this context, a trend towards a certain degree of harmonization started with the TRIPS Agreement concluded as part of the Uruguay Round of Multilateral Trade Negotiations (UNCTAD, 1996d) which also addresses anticompetitive practices in licensing arrangements. The Agreement addresses competition issues and refers to national legislation as far as it is concerned with policy determination and the implementation of specific measures. It is the first international legally binding agreement in the area of intellectual property that provides guiding principles dealing with the control of anticompetitive practices in contractual arrangements. It allows members to take, if needed, "appropriate measures, provided that they are consistent with the provisions of this Agreement, ... to prevent the abuse of intellectual property rights by right-holders or the resort to practices which unreasonably restrain trade or adversely affect the international transfer of technology" (article 40) within its main objectives, namely, the reduction of distortions and impediments to international trade and the avoidance of barriers to legitimate trade.

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(Box V.17, cont'd.)

The Agreement makes it clear (article 40) that "nothing in this Agreement shall prevent Members from specifying in their legislation licensing practices or conditions that may in particular cases constitute an abuse of intellectual property rights having an adverse effect on competition in the relevant market". It also allows (in article 40.2) member States to "adopt, consistently with the other provisions of this Agreement, appropriate measures to prevent or control such practices in the light of the relevant laws and regulations of that Member". It also gives examples of such practices, including exclusive grant-back conditions, conditions preventing challenges to validity, and coercive package licensing. The Agreement is limited to those licensing practices that exemplify the practices envisaged in this article. In other words, restrictive practices or practices affecting technology transfer that occur outside a licensing context, such as delimitation agreements, assignments, intellectual property clauses in R&D contracts or in cooperation agreements, joint ventures, subcontracting arrangements, etc., as well as all unilateral conduct by enterprises enjoying some sort of market power, are not subject to article 40 and, therefore, not subject to the international enforcement cooperation provided in the Agreement.

Member countries seem to be bound by an obligation to provide some minimum control over restrictive practices which, according to traditional principles, unreasonably restrain competition or adversely affect trade. The Agreement implies the gradual development and mutual understanding of at least the basic principles of what are generally unacceptable restrictive practices in the field of intellectual property.

Source. UNCTAD, 1996b.

C. Broader policy implications

The preceding section dealt with the interface between FDI and competition law and policy issues arising from it. This section examines, from a broader perspective, what governments could do to maximize pro-competitive effects of FDI and minimize anticompetitive situations.

1. The importance of competition policy

Perhaps the best starting point is to return to the opening sentence of this chapter, namely that there is a direct, necessary and enlarging relationship between the liberalization of FDI regimes and the importance of competition policy. The liberalization of FDI regimes can directly contribute to the contestability of a host country's markets. To the extent that this increases the competitiveness of domestic firms in host countries, it can also contribute to the contestability of international markets. But while FDI liberalization can help to enhance the contestability of markets by foreign firms, it is not a sufficient condition: in so far as FDI liberalization creates more space for firms to pursue their interests in markets -- as it invariably does -- it becomes necessary, as a rule, to put in place competition laws to ensure that former statutory obstacles to contestability are not replaced by anticompetitive practices of firms. This need increases as liberalization becomes more widespread and extends also to new areas.

If anything, this underlines that the three dimensions of the FDI liberalization process (UNCTAD, 1994a, chapter VII) are, indeed, inextricably linked: the reduction of barriers to FDI and the establishment of positive standards of treatment for TNCs need to go hand in hand with the adoption of measures aimed at ensuring the proper functioning of markets, including, in particular, measures to regulate and control anticompetitive practices by firms.

This also underlines something else, and something more fundamental, namely, that the culture of FDI liberalization that has grown worldwide and has become pervasive, needs to be complemented by an equally worldwide and pervasive culture of competition, which, of course, needs to recognize competing objectives as well (see section D below). Clear competition policies and their enforcement can contribute significantly to the growth of such a competition culture. In this respect, the trend in many parts of the world towards adopting or strengthening competition laws noted earlier in this chapter (figure V.1) is important in that it suggests that a competition culture is emerging. However, many countries are new to this practice; moreover, the transition to more open, competition-oriented systems cannot be achieved overnight. This transition will, especially for many governments of developing countries and economies in transition, involve difficult political choices and the balancing of interests among many stakeholders in the process, apart from a range of practical problems. Thus, the promotion of a competition culture requires additional efforts, not only by national competition authorities themselves, but also by other administrative bodies and political and civic society groups. ²⁶

When one moves from the plane of competition culture to the plane of policies, this means also that, to maintain contestability and competition, increasingly, competition policy should rank alongside FDI and trade policies when it comes to relevant policy instruments. Indeed, this is part of the "necessary and enlarging" relationship between FDI liberalization and competition law. An important effect of FDI liberalization has been to reduce greatly the role of traditional tools, such as screening at the time of entry, closing activities to FDI and foreign ownership restrictions. The central presumption underlying these controls was that FDI entry should be allowed only if specifically approved by host governments. The opening of countries worldwide to FDI, and their increasing competition to attract it, has reversed that presumption and its underlying logic. In a world of liberalized investment regimes the priority becomes to ensure that inward FDI stimulates efficiency gains for the host economy and, ultimately, welfare. At the same time, countries liberalizing their investment regimes may be concerned that they may be moving, for example, from a system of screening all take-overs of national firms to screening none. They may also see risks of TNCs acquiring dominant positions. Therefore, there is a need to have tools to assess the competitive effects of FDI at the time of entry and after entry, and that function is assumed by a competition authority. Competition policy can thus play a major role in the process of liberalization, notably by ensuring that markets are kept as open as possible to new entrants, and firms do not frustrate this by engaging in anticompetitive practices. In this manner, a vigorous enforcement of competition law can provide reassurance that FDI liberalization will not leave a government powerless against anticompetitive transactions or subsequent problems. In brief, as controls on FDI are reduced, the role of competition policy for assessing the effects of FDI on a host country's economy becomes increasingly important.

When formulating their competition policies, countries need, of course, to keep in mind that competition policy is not a substitute for FDI and trade policies, but rather that all three are mutually supportive in the pursuit of efforts to ensure that markets function properly. This requires appropriate coordination between these policies, at the national and international levels, e.g., in a sectoral context. (The 1997 WTO agreement on basic telecommunications services shows one way in which trade and FDI liberalization, deregulation and safeguards against anticompetitive practices can be combined -- see box V.18.) Still, to the extent that contestability and competition considerations gain in importance in shaping policies, and the more liberal trade and FDI policies become -- but at the same time do not always lead to contestable markets -- competition policy becomes *primus inter pares* among policy instruments used to maintain contestability and competition.

However, it must be recognized that there are few countries that have strong, well-functioning and well-funded competition authorities, and that even in the case of those countries that do, it took a considerable time until they had assumed an important role. It may well take other countries many years to develop appropriate policies and establish the means to implement them fairly and effectively. This means that, where contestability and competition are the objective, many countries will need to continue to rely, for the foreseeable future, primarily on FDI and trade to meet these objectives, in the context of closer integration into global markets.

Box V.18. Market structure, FDI and competition rules in the WTO negotiations on basic telecommunications services

The WTO negotiations on basic telecommunications illustrate how the General Agreement on Trade in Services (GATS) can be employed to encourage a transformation away from monopoly market structures and towards competition, the progressive elimination of restrictions on trade and FDI and the adoption of safeguards to ensure that the benefits of commitments are not undermined by anticompetitive practices.

On 15 February 1997, the WTO concluded nearly three years of negotiations on GATS schedules of commitments on liberalization for basic telecommunications.^a Sixty-nine governments made commitments (contained in 55 schedules), which are annexed to the Fourth Protocol to the GATS. The rationale for extending the negotiations beyond the Uruguay Round was to allow negotiators to take into account the many reforms under way in national telecommunications regimes and rapid advances in technology.

The results show how dramatically views are changing about the market structure that best serves consumers and economic development imperatives. Public voice-telephone service and the national telecommunications infrastructures used to provide this service were long viewed as "natural" monopolies. In this service, however, 59 governments made commitments to allow competitive supply (defined here as two or more suppliers, including foreign suppliers), either upon entry into force of the Protocol or on a phased-in basis, in one or more market segments (i.e., local, long distance or international services). Twenty-five of the 59 governments making commitments on public voice telephone, committed to phase-in competition, meaning that liberalization would take place on the date specified in the schedule, rather than upon the formal entry into force of the Protocol in January 1998. All but one developed country agreed to create almost totally open market regimes in these areas. A substantial number of developing countries did the same. The main difference was that developing countries tended more often to commit to phase-in competition in infrastructure-based public voice telephone and were less likely than developed countries to commit to allow the service to be provided through resale.

Other basic services have often been more easily amenable (or perhaps less politically sensitive) to the introduction of competition. On these, 63 governments made commitments on competition in data-transmission services; 60 granted access to cellular/mobile telephone markets; 55 opened markets for leased circuit services (the supply of transmission capacity); and 59 committed on other types of mobile services (such as personal communication services, mobile data or paging). Regarding newer satellite-related communication services, 51 governments agreed to liberalize some or all types of mobile satellite services or transport capacity, and 50 to liberalize fixed satellite services or transport capacity.

Since GATS provisions aim at progressive liberalization, they give governments the possibility to maintain certain restrictions on their commitments, as long as these are listed in their schedules. One such limitation, particularly relevant to FDI, involves limitations on foreign equity participation.

Forty-nine governments (out of 69 taking part in the negotiations) allow majority foreign ownership of telecommunications service suppliers that may establish in their markets. Forty-three of these governments have no FDI restrictions and six maintain foreign equity limitations, which nevertheless allow foreign control (e.g., 50 per cent or higher). Limitations on foreign participation, although more

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(Box V.18 Cont'd.)

common in the economies of developing countries, are not unique to them. Six of the 23 developed countries list foreign equity limits; only three of these restrict foreign participation to a minority share, although two permit foreign control only through indirect ownership arrangements. Three of the six economies in transition that participated in the negotiations limit foreign ownership; one of these permits a majority foreign share. Fifteen of the 40 developing country participants, or less than 2 in 5, limit foreign ownership to minority share holding (49 per cent or less). Two other developing countries limiting foreign equity allow majority control.

Often, the foreign equity limits listed in the Schedules do not apply to all basic telecommunications services committed. Only one developed country and eight developing countries have inserted in their Schedules foreign equity limitations applying to all basic telecommunications services. However, two more developing countries indicated that, for the moment, the maximum level of foreign equity in all basic service suppliers is unbound, meaning that they have reserved the right to introduce limitations at a level that may be determined in the future.

One of the results of the negotiations was the elaboration of a common set of telecommunications regulatory principles, called the "Reference Paper" which participants agreed to use as a guideline in taking additional commitments. The Reference Paper deals with such matters as competition safeguards, interconnection guarantees, licensing and the independence of regulators. It was agreed that, when scheduling commitments based on the Reference Paper, participants were free to adopt it in whole, modify portions of it to fit their own regulatory structures, or to commit only on some of its elements. Nevertheless, 63 of the 69 participating governments included commitments on regulatory disciplines. Of these, 57 committed to the Reference Paper in whole or with only minor modifications. Even among the six participants that made no regulatory commitments, four undertook to introduce such commitments in the future.

The main rationale for the principles of the Reference Paper was to safeguard a competitive balance in an environment in which new market entrants would face competition with a former monopoly, one that would initially dominate existing network facilities and a large portion of the market. In some respects, it builds upon obligations already existing in Articles VIII and IX of the GATS (the first dealing with monopoly and exclusive service suppliers and the second with restrictive business practices) and in the Annex on Telecommunications (dealing with access to telecommunications for services suppliers in sectors where GATS-specific commitments have been undertaken). Also, to the extent that the GATS or the Reference Paper deal with competition-related issues, they do so more in the interest of safeguarding the integrity of GATS obligations and commitments than with the aim of establishing generalized competition rules.^b

In order to meet the concern that the GATS obligations and the Telecommunications Annex might not provide an adequate level of discipline to prevent anticompetitive practices of monopoly and dominant operators, the Reference Paper includes a general provision on the prevention of anticompetitive practices by major suppliers (defined as telecommunications operators having control over essential facilities or market dominance). It also provides some concrete examples of such practices, including anti-competitive cross-subsidization; misusing information obtained from competitors; and withholding technical and other commercially relevant information that other suppliers need to provide their services.

Recognizing that effective interconnection is essential to successful competition in this industry, the Reference Paper also includes specific details on interconnection obligations governments could commit to impose on "major" suppliers. These provisions require that interconnection be ensured under non-discriminatory, transparent and reasonable terms, conditions and rates; of a quality no less favourable than that which a major supplier provides for its own like services, for like services of non-affiliated

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(Box V.18 Cont'd.)

service suppliers or for its subsidiaries or other affiliates; at cost-oriented rates; in a timely fashion; sufficiently unbundled so that a supplier need not pay for unnecessary network components or facilities; and at any technically feasible network-termination point. Other Reference Paper provisions on interconnection call for greater transparency and mechanisms for the resolution of disputes on interconnection with major suppliers.

Regarding universal service, the Reference Paper's principles recognize that governments have the right to define the universal service obligations they wish to maintain and that these obligations are not to be regarded as anti-competitive *per se.* However, they must be administered in a transparent, non-discriminatory and competitively neutral manner and not be more burdensome than necessary to meet the chosen universal service objectives.

The basic telecommunications commitments now included in the GATS Schedules demonstrate not only that market access for FDI and trade has been improved substantially, but also that developing countries have come to view making such commitments as complementary to their economic development strategies. Governments seeking FDI in industries such as telecommunications, which they often consider essential to development, have used the commitments to send a clear signal to potential investors of their priorities and of their resolve to maintain a stable and hospitable investment climate in which all participants, including new entrants, will have a fair chance to compete.

Source: WTO Secretariat.

- ^a The definition of "basic telecommunications" developed for negotiating purposes was open-ended. It covered all telecommunications services (both public and private) that involve end-to-end transmission of customer supplied information (e.g., the relay of voice or data from sender to receiver without "adding value" or changing its form or content). It also covered these services provided over network infrastructure as well as through resale (over private leased circuits).
- b For a more extensive discussion of the regulatory implications of the negotiations, see Tuthill, forthcoming.

To make a difference, competition policy needs to be implemented effectively (Goldman, Kissack and Witterick, 1997, pp. 22-35). This requires, first of all, a strong competition law and a competent and effective competition-enforcement agency. The agency needs broad powers to investigate enterprises' behaviour, including the authority to analyse the competitive effects of certain major types of FDI -- e.g., whether the results of the entry of a foreign investor would create a more or less competitive environment in the market concerned -- and the competition implications of market-power inducements. The agency entrusted with the enforcement of competition law ought to be obliged to put fair competition and the maximization of economic efficiency and consumer welfare above all other considerations. The rulings of competition authorities must be open to review or appeal, including by the judiciary. Once the basic political decision is made to adopt and enforce competition law, the decisions of the competition agency should not be subject to political intervention.

Such an enforcement agency requires well -trained professional staff. The agency should develop a strong analytical capability in order to be able to determine the economic consequences of alleged or potential anticompetitive practices. This, in turn, requires an appropriate budget in order to, among other things, ensure adequate staffing and to be able to meet the costs of training. This is all the more so given the speed with which competition cases -- especially M&As -- need to be dealt with in order not to block unnecessarily the flow of legitimate cross-border transactions. ²⁸

One important role of an effective enforcement agency is to act as a watchdog to discover potentially anticompetitive situations and to deal with them at an early stage. ²⁹ Various

techniques can be used for this purpose. They include, most importantly, moral suasion (i.e., discussing a potential problem with the management of a firm whose practice might be anticompetitive, with a view towards reaching a mutually agreed-upon solution of the problem) and consent decrees (i.e., formal or informal agreements between an enforcement agency and a firm to the effect that, if the firm will undertake certain steps or desist from certain practices, the agency will not seek further redress through prosecution). Such "soft" approaches to competition-law enforcement can be quite effective, especially if they are buttressed by the possibility that, if a mutually satisfactory solution between the enforcement agency and the relevant firm cannot be reached, there remains the possibility of prosecution. If "soft" approaches to the enforcement of a specific case fail to work, the enforcement agency must be prepared to prosecute the case, using strong remedies for egregious and clear violations, but milder remedies, such as prohibiting future violations, in difficult, precedent-setting cases. Both the review of cases by the competition authority and prosecution of cases should be subject to some time limits, especially with respect to M&As. In many countries, moreover, firms have the right to initiate action; the threat of complaints by affected private actors could have an important dissuasive effect regarding potential anticompetitive practices.

Enforcement of competition law should therefore be vigilant but not dogmatic. Indeed, because some issues of competition policy are in "grey" areas and subject to the merits of the case involved, many areas of the law might need to be enforced on a "rule-of-reason" basis. If subject to a "rule-of-reason" standard, a particular business practice would neither be *per se* legal nor illegal but, rather, legality would be a function of its effect. Applying a rule-of-reason standard, however, increases the risk of arbitrariness in competition decisions.

Traditionally, competition laws have focused mostly on protecting competition among domestic firms within the local market. With the liberalization of international trade, attention expanded to include (foreign) competition through imports. With FDI having become more important than trade in terms of delivering goods and services to foreign markets, markets themselves becoming increasingly regionalized or globalized, and national production systems being more and more integrated through the activities of TNCs, attention now needs to expand to include the competition effects of FDI and corporate integrated international production systems, including corporate alliances. As discussed in the preceding chapter, these effects have policy implications, especially in terms of the geographical space within which certain relevant markets have to be defined, the efficiency gains that can be associated with FDI and corporate integrated international production systems, and the supply response that may be possible through FDI:

- The regionalization and globalization of markets and their underlying production structures make it increasingly difficult to define and measure market concentration and to determine the emergence of dominant positions (and the possibilities of abuse of market power inherent in this) in reference solely to *individual national* markets. This is relevant both in the context of the standards developed for the competition control of cross-border M&As and joint ventures, as well as for monitoring the subsequent competition effects after FDI entry. More broadly, the existence of larger-than-national markets and production structures can make it substantially more difficult, especially for developing countries, to obtain relevant information, to assess effects and to implement decisions. This is a consequence which, inherently, requires greater international cooperation, an issue that will be dealt with separately below.
- Closely related to this is that the efficiency gains that can be associated with corporate integrated international production systems need to be balanced against any anticompetitive effects of the relevant transactions for the markets supplied by these systems. In other words, FDI transactions involving M&As or joint ventures

- increasingly need to be evaluated by taking into account well-documented efficiency gains likely to be achieved and balancing these against any lessening of competition or any increases in concentration. 30
- When confronted with non-trivial and non-transitory price increases, competition authorities need to give more attention to a possible supply response through new FDI by foreign producers not yet servicing the market (in addition to supply responses by established domestic producers and imports). Competition authorities are only beginning to consider explicitly and systematically such new FDI as a normal possible source of supply response (box V.19). However, for the reason discussed in chapter IV, FDI can, indeed, represent, in today's world economy, a viable supply response as many producers can establish themselves in a given market within a reasonable time (e.g., less than two years). The FDI supply response is particularly important because, in terms of magnitude, world sales by foreign affiliates are larger than world imports and because, in the services sector, FDI is often the only international supply response possible, given the importance of local establishment for delivering services to foreign markets.

Box V.19. Supply response in competition analysis

As discussed above, FDI can be as important as trade in making markets more competitive. In evaluating the likely consequences of M&As or other market conduct, competition authorities would be expected to consider FDI and trade at different stages of their analysis. The United States approach to these issues is described below. The somewhat different analytical frameworks used by other competition authorities are also capable of giving full consideration to the competitive significance of FDI.

The impact of trade on competitive conditions is often an important factor in defining the relevant geographic market within which to assess the likely effects of a merger. The importance of trade to this market-definition process is obvious when one recalls that the purpose of the process is to delineate the area containing the firms or (plants) from which customers of the merging firms could obtain supplies if the merging firms attempted to restrict output and raise price. The United States and some other countries define relevant geographic markets using economic principles regardless of the size of the market; but in some other countries, the competition law is interpreted to prevent consideration of a relevant geographic market that is larger than the area circumscribed by a country's national boundaries, although imports may enter at one stage of the analysis.

Foreign direct investment entering a market (through the establishment of new production facilities) is not part of the market-definition process, but -- like imports from outside the geographic market -- it is relevant to whether a merger is likely to be anticompetitive. Under the United States system, firms not producing or selling the relevant product in the geographic market will be treated as if they were in the market if they would be likely to have a sufficient "supply response". This supply response can result from use of existing assets to produce or sell in the relevant market, or it can result from new investment: "the construction or acquisition of assets that enable production or sale in the relevant market" (United States, Department of Justice and Federal Trade Commission, 1992, at 1.32). No matter what the source of the potential supply response (trade or investment, domestic or foreign), the supply response will be considered at this stage -- as if it had already occurred -- only if it is likely to occur within one year and without the expenditure of significant sunk costs at entry and exit. In many industries, supply responses through FDI (or other investment) will not meet this requirement, because even if the supply response could in theory occur in time, the investment may be "sunk" (recoverable only through sales in the relevant market) and "significant" (not recoverable within one year). Of course, if a likely future supply is not so quick and not likely to be (treated as) already deemed part of the market, its competitive significance is fully considered at a later stage in the competition analysis -- the assessment of the ease and likelihood of entry.

Source. UNCTAD.

Competition authorities constantly need to monitor developments in the world economy to adapt to the changes that they may engender (box V.20). Increasingly, this requires that competition authorities recognize the growing importance of not only trade but also FDI for market structures and competition. When it comes to competition policy and its enforcement, moreover, this requires that competition authorities pay increasing attention to the need to cooperate among themselves.

Box V.20. Competition policy in the era of globalization

During 1996, the United States Federal Trade Commission held extensive public hearings, leading to a report entitled "Competition Policy in the New High-Tech, Global Marketplace." The Commission concluded that global competition is expanding at a rapid rate and that innovation is a crucial element of such competition. In particular, the Commission found that:

"In general, U.S. businesses are now confronting increasingly stiff competition as a result of the "globalization" of trade. Domestic firms face a greater number of foreign competitors in their home markets and are under pressure to expand their operations abroad. In this global marketplace, U.S. businesses stress both the importance of achieving efficiencies—that is, cost savings—and the importance of entering new markets, whether to attract new foreign customers or to remain competitive for their U.S. customers now doing business around the world. Mergers and other collaborative ventures are sometimes the vehicles they use to achieve these goals. Given this hearings' testimony and current research on these trends, it is timely to reassess certain aspects of competition policy toward mergers and collaborative ventures to ensure that procompetitive, efficiency-enhancing transactions are permitted" (United States, Federal Trade Commission, 1996, S. 5-6).

After noting that effective, consistent, sensible competition law enforcement is a necessary and desirable framework for continuing the development of global markets, the Commission in its policy conclusions regarding competition enforcement in this new globalized era (S. 8-9) emphasized, among other things, that:

- There should be further development of an efficiencies justification for mergers or joint ventures.
- Relevant geographic markets should be defined to include foreign supply response as appropriate, giving due regard both to actual barriers to trade and to the increasing trend towards the globalization of trade and services.
- Major mergers should be examined in terms not only of whether they eliminate competition as to
 existing products but also to whether they will significantly lessen innovation competition for the
 creation of substitute products.

In April 1997, the United States amended the country's Merger Guidelines to take into account the conclusion pertaining to efficiency considerations.

Source. United States, Federal Trade Commission, 1996.

2. International cooperation

(a) The need for international cooperation

There are numerous reasons why -- in an era of globalization -- competition issues as they relate to FDI increasingly involve more than one country and, therefore, require international policy responses. Indeed, these are grounded in the very nature of the transnational character of the firms involved and relate especially to such issues as access to information and the implementation of decisions taken:

Information. Even in a simple example of FDI by means of an acquisition, competition authorities in the acquired firm's country will probably need documents from the acquired firm's headquarters in order to analyse the purpose and effect of a deal. Usually, the foreign firm seeking clearance for the transaction supplies the non-local information voluntarily. But it is important that sending such information abroad be legal under the law of the country where the data are located. If foreign information is needed beyond that controlled by the firm applying for the competition-law clearance, it may become necessary for the host country to ask the home country to obtain it, even by use of compulsory means. This can be accomplished by treaty, such as the agreement between the Government of the United States of America and the Government of Canada on Mutual Legal Assistance in Criminal Matters that provides for such cooperation in criminal cases (Hachigian, 1995, p. 129), or the Agreement between the Government of the United States of America and the Commission of the European Communities Regarding the Application of Their Competition Laws.³¹

Cooperation even with regard to public information gathering may be very helpful to competition authorities. The difficulties confronting a competition enforcer, especially in developing countries, in seeking to obtain even the most elementary public information and data in another country should not be underestimated. In some instances, information that might take one competition official weeks to obtain and collate is easily obtainable by a competition official in another country.

Remedies. Competition authorities often need to take into consideration the positions of other competition authorities with respect to a proposed merger or other arrangement. Even more, if a merger or joint venture is being simultaneously investigated by two competition authorities, they will likely wish to consult about facts, theories and relief. In some instances, the companies involved waive confidentiality rules in order to allow the competition authorities in the affected countries to work from the same data and thus be more likely to receive similar conclusions. For instance, when Montedison and Shell created a worldwide joint venture (Montell) that was reviewed by United States and European Union authorities, the companies waived confidentiality as to both. Staffs of the United States and European Union competition agencies exchanged views regularly on issues relating to market definition, competitive effects and potential remedies (Starek, 1996, p. 2). Because of tighter time deadlines, the European Union had to rule first, and concluded that the transaction was acceptable, subject to certain conditions, including the transfer of particular technologies to a new subsidiary of Montedison, Technipol, which would act as a fully independent company. The United States Federal Trade Commission later concluded that the better relief was the divestiture by Shell and Shell Oil of all of its polypropylene assets. The European Union then decided to conform its remedial order to that of the United States Federal Trade Commission, since it was satisfied with the consent order issued by the latter.

(b) Obstacles

i. Impediments to information access

Several basic obstacles exist to international cooperation on the exchange of information on FDI-entry situations, and, to an even greater degree, after-FDI entry competition-law enforcement. The largest single obstacle are the confidentiality obligations that most competition authorities have -- and need to have -- regarding information submitted to them by various parties.³² For example, European law binds the Commission to keep the information it receives in the context of a particular case confidential (Starek, 1996, p. 3). Meanwhile, competition

authorities in host countries may find it very difficult to obtain jurisdiction to compel the release of certain information. As noted before, Australia and the United States have enacted laws that allow for information sharing under certain circumstances and conditions (Varney, 1995, p. 4), but Canada recently abandoned efforts to secure such a law, and there has been very limited activity elsewhere.

ii. Limited enforcement cooperation

There are also a number of practical obstacles to closer competition-enforcement cooperation. First, agencies may not wish to cooperate because basic substantive and procedural differences exist in the competition-law regimes of different countries. An example of these differences relates to situations where one country claims extra-territorial jurisdiction under the "effects doctrine". Even where there is no question about the jurisdiction of the investigating country over the allegedly illegal conduct, some countries use "blocking statutes" to preclude the disclosure of information. Blocking statutes are thus the very opposite of competition-policy cooperation.

Second, the activities being investigated in one jurisdiction may have been encouraged by a government in another jurisdiction, either through advice from a competent government agency, or by explicit legal provisions. For example, many developed countries (including France, Germany, Japan and the United States) have legal provisions allowing for the creation of export cartels targeting foreign markets (OECD, 1996d). Such cartels are allowed if they have no adverse effects on the domestic economy because countries regard them as enhancing the export performance of their firms or because they may lack constitutional authority to regulate them. Many of the arrangements covered by these exemptions may, in fact, be joint ventures that would be legal in any event; but for some, the legalized activities are simply cartels. One notable case involving export-trading cartels was the European Wood Pulp in which the European Commission issued a Decision under Article 85(1) whereby 40 producers of market wood pulp located in Canada, Finland, Norway, Portugal, Spain, Sweden and the United States and three of their trade associations were found to have restricted price competition (by means of concerted practices and exchanges of information) in the European Union and had hindered trade between its member states between 1973 and 1981 (European Commission, 1984b). This case was also noted because, even though none of the producers in the wood-pulp export cartel were located within the territory of the European Union, the Commission applied something akin to the effects doctrine insofar as the cartel's restrictive effect was affecting competition in the European Union (Nicolaides, 1994, p. 20; Utton, 1995, p. 310).³⁴ Besides these regulatory overlaps, there are also regulatory gaps, as in the case of international cartels which may simply fall outside the scope of most competition authorities.

Finally, many governments simply may not see it in their country's interest to facilitate a foreign state's investigation of one or more of their companies. This may particularly be the case where a company is wholly or partially state-owned. However, even when a company is not state-owned, a government may be disinclined to cause problems for a major national company, especially where the activities complained of have no domestic consequences.

iii. Differences in competition laws

Difficulties can also arise from diverging national approaches with respect to what the appropriate substantive standards for competition policy are in some areas. To a large extent, this is the result of competing policy and social objectives of countries, especially where development objectives are of primary importance. For example, certain approaches to competition law could specifically aim at addressing particular development objectives, e.g., to foster enterprise development. Likewise, developed countries may take different approaches to competition to pursue their particular objectives (e.g., to promote technological innovation

by exempting R&D alliances from competition), although most developed countries now take the view that economic efficiency and consumer welfare, rather than any particular social or economic objective, is the paramount objective of competition law. Much turns therefore on the question of what is considered "anticompetitive". For example, do exclusive contracts between a supplier of intermediate goods and a manufacturer of final goods embodying these intermediate goods foreclose sales of competing suppliers in a way that could be considered "anticompetitive"? In the eyes of some countries, for example, long-run relationships between large firms and their suppliers can constitute an objectionable anticompetitive practice, because they inhibit entry into the relevant industry by alternate suppliers, including foreign firms seeking to invest in a particular country. On the other hand, the competition laws of most countries would not consider vertical agreements anticompetitive unless they created or maintained market power and the resulting anticompetitive effects were not offset by procompetitive efficiencies, e.g., allowing supplier and manufacturer to undertake complementary research that would not be economic in the absence of such a long term mutual commitment. There is no single and unequivocal approach to these issues. Indeed, under United States antitrust law, such contracts would be subject to a "rule-of-reason" standard (i.e., they would not be seen as *per se* illegal, but under certain circumstances they might be ruled illegal). On the other hand, such "vertical restraints" as exclusive dealing and tied selling have traditionally been dealt with more stringently under European Union law than under United States law (Boner and Krueger, 1991).³⁵ Indeed, for more than thirty years, vertical restraints have been of particular importance to the European Union's competition policy and law, but, under current economic thinking, market structure is determinant for establishing the anticompetitive effects of vertical restraints.

On matters of enforcement, competition laws likewise often differ. For example, there are a few hard core violations of competition law (e.g., certain horizontal cartels) that may be treated as criminal offenses in the United States, but only as civil-law infringements in the European Union (Boner and Krueger, 1991). There are also related differences among agencies as far as powers of "discovery" are concerned (i.e., powers of competition-policy enforcement officials to obtain evidence from individuals or companies against their will). As noted before, in extreme situations, differences in jurisdictional standards have led countries to pass "blocking statutes".

As a result, efforts to harmonize competition laws have a number of difficulties to overcome. To the extent that competing objectives exist, the substantive rules of countries may differ even though many use a rule of reason. What is seen as "reasonable" under the rule of reason by one country's authorities might not be seen as reasonable by the authorities of another country. Thus, for example, if competition authorities of one country complain that exclusive dealings between a firm and its suppliers in another country constitutes an anticompetitive vertical restraint that forecloses FDI by alternate suppliers based in the first country, the authorities in the second country might investigate the complaint but find that the exclusive arrangements in fact were efficiency enhancing and hence not illegal. But this outcome might not be acceptable to officials in the first country, even though exclusive dealing is subject to the rule of reason in both countries. In such an instance, the only likely means that the differences between the two countries might be worked out would be through a process of consultation and negotiation.

(c) Existing cooperation arrangements

Precisely because of the obstacles outlined, issues relating to competition are increasingly being addressed at the international level, either in the form of separate arrangements relating to some aspects of competition policy or in the context of broader investment and trade arrangements (table V.1).

Table V.1. Selective list of bilateral and regional arrangements dealing with competition-policy issues

Name of the arrangement	Year ^a	Туре	Cooperation	Common rules ^b	Common authority
MERCOSUR, Protocol on the Protection of Competition	1996	regional	yes	no	no
Agreement between the Government of the United States of America and the Government of Canada Regarding the Application of Their Deceptive Marketing Practices Laws	1995	bilateral	yes	no	no
OECD Revised Recommendation of the Council Concerning Cooperation between Member Countries on Anticompetitive Practices Affecting International Trade	1995	regional	yes	no	no
Association Agreements between the European Union and various Southern Mediterranean countries	1995- 1996 ^c	bilateral	no	yes	no
Cooperation and Coordination Agreement between the Australian Trade Practices Commission and New Zealand Commerce Commission	1994	bilateral	yes	no	no
European Economic Area Agreement	1994	regional	yes	yes	no
Energy Charter Treaty	1994	regional	yes	no	no
North American Free Trade Agreement	1992	regional	yes	no	no
Agreement between the United States of America and the	1991	bilateral	yes	no	no
Commission of the European Communities Regarding the Application of Their Competition Laws					
Cartagena Agreement Commission Decision 285: Norms to Prevent or Correct Competitive Distortions Caused by Practices that Restrict Free Trade Competition	1991	regional	yes	yes	yes
Memorandum of Understanding on the Harmonization of Busines Laws between Australia and New Zealand	1990	bilateral	yes	no	no
Agreements between the European Union and countries of Central and Eastern Europe	1991 ⁻ 1996 ^d	bilateral	yes	yes	no
Structural Impediments Initiative between the Government of the United States of America and the Government of Japan	1990	bilateral	yes	no	no
Agreement between the Government of the Federal Republic of Germany and the Government of France on Cooperation Relating to Restrictive Business Practices	1984	bilateral	yes	no	no
Agreement between the Government of the United States of America and the Government of Australia Relating to Cooperation on Antitrust Matters	1982	bilateral	yes	no	no
OECD Guidelines for Multinational Enterprises	1976	regional	yes	no	no
Agreement between the Government of the Federal Republic of Germany and the Government of the United States of America Relating to Mutual Cooperation Regarding Restrictive Business Practices	1976	bilateral	yes	no	no
Treaty Establishing the European Community	1957	regional	yes	yes	yes

Source: UNCTAD, based on various sources.

^a Year of signature.

b The extent of common rules varies considerably from instrument to instrument.

^c Israel, Morocco, Palestine Authority (1996), and Tunisia.

d Six such agreements had been signed as of June 1996.

• **Bilateral level**. Bilateral cooperation among competition authorities is increasing, although formal agreements are limited to a relatively small number of countries (table V.1). Most of these efforts involve cooperation on exchange of information. In addition, a number of bilateral agreements go further to establish ground rules for notification of competition investigations, consultations and cooperation on competition-law enforcement, including commitments for positive comity (e.g., the cooperation agreements between Canada and the United States and between the European Union and the United States) and negative comity (e.g., the cooperation agreements between France and Germany, Australia and the United States, Germany and the United States). Provisions for the bilateral harmonization of competition laws, on the other hand, have so far only been established in the context of bilateral agreements between countries and regional organizations that pursue broader integration objectives.

Some cooperation agreements have proved to be quite successful. In the context of the Canada-United States Mutual Legal Assistance Agreement, for example, a joint investigation led to the prosecution of New Oji Paper Ltd. and the levying of \$2.6 million in fines against Oji Paper and two other companies between 1994 and 1996 in Canada (Canada, Federal Court (Trial Division), 1996). Similarly, the experience of cooperation between the European Union and the United States under their 1991 agreement has been positive. In total, from September 1991 to the end of 1996, 194 cases were notified by the European Commission, and 200 by the United States authorities.

At the same time, given the increasingly regional and global operations of firms, the question arises as to whether bilateral approaches alone can address adequately all pertinent concerns.

Regional level. Cooperation efforts at the regional level often take place in the context of regional economic integration schemes, which allow approaches and trade-offs that may be more difficult to pursue in other settings. The most integrated here is the European Union. Under the Treaty of Rome, the European Commission is authorised to administer competition policy, including regulation and control of M&As throughout the Union, in matters relating to commerce among the member states. Specifically, the European Commission is entrusted with the application of Articles 85 (dealing with cartels), 86 (dealing with abuse by a firm of a dominant market position), and several other articles of the Treaty of Rome dealing with state aids to industries and regions. These powers were extended in 1989 to mergers with a Community dimension. The authority of the Commission is subject to size thresholds: it reviews only M&As involving very large firms. Naturally, a necessary condition for pursuing this approach is that national competition laws be in conformity with the regional law. In this respect, the tendency in the European Union has been for member countries to bring national laws and policies closer to European Union law and policy, although those laws still vary considerably. The norm is that Community rule takes precedence over national rulings. Finally, the decisions of the Commission are subject to appeal to the Court of First Instance of the European Court of Justice.

In addition, arrangements are also made within the European Union for agencies to share information more readily. For example, Article 10 of the European Union Council Regulation 17/62 (Council of the European Communities, 1962), the Union's basic competition procedure, establishes the rules for cooperation between the European Commission and the national competition authorities of the member states in respect of cases pending with the European Commission, while Article 20 binds both the Commission and the national authorities to keep the information secret.

The Andean group is another example of a regional organization that deals with anticompetitve business practices. Decision 285 of the Commission of the Cartagena Agreement

allows member countries, or their companies having a legitimate interest, to request the Andean Group Board to apply measures to prevent or correct damage to production or exports caused by business practices that restrict free competition within the subregion. The Decision specifies the types of business practices that are understood to restrict free competition, and spells out the procedures to be followed to address such practices or their effects (Commission of the Cartagena Agreement, 1991).

In the OECD, efforts to cooperate on restrictive business practices began in 1967. The most recent instrument (adopted in 1995) strengthens previous provisions and, in particular, calls on member countries to make best efforts in the following aspects (UNCTAD, 1996d):

- timely notification of the initiation of investigations to member countries whose interests may be affected;
- coordination of actions when two or more member countries proceed against the same anticompetitive practice;
- cooperation in developing or applying mutually-satisfactory and beneficial remedies for dealing with anticompetitive practices, and, to that effect, supplying each other with relevant information:
- consultations when a country considers that an investigation by another country
 may affect its important interests, or when enterprises situated in another member
 country have engaged in anticompetitive practices that substantially adversely affect
 its interests, and giving sympathetic consideration to the views expressed by the
 affected country; and, in this context;
- commitment to take whatever remedial action is considered appropriate.

The same Council recommendation sets out detailed guiding principles for the implementation of notifications, exchanges of information, cooperation in investigations and proceedings, consultations and conciliation of anticompetitive practices affecting international trade. Finally, it recommends that these principles be taken into account in bilateral cooperation arrangements.

In addition, the OECD Guidelines for Multinational Enterprises, adopted in 1976 as part of the Declaration on International Investment and Multinational Enterprises (UNCTAD, 1996d) recommend that enterprises refrain from abuses of market power such as anticompetitive acquisitions, predatory behaviour and anticompetitive abuse of industrial property rights, and refrain also from participating in restrictive cartels that are not in accordance with relevant laws. The OECD Recommendation of the Council for Cooperation Between Member Countries in Areas of Potential Conflict Between Competition and Trade Policies (1986) calls on OECD countries to take into account competition considerations when implementing trade policies.

Efforts are also being made in the context of other regional agreements such as the North American Free Trade Area (NAFTA) (UNCTAD, 1996d). In chapter 15, NAFTA members have agreed to maintain national measures to prohibit anticompetitive firm behaviour, but mutually agreed competition rules are not included. The same chapter commits members to establishing a working group to make recommendations on appropriate further work on the relationship between competition policy and trade in the NAFTA area, and to consult from time to time about the effectiveness of their competition policies, and cooperate on issues such as notification and exchange of information. Also, MERCOSUR envisages cooperation on competition policy, including with a view towards establishing mechanisms of consultation, information exchange and the joint investigation of anticompetitive practices (European Commission, 1996b, p. 3). The Energy Charter Treaty (UNCTAD, 1996d) calls for the adoption of competition laws and policies and for cooperation on exchange of information and consultation among the signatory

countries. In the context of the Asia Pacific Economic Cooperation (APEC), a dialogue has started with a view towards developing cooperative approaches in the area of competition-policy. Most of these efforts are nascent, and only time will tell whether and what concrete developments ensue.

• **Multilateral level.** The UNCTAD Set of Multilaterally Agreed Equitable Principles and Rules for the Control of Restrictive Business Practices is so far the only multilateral instrument covering all aspects of the control of restrictive business practices (box V.21). It calls upon governments to adopt, improve and effectively enforce appropriate competition legislation and implementation of juridical and administrative procedures. Moreover, UNCTAD's continued work on the elaboration of a model law or laws on restrictive business practices -- primarily intended to assist developing countries in devising appropriate legislation -- contributes to increasing consistency in competition-law standards and procedures, as does its technical cooperation programme in this area.

The UNCTAD Set, in its section dealing with measures at the international level, provides for consultation procedures whereby a country may request a consultation with other countries in regard to issues concerning the control of such practices. These consultations are intended to prevent or avoid conflicts arising from such situations. Given the Set's non-binding nature, its institutional machinery could not act as a tribunal or pass judgement on the activities or conduct of individual governments or of individual enterprises in connection with specific consultations. An important characteristic of the Set -- in addition to its broad membership -- is that it specifically provides for preferential treatment for developing countries. This is intended to ensure that concerns of developing countries are fully taken into account.

While GATT/WTO agreements focus on governmental measures and actions, and they do not regulate anticompetitive practices by firms, a number of provisions are particularly relevant for competition policy in that they deal with practices of enterprises that may distort or impede international trade and with what governments are allowed or required to do to regulate or remedy such practices.³⁹

So far, the most direct link between the provisions of GATT agreements and firm anticompetitive practices is provided by Article IV (anti-dumping and countervailing duties). Antidumping practices sanctioned under this article are inconsistent with the goals of competition policy. Other GATT provisions have relevance for competition as they affect market access (e.g., provisions on national treatment (Article III), elimination of quantitative restrictions (Article IX), state-trading enterprises (Article XVII), and nullification and impairment (Article XXIII)). 40 Furthermore, several of the most recent WTO agreements (WTO, 1995) address private practices: the Agreement on Technical Barriers to Trade (which relates not only to government rules but also to the standard-setting activities of non-governmental bodies); the Agreement on Government Procurement (which deals with practices of public enterprises); and several provisions in the General Agreement on Trade in Services (e.g., the provisions on monopolies and exclusive service suppliers which require that these suppliers not abuse their monopoly position outside the scope of their monopoly), supplemented further by relevant provisions of the agreement on basic telecommunications services completed in 1997 (box V.18). The TRIMS Agreement (UNCTAD, 1996d, Article 9) deals with investment performance requirements that restrain trade and provides that consideration be given to whether "the Agreement should be complemented with provisions on investment policy and competition policy". The TRIPS Agreement (UNCTAD, 1996d) requires members to cooperate on "control of anti-competitive practices in contractual licences". The Agreement provides

Box V.21. The UNCTAD Set of Multilaterally Agreed Equitable Principles and Rules for the Control of Restrictive Business Practices

In 1980, after almost ten years of negotiations, agreement was reached in UNCTAD on a voluntary code of conduct on competition: the Set of Multilaterally Agreed Equitable Principles and Rules for the Control of Restrictive Business Practices.

The Set's first objective is to ensure that restrictive business practices (RBPs) do not impede or negate the realization of benefits that should arise from the liberalization of tariff and non-tariff barriers affecting world trade, particularly those affecting the trade and development of developing countries. It also seeks to attain greater efficiency in international trade and development through, *inter alia*, promoting competition, control of concentration of economic power and encouragement of innovation. Moreover, it aims at protecting and promoting social welfare in general and, in particular, the interests of consumers.

Under section C of the Set, which spells out the multilaterally agreed principles for the control of RBPs, the specific needs of developing countries, and in particular the least developed, are taken into account, as it was agreed that "in order to ensure the equitable application of the Set of Principles and Rules, States, particularly developed countries, should take into account in their control of restrictive business practices the development, financial and trade needs of developing countries, in particular of the least developed countries, for the purposes especially of developing countries in:

- "(a) Promoting the establishment or development of domestic industries and the economic development of other sectors in the economy, and
- "(b) Encouraging their economic development through regional or global arrangements among developing countries" (para.7).

Section D of the Set (para.1) states that "enterprises should conform to the restrictive business practices laws, and the provisions concerning restrictive business practices in the laws of the countries in which they operate, and, in the event of proceedings under these laws, should be subject to the competence of the courts and relevant administrative bodies therein". Paragraphs 3 and 4 of section D deal with the main types of RBPs that enterprises should refrain from. Concerning intra-firm transactions between different entities of a TNC, while paragraph 3 excludes enterprises "when dealing with each other in the context of an economic entity wherein they are under common control, including through ownership, or otherwise not able to act independently of each other", paragraph 4 covers all enterprises which "through an abuse or acquisition and abuse of a dominant position of market power... limit access to markets or otherwise unduly restrain competition". This same paragraph goes on to list practices in this respect, which include predatory behaviour towards competitors and "discriminatory (i.e. unjustifiably differentiated) pricing or terms or conditions in the supply or purchase of goods or services, including by means of the use of pricing policies in transactions between affiliated enterprises which overcharge or undercharge for goods or services purchased or supplied as compared with prices for similar or comparable transactions outside the affiliated enterprises".

Section E, addressed to States, calls for the adoption and effective enforcement of appropriate competition legislation and implementing judicial and administrative procedures. Section E further calls for exchange of information and cooperation in proceedings, subject to confidentiality safeguards. Finally, Section F provides for consultation procedures and technical cooperation for developing countries.

An institutional machinery to monitor application of the Set was established by UNCTAD, in conformity with Section G, in the form of an Intergovernmental Group of Experts meeting annually.

Source. UNCTAD, 1996d, pp.133-144. Also reproduced in this publication is the Resolution Adopted by the Conference Strengthening the Implementation of the Set.

for consultations between members where there is reason to believe that licensing practices or conditions pertaining to intellectual property rights constitute an abuse of these rights and have an adverse effect on competition in the relevant market (Article 40). The cooperation is limited to the supply of publicly available non-confidential information of relevance to the matter in question.

As this brief review of existing cooperation arrangements shows, the need for international cooperation has been recognized, and some progress in this respect has been made at all levels. Still, more could be done.

3. Looking ahead

The most important areas in which further progress needs to be made concerns cooperation on information exchange and the enforcement of competition laws. Indeed, the UNCTAD Set calls for the institution of improved procedures for obtaining information from enterprises (including TNCs) and the establishment of appropriate mechanisms at the regional and subregional levels, to promote exchange of information on restrictive business practices and to assist each other in this area. The Review Conference of the Set provides a forum in which efforts in this respect can be pursued.

Countries that have not yet done so may need to conclude bilateral competition cooperation agreements with their major investment and trading partners. The laws of many countries prevent some kinds of information-sharing; but, even so, it could be useful for such agreements to provide for the exchange of information subject to existing laws. Regional agreements, too, could provide for exchange of information and encourage cooperation. While progress in this respect does not necessarily lead to a harmonization of competition laws, it tends to contribute to an increasing convergence of approaches to competition policy.

Cooperation efforts could also be strengthened if countries were willing to adopt "positive comity" policies towards one another. Under positive comity, the authorities of one country are sympathetic (and willing to act, where appropriate) to the concerns of the authorities of another country. For example, if a specific practice actually took place within the jurisdiction of one country but had demonstrably anticompetitive effects in a second country, the authorities of the latter country could initiate a complaint under which they would present their case before the authorities of the former country. These officials (of the country where the practice took place) may then take some form of action. This could consist, e.g., first, of investigation of the practice, and, then, of remedial action if such action was deemed appropriate.

For positive comity to work best, it would also be desirable that there be some element of mutual recognition of outcome. Thus, in the example above, the authorities of the country which initiated a complaint could consider abiding by the outcome of the investigation of the authorities of the other country and accepting the remedy arrived at by these authorities. (Of course, during the process of investigation and determination of outcome, there might be consultation between the authorities involved.) For this to be at all effective, it is clear that there must be a strong element of trust among the authorities of the relevant countries. At the same time, adopting positive comity and recognizing outcomes among countries with different levels of development may require a previous process of approximation on competition-policy stands, objectives and approaches, something that would take some time to achieve.

Even if this approach should prove to be successful, the question arises whether the international community requires more than expanded bilateral and regional cooperation to sustain the rapid regionalization and globalization of markets and production structures, especially under conditions in which the liberalization of FDI and trade policies make it all the more important that statutory obstacles are not replaced by anticompetitive practices of firms.

It is a question that, by its very nature, has broad implications, given the desirability of attributing a more prominent role to competition policy in a liberalizing and globalizing world economy. And it is a question that will most likely receive increasing attention in the future.

Indeed, recent international discussions reflect a growing recognition by the international community of the links between FDI policy, trade policy and competition policy, as means for maintaining contestable and competitive markets. This is underlined in particular by the decision taken at the December 1996 Ministerial Conference of the World Trade Organization in Singapore (WTO, 1996, para. 20) to establish one working group to examine the relationship between trade and investment, and another one to study issues raised by members relating to the interaction between trade and competition policy, including anticompetitive practices, in order to identify any areas that may merit further consideration in the WTO framework. As furthermore stated in the Ministerial Declaration, these working groups are to draw upon each other's work if necessary and also draw upon the work in UNCTAD and other appropriate intergovernmental fora.

D. Competition policy and market outcomes

The analysis in previous sections was undertaken in a framework in which FDI liberalization generally increases competition in markets. Within this framework, competitive markets are a means to achieve certain ends: economic efficiency, growth, economic development and consumer welfare. This section examines whether there are limitations as regards the effectiveness of competition (and, if so, what these are), considering that "like all instruments, markets should be evaluated by asking whether they promote our social and economic goals" (Sunstein, 1997, p. 384).⁴¹ This is an issue of particular importance to developing countries, precisely because of the imperative of development.

Two situations generally motivate governments to take a more active role in markets: one is when markets tend naturally towards high levels of concentration; the other is when market outcomes

conflict with other policy objectives. In both cases, rather than protecting the competitive process through competition law, governments usually choose to regulate markets in one form or another.

1. Naturally concentrated markets

A characteristic of virtually all economic activity is that, for entry to occur in a market, certain costs must be incurred on an "up-front" basis. These can include the costs of establishing production or distribution capabilities. They can also include, in some industries, the costs associated with establishing a reputation, including advertising and promotional expenses. To the extent that these costs are necessary and unrecoverable (should the supplier decide to exit the activity) the costs must be considered as "sunk" and, 42 as such, they affect the relative ease of entry in an activity. If the magnitude of these sunk costs is so high (relative to the size of the market) that no more than one producer can supply the relevant market and reasonably expect to amortize the costs, the activity is termed a "natural monopoly" (Boner and Krueger, 1991, p. 43

Most markets, however, operate on a continuum between natural monopoly at one extreme and contestability at the other. In addition, the conditions that sometimes give rise to natural monopolies are constantly changing over time, especially under the impact of new technologies; as a result, activities that, at one point in time are considered to be natural monopolies, may no longer have that status at another point in time, or only in a newly (and perhaps more narrowly) defined manner.⁴⁴ Sunk costs of entry in such markets yield an

advantage to incumbent suppliers, but the advantage is not so great as to preclude new entry altogether. The most likely scenario for new entry in industries with high sunk costs is that the potential new entrant has some advantage not possessed by the incumbent firms, such as a proprietary technology enabling lower production costs or superior variants of a product or service. As discussed in chapter IV, TNCs are sometimes in such a position, and may also be able to enter previously concentrated markets. However, it remains that "natural" factors can make some national markets, to a greater or lesser degree, difficult to contest. These include:

- *Economies of scale*. Certain industries possess technical characteristics that require large scale of production (and, often, high sunk costs) to be efficient. If the market is relatively small, only one or a few producers will be economically viable in such an industry. A special case of economies of scale relates to network costs. For example, markets for electricity distribution and telephone services have traditionally been treated as natural monopolies due to the high sunk costs associated with the required networks and the fact that it may be inefficient to duplicate the networks.
- *Risk costs.* Where sunk costs are particularly high and a particular economic activity is characterized by high levels of risk, a certain level of concentration in the market might be necessary for an economic activity to be viable from a business perspective. This has often been the argument put forward to competition authorities by companies seeking to cooperate more closely (or to merge), usually in areas relating to R&D, with a view towards sharing risk costs. The development of jet engines and commercial aircraft present examples of "bet-the-company" risks that owners seek to avoid by means of temporary or permanent alliances, many of which are screened by competition authorities.

One of the antidotes to markets that tend to be naturally concentrated due to the above factors involves increased entry into the relevant market for the products of these kinds of industries through market opening measures, especially investment and trade liberalization. This is particularly important for countries whose internal markets are small. When a small economy (and in some instances even a large economy) is closed to international competition, the potential for natural concentration is much more significant. However, in some cases, market enlargement through liberalization is politically difficult to achieve.

A partial answer to the question of whether there are limitations to competition is, therefore, that there are indeed some limitations imposed by the very nature of certain economic activities. But even with respect to these activities, it may often be possible to increase competition by, for example, separating the "natural monopoly" activities from activities that are potentially competitive. Once all such possibilities have been considered, the policy question becomes how governments can minimize the negative economic effects that can be associated with limited competition.

Therefore, where markets are natural monopolies, regulation is needed to prevent abuses of dominant positions of market power by the seller, e.g., the setting of prices well above marginal costs and restricting output so as to generate higher rents. While regulation becomes important in these cases, governments need to ensure that regulation serves the purposes that it is meant to serve. One danger that they need to guard against is the possibility of "capture", i.e., regulators may come to serve the interests of the firms they are regulating instead of the interests of consumers. Another concern relates to the appropriate scope of regulation. Natural monopolies can exercise considerable market power, both upstream and downstream in their value chains. This can result in the extension of market power of a given natural monopoly into related markets which are not themselves natural monopolies (e.g., the operator of an

electricity transmission network could enter the electricity-production business and foreclose competition in this activity by not permitting competing producers access to the transmission network, which, in this case, is an essential facility). For example, some parts of telecommunications networks exhibit natural monopoly characteristics (Armstrong and Doyle, 1995, p. 2), but the selling of peripheral equipment (telephone handsets, modems, etc.) does not, nor does the selling of "value-added" services over the telecommunications network. In many such cases, competition policy can play a role, especially with respect to containing or even reducing the scope of natural monopolies, ensuring adequate access to essential facilities and generally aiming at reducing their potentially harmful effects.

2. Competing objectives

But there are also broader limitations, resulting from competing objectives, among which the development objective takes pride of place. Indeed, governments are often (if not always) faced with having to choose between competing objectives, and a number of these can conflict with the market outcomes that would be generated by reasonably competitive markets. These conflicts are more frequent in developing countries.

(a) Promoting development

Improving economic efficiency by making markets more competitive -- and thereby serving development -- is subject to the same need to make choices. Given the particular characteristics of developing countries -- low income levels, skewed distribution of wealth, lack of infrastructure, low levels of education, asymmetries in information, to mention a few - the incidence of conflicts between market outcomes and competing objectives is often more frequent in these countries.

For example, where foreign exchange is temporarily in limited supply, certain import restrictions might be needed -- thus limiting contestability -- to ensure that critical imports are not disrupted, e.g.,

that foreign exchange reserves are used for machine parts instead of luxury goods. Or, where a country is characterized by dispersed rural communities, the market will often not provide these with certain basic services (such as roads, telecommunications services and railways); in these cases, governments might need to ensure that certain services reach segments of the national market which otherwise could not support such services. They could do so, for instance, by providing the services through state-owned enterprises or, where private operators are involved, by providing these with market power so that services in less-economically viable markets can be cross-subsidized from profits earned in larger segments of the market. A policy alternative to consider in such a case would be more direct government involvement in the form of subsidized provision of the services in question. The decision in this case -- whether to allow concentration combined with cross subsidization or to provide subsidies -- would involve a careful consideration of the quite different trade-offs associated with these two options (possibly less efficiency in the market, on the one hand, versus a direct budgetary expense on the other).

It should be noted that these dilemmas -- and the need for more active government intervention in markets they might entail -- do not occur in developing countries alone. Governments of developed countries, in similar situations, also see the need to correct market outcomes through various regulatory or competitiveness-enhancing measures (table V.2). For example, recognizing the structural disadvantages faced by small and medium-sized enterprises relative to their larger counterparts, many countries exempt the former from competition rules below certain thresholds and/or provide them with special assistance.

If anything, this issue is even more relevant in developing countries, due to their particular characteristics. For example, if the competitive disadvantages of small and medium-sized enterprises are judged a reason for giving special treatment to such firms in developed countries, this may be even more so the case for many firms in developing countries, considering that most of them are small and medium-sized enterprises and that all of them face the structural disadvantages of their economies, especially in the context of liberalization and heightened international competition. This may require that firms in developing countries are given public support, e.g., to ensure that they have adequate access to finance and have opportunities for learning-by-doing, so that they are competing on a level playing field and have an opportunity to move up the learning curve of international competition.

Governments have also limited exposure to international competition in order to provide their firms the breathing space to become internationally competitive. However, when this is deemed necessary, care needs to be taken to find the proper balance between the right dose of international competition and intervention. If limits are too weak, strong international competition may force local firms to exit the market; however, unlike in the case of trade -- where import liberalization can lead to a reduction of domestic capacities -- competition through FDI does not necessarily eliminate domestic productive capacity, but rather changes it ownership and, therefore, raises other questions, namely those related to the implications of foreign ownership for economic development. If limits are too strong, domestic firms may not adjust to the international competitive environment.

Table V.2. Selected exclusions from competition laws, selected OECD countries^a

Country	Labour	Fishing	Agriculture	Energy	Transport	Media	Medical related	Small and medium-size enterprises	Export cartels	Special- ization cartels ^b	Other cartels ^c
Canada	В	В	P	SG	P	P	No	No	P	P	P
France	В	No	P	P	No	P	No	No	n.a.	n.a.	n.a.
Germany	В	No	P	P	P	P	R	No	P	P	P
Hungary	В	No	P	R	R	P	P	P	P	P	P
Japan	В	P	P	P	P	P	P	P	P	P	P
Mexico	В	No	No	R	R	P	No	No	P	No	No
Portugal	В	No	P	R	n.a.	В	No	No	No	No	No
United Kingdom	В	No	P	R	P	P	P	P	P	No	P
United States	В	P	P	R	P	P	No	No	P	No	P
European Union	В	No	P	P	P	P	No	No	P	P	No

Source: UNCTAD, based on OECD, 1996d.

- B: Broad exemptions from competition laws.
- P: Partial application of competition laws.
- R: Regulated sector.
- SG: Safeguard related provisions.

- b Specialization cartels involve arrangements between suppliers to allocate markets according to types of products.
- ^c These can include cartels relating to terms and conditions, rebates, authorizations, structural crisis, notifications on standards, exchange agreements, and various consortia.

^a It should be noted that the classifications in this table do not reflect the different factors and conditions that apply across jurisdictions with respect to the applications of competition rules, nor do they reflect differences in approach towards enforcement, including approaches with respect to efficiency defences. As such, the table is more indicative of the flexibility that governments exercise in their application of competition laws than of actual derogations from competition laws. In particular, the classification overstate the exclusions for small and medium enterprises since many laws "exclude" only conduct that would likely be lawful in any event.

In general, these forms of selective government intervention in the market are meant to address the particular characteristics of developing countries. They involve creating the proper policy mix aimed at defining the rules of competition, on the one hand, and undertaking measures to assist and encourage the building up of domestic capabilities, on the other hand. 49 Indeed, the key issue is to help domestic firms to participate effectively in international competition and to move up the value-added chain. Of course, finding the appropriate forms of government involvement depends, among other things, on the level of development, which varies from country to country and industry to industry; they can also change over time and in light of other competing objectives; they need to be targeted as narrowly as possible since any trade-offs in terms of economic efficiency should be minimized; and they are often difficult to implement exactly in the manner in which they are thought to bring about the desired benefits. Hence, while market intervention is needed to promote development, it is very difficult, indeed, to define general criteria for determining the type and scope of such intervention, in particular where alternative policy options exist. In any event, the main emphasis should remain on establishing, where possible, competitive and fair markets which provide a level playing field for domestic as well as foreign firms; only where this is not viable, governments need to take a more active approach vis-à-vis markets.

(b) Other objectives

Apart from development objectives, there are a number of other objectives that may not be well served by market forces and that therefore may motivate governments to play a more active role in markets. These include:

- Safeguarding national security. Virtually all governments intervene in markets to maintain domestic production capacity in certain industries considered essential to national security by restricting foreign (and sometimes even domestic) participation in these. They do so to minimize the risk of disruption of supply in the event of conflict and to keep certain knowledge (especially relating to high technology) from potential adversaries.
- Protecting labour rights. A fully market-driven national labour market would have no minimum wages, would not allow unionization or other forms of cooperative labour agreements, would not necessarily prohibit indentured servitude (a form of slavery based upon contracts) and would probably not impose regulations relating to the quality and safety of the work environment upon firms. Most societies have therefore recognized the need to regulate national labour markets because market forces would give rise to outcomes that neither governments nor societies find desirable.
- Safeguarding culture. Governments sometimes regulate cultural industries, with a view towards protecting and maintaining national and cultural identity.
- Promoting positive externalities. Positive externalities relate to activities whose net social benefit exceeds the return that a private investor could expect under normal market conditions. In other words, in cases where market signals understate the benefits to society of the activity in question and where market signals alone determine levels of investment and output, these would be less than optimal from a social perspective. Education and health care are among the most common instances of activities in which governments intervene in markets based upon the expected positive externalities associated with these services.

Another form of positive externality relates to the development and establishment of standards. For example, clear telecommunications standards imply that the market for peripheral telecommunications equipment (e.g., modems, faxes) is much larger than it would be if the market were segmented by a large number of different standards. Clear standards also increase the value of networks themselves (e.g., the utility of having a telephone is much greater if it is possible to call one million people than if it is only possible to call one hundred people due to incompatible standards between telecommunications networks).

Standards are particularly relevant in the area of professional services. For example, in the legal, accounting and medical professions, standards (in the form of accreditation by professional societies) enable consumers of the relevant services to gauge better the quality of these than would be the case in the absence of such standards.

- *Protecting property rights.* Where property rights are either not protected, or are simply not clear, competition for the property in question can give rise to inefficient outcomes. Governments therefore intervene in markets in various ways to protect property rights. A prime example concerns intellectual property rights. Such rights, as embodied in patents, trademarks and copyrights, are protected because it is felt that granting such protection is needed to provide the incentives required to encourage further innovation and a high rate of commercialization of inventions.
- Avoiding negative externalities. Negative externalities involve costs to society that are not borne by the producers of such costs. Pollution, for example, is one of the most commonly cited negative externalities; if environmental regulations are not implemented, firms will tend to externalize the costs of operating cleanly by dumping waste. Likewise, for example, the location of airports is usually tightly regulated by governments due to the negative externalities associated with these (air and noise pollution).
- *Protecting consumers.* A number of industries have traditionally been regulated, including as regards entry by new entrants, for prudential reasons. The rationale for regulation in this case has been the asymmetric information (between producers and consumers) characterizing these industries, coupled with the high cost (in economic and social terms) of various failures associated with market forces in these industries. For example, financial industries have traditionally been regulated due to the high costs to society of exit from this industry -- in effect, exit from the financial industry is usually associated with negative externalities. It has therefore been considered inappropriate by many governments to allow market forces to hold sway in an industry where such significant exit costs are involved (e.g., the life savings of pensioners). Similarly, it has been argued by some that too much competition among airlines (or any other service provider where safety is a factor) could lead these to reduce costs at the expense of safety.

In sum, there are a number of instances in which other objectives may require careful and selective government intervention in the operation of markets. In some cases, the undesirable outcomes are due to market failures, e.g., the failure of the market to reward innovation in the absence of government intervention to protect the latter, or the failure of the market to provide adequate education or health care. Market failures, which can be encountered in all markets, are prone to exist more acutely in developing countries, and especially in the least developed countries. Indeed, many of the characteristics of underdevelopment relate in some form or another to market failures. In other cases, the undesirable outcomes are due to the failure of the market to serve particular objectives, e.g. national security. In these instances,

governments intervene in markets through various forms of regulation to ensure that competing social objectives are met.

At the same time, policies put in place for that purpose need to be formulated carefully to achieve the desired objectives, ⁵¹ and it should be recognized that such policies often come at the expense of reducing economic efficiency. Furthermore, a clear distinction needs to be drawn between undesirable market outcomes that relate to competition and those that relate to the interaction of markets and government policies. Indeed, within the context of the inextricable relationship between government policies and the functioning of markets, it becomes difficult to identify "pure" market failures. Rather, in many instances, market failures reflect a particular interaction between policies and market forces that give rise to undesirable outcomes (such as, for example, when a market that does not have natural monopoly characteristics is treated by policy makers as if it does, in which case a second best solution is adopted when the first best solution was available).

* * *

The main message of this concluding section is that there are, indeed, limitations to competition especially where market forces do not bring the desired results. This is especially the case in developing countries.

In these circumstances, there is a need to achieve the right balance in the choice of means used to pursue competing objectives. One problem for policy makers faced with competing policy choices is to distinguish between government intervention in markets that serves legitimate policy goals, and intervention which rather serves to maintain market power for particular vested interests, without contributing significantly to broader social objectives. This is a particularly important issue where government intervention in the market involves discriminatory measures between domestic and foreign firms. While many of the considerations outlined in this section have been used to justify circumscribing competition to some degree, doing so should always be tempered by the recognition that efficiency trade-offs are often involved. Moreover, when governments choose to circumscribe competition, the means by which they do so should be the least damaging from an efficiency perspective and should be transparent and subject to review in light of changes in markets and the original rationale for such policies.

Notes

- For more details of the process of liberalization, see UNCTAD, 1994a, 1995a, 1996a.
- An example of such practices may be keiretsus. The term "keiretsu" in Japanese is often preceded by a modifier such as kin'yu keiretsu (financial groups), kigyo keiretsu (corporate groups), kigyo groups (affiliated firm groups), or ryutsu keiretsu (distribution groups), specifying the type of relationship among the affiliated firms. However, as Matsushita (1997) observed, the term is rather vague and does not necessarily involve contractual relationships between the affiliated firms. Instead, these may be *de facto* relationships based on repeated transactions.
- Competition authorities could nevertheless consider intervening in circumstances where shareholdings by a firm in a competitor firm are or may be used to prevent a joint venture with an investment by a new entrant
- In some cases, these practices appear to be anticompetitively motivated. However, they might also be explained by fiscal, social or cultural reasons. Thus, in some countries, society sees companies as having a particular responsibility for their employees, and "take-overs are socially and ethically frowned upon as akin to buying and selling people" (Lehmann, 1997, p. 98).

- Until recently, many governments used various types of investment incentives in exchange for performance requirements, such as export performance, technology transfer, training of local personnel and local content requirements. The TRIMs agreement clarified that a number of these performance requirements are prohibited and should be phased out. These include both certain mandatory performance requirements as well as requirements linked to the granting of incentives.
- Granting market power is most often an issue when a firm is new to the country (since such a firm usually has something new to offer to the economy where it may establish itself, and because it typically has greater leverage in terms of negotiating with different governments before committing itself to invest), or has natural monopoly characteristics.
- Canada, Denmark, Norway, the Russian Federation and Venezuela are among the countries whose competition laws include as a main objective to promote economic efficiency (UNCTAD, 1995c).
- For a recent study that shows that properly designed and phased-in competition policy can stimulate innovation in developing countries, see Mytelka, forthcoming.
- For a discussion of the objectives of competition policy, see Khemani, 1993.
- Competition laws, in general, do not consider the possession of a dominant (or monopolistic) position *per se* unlawful but, rather, the abusive exploitation of that position.
- "Horizontal agreements" are concerted practices among enterprises competing (actually or potentially) in the same relevant market. "Vertical agreements" are agreements among firms active at different stages of the production/distribution chain (producers, distributors, wholesalers, etc.).
- In other words, the degree of concentration is only the starting point of a competition analysis. As the Merger Enforcement Guidelines of Canada (p. ii) put it: "No inferences regarding the likely effect of a merger should be drawn from evidence that relates solely to market share or concentration. In all cases, an assessment of the market share and concentration is only the starting point of the analysis." (Canada, Director of Investigation and Research, 1991).
- For the purpose of merger control, the term "joint venture" refers to arrangements between firms that involve acquisition of a "controlling interest" by one of the firms involved. Acquisitions involving no changes of control, such as a company acquiring more shares of a firm it already controls, are normally not reviewed by competition authorities. Foreign investment without control or voting power ("portfolio investment") does not in most instances create competition problems, or is expressly exempted. For example, Section 7 of the United States Clayton Act exempts acquisitions "solely for investment". Similarly, Article 3(5)(a) of the European Merger Regulation (4046/89) provides that holdings of credit and financial institutions who regularly deal in securities on their own or others' accounts do not fall within the merger regulation, provided the institutions do not exercise voting rights in the securities. Germany has a similar (though not identical) provision to that of the European Union (Gesetz gegen Wettbewerbschränkungen, Section 23(3)).
- The "effects doctrine" -- which asserts jurisdiction over conduct abroad that affects domestic consumers -- is the best known approach towards dealing with domestic effects; it is not universally accepted. It was first developed in the United States. The European Union has applied something approaching the effects doctrine in a number of cases (see, e.g., the discussion of the "Wood Pulp" case below). What remains controversial is the claim that jurisdiction can be based on conduct abroad that does not affect a country's consumers but does affect its exporters.
- For some practical suggestion in this respect, see Crampton and Carley, 1997.
- Similar types of considerations appear to have affected the attempted acquisition of Sotheby's auctioneers in 1983. The bid was referred to the Monopolies and Mergers Commission because of the impact such a take-over might have on "the importance of London as the centre of the international art market and the importance of Sotheby's in relation to that market." (Rowley and Baker, 1991, p. 217).
- On national interest considerations, see also Goldman, Kissack and Witterick, 1997 and Crampton and Corley, 1997.
- The "failing firm" defence provisions in competition laws allow competition authorities to authorize or exempt certain activities that would otherwise be considered anticompetitive and, hence, illegal when such activities are deemed necessary to avoid the failure of a firm or industry and when such a failure raises significant social concerns. The failing firm defence usually consists of exemptions for various types of cartels (e.g., depression cartels, specialization cartels, rationalization cartels, structural crisis

- cartels) as well as provisions that allow for a more lenient treatment of proposed mergers. Most competition laws contain some form of failing firm defence. Those that do not, nonetheless have shown prosecutorial discretion in taking into account factors similar to those that are explicitly spelled out in the competition laws of other countries (Waller, 1995).
- For example, in the United States the ultimate concern would be the impact of an outward FDI transaction on United States consumers or on trade, including anticompetitive suppression of exporters from the United States. See the United States Foreign Antitrust Enforcement Act of 1982, enacted as Title IV of the Export Trading Act of 1982.
- For a detailed analysis of the Gillette/Wilkinson Sword merger see OECD, 1994.
- 91 The UNCTAD Set has exempted, to a large extent, intra-firm transactions from the applicability of the principles and rules for the control of restrictive business practices. Section D(3) concerning horizontal arrangements states that "Enterprises, except when dealing with each other in the context of economic entity wherein they are under common control....." should refrain from practices defined as anticompetitive. At the same time, the Set covers all transactions between affiliates and third parties in host countries and, according to its Section D (4), firms should refrain from certain acts or behaviour which are considered abusive (to be examined in terms of the purpose and effects in actual situation of acts or behaviour) "in particular with reference to whether they limit access to markets or otherwise unduly restrain competition ... and to whether they are: (a) appropriate in the light of the organizational, managerial and legal relationship among enterprises concerned, such as in the context of relations within an economic entity and not having restrictions effects outside the related enterprises" (note to section D.4). For example, partial or complete refusals to deal on the basis of customary commercial terms (taking into account legitimate business practices, such as consideration of quality or safety) may amount to abuse of dominant positions. Restrictions of this type that may be included in licensing and trade arrangements can be particularly important, because they affect the developmental impact of foreign affiliates by impeding the development of downstream linkages in host county economies.
- The issue of access to essential facilities is frequently discussed among competition authorities and commentators, and is becoming increasingly relevant given the current trend towards deregulation. The essential facilities doctrine -- which basically provides that a person who controls a facility essential to entering a market must allow others access -- has yet to be established in a number of countries. The European Commission has recognized this doctrine in the British Midland/Air Lingus case, when it took the position that companies in dominant positions have a duty to provide access to facilities when the effects on competition of a refusal to do so are significant and there is no objective commercial reason for refusal (Goldman, Kissack and Witterick, 1997).
- On the question of transfer pricing, see Plasschaert, 1995.
- In the United States, the trend originated in the late 1970s and was reflected in the GTE-Sylvania decision by the Supreme Court which held that vertical territorial restraints in manufacturers-dealer contracts were subject to a rule-of-reason test (United States, Bureau of National Affairs, 1990). In other cases, the Court decided not to apply the *perse* violations, but considered on a case-by-case basis according to the rule of reason, e.g., in Berkey Photo Inc. v. Eastman Kodak Company (United States, Second Circuit Court, 1979).
- In order to encourage joint R&D, the United States enacted the National Co-operative Research Act in 1984, making joint undertakings less risky and more desirable for firms by clarifying that the rule of reason applies to such ventures and eliminating treble-damage liability for joint ventures that provide adequate notification to the Government.
- A number of non-governmental organizations such as, for example, the International Chamber of Commerce (ICC) and Consumers International, play an active role in promoting the adoption of effective competition laws and have also stressed the need for international policy discussions in this area.
- The need to address trade, investment and competition policy "to ensure a smoothly functioning global market place" was recognized, among others, by the International Chamber of Commerce in its submissions to the Heads of State and Government of the Group of Seven Countries attending the 1995 Halifax Summit, and the 1996 Lyon Summit (ICC, 1995, 1996a).
- For a discussion of the difficulties and limitations often encountered in adopting and implementing competition laws, see UNCTAD, 1996c, annex 1 and 2.
- The practice of the European Union is illustrative in this respect. Firms can formally notify their

- agreements to the European Commission for assessment of their compatibility with the competition rules of the Treaty of Rome. Formal notification is a condition precedent for obtaining an exemption under Article 85(3) from the general prohibition and automatic nullity in Article 85(1) and (2). Notification grants also immunity from fines for the notifying parties from the moment of notification. Since 1962, the European Commission has received some 30,000 notifications.
- The enhanced importance given to efficiency considerations in United States case law is reflected in the April 1997 amendments of the United States Merger Guidelines which place special emphasis on efficiency justifications, if proved, for mergers (including cross border mergers) between competitors leading to concentration well short of monopolization (United States, Federal Trade Commission, 1997). Canada's Competition Law, too, contains an efficiency exception (Canada, 1985, Section 96).
- Also Australia and the United States have enacted legislation permitting such cooperation in civil cases pursuant to bilateral agreements, and they have recently negotiated an agreement under those laws.
- Such obligations reflect concerns of the business community regarding the disclosure of confidential and competitively sensitive business information. See, for example, ICC, 1996b.
- A "blocking statute" bans firms from disclosing information or authorizes a government official to direct firms not to disclose information.
- It is also of interest to note that the United States did not interpose an objection to the European Union investigation of United States firms's involvement in the Wood Pulp case, which meant -- if not cooperation -- at least non-opposition.
- However, in the interest of legal security and to avoid overloading the work of the European Commission, the agreements made in accordance with Regulation No. 1384/83, concerning exemptions on exclusive dealing arrangements, do not require notification.
- In Canada, hard core cartels are also a criminal offence, while monopolization is not; rather, monopolies are addressed under the civil reviewable merger and abuse of dominance provisions of the Competition Act
- Another type of bilateral treaty dealing with competition issues are the bilateral treaties of friendship, commerce and navigation (FCN). These treaties were concluded in earlier decades in considerable numbers by the United States and, to a lesser extent, by Japan and a few Western European countries with other developed and developing countries, and a number of them are still in force. While intended primarily to regulate trade and investment between the two countries in the context of broader economic relations, these treaties included various provisions dealing with business practices that restrain competition, limit access to markets or foster monopolistic control. On the other hand, bilateral investment treaties for the promotion and protection of foreign investments do not include provisions dealing with anticompetitive business practices.
- In addition, the protocol also envisages possible cooperation with other governments in the region on issues relating to competition (Article VIII(b)).
- The Havana Charter, which was the close precedent of the General Agreement on Tariffs and Trade (GATT), did include substantive provisions on the treatment of restrictive business practices that might restrain competition in international trade (Chapter V), together with provisions on the treatment of government measures dealing with trade and investment. Only provisions dealing with trade, however, were taken it into the GATT (UNCTAD, 1996d). Instead, a Decision was adopted in 1960 on Arrangements for Consultations on Restrictive Business Practices (GATT, 1961) whereby it was recommended that, at the request of any contracting party, consultations should be held on harmful restrictive practices in international trade on a bilateral basis. Thus far, however, very few consultations have taken place pursuant to this Decision (WTO, 1997).
- Although the "nullification and impairment" clause existed prior to WTO in GATT Art. XXIII (1)b, it was seldom used because the standards for its application were ambiguous. The new Dispute Settlement Understanding (Section 26.1) states that Article XXIII (1) b concerns measures that do not violate GATT rules. Nevertheless, member countries can appeal to a WTO panel for "mutually satisfactory adjustment" in case it is found that the measures "nullify or impair benefits" under the relevant agreement. The panel, however, cannot mandate removal of the disputed measures. A recent submission under this Article was the Kodak v. Fuji case concerning exclusive dealings for which United States and Japan

- standards are markedly different (Takigawa, 1997).
- Sunstein goes on to observe, "... markets, free or otherwise, are not a product of nature. On the contrary, markets are legally constructed instruments, created by human beings hoping to produce a successful system of social ordering...there is no opposition between 'markets' and 'government intervention'. Markets are (a particular form of) government intervention" (Sunstein, 1997, p. 384).
- In other words, in the event of exit, the costs are forfeited.
- It should be noted that natural monopolies can exist also where sunk costs are low. For example, airline service between two medium-sized cities (provided that new entrants have adequate access to slots, ground handling facilities, etc.) could be a market where least cost service mandates a single supplier, but the identity of that firm could change quite quickly. Sunk costs are emphasized in the discussion, however, since it is this feature of some natural monopolies that gives rise to limits to contestability.
- For example, cellular telecommunications technology has contributed to the erosion of the natural monopoly positions of the traditional land-based networks. See in this context also the box on the WTO basic telecommunications agreement earlier in this chapter.
- Augmenting this point is that, where such policies are likely to accelerate economic growth, growth itself can help to make markets more contestable: a new entrant is more likely to enter a market with high growth potential, even if sunk costs cannot be fully amortized in the market at its present size, if the market is expected to expand in the future.
- For example, an isolated island economy (no FDI or trade) with fifty inhabitants will, in all likelihood, only be able to support one producer of shirts. The shirt producer is a natural monopolist. If the market expands, however, either through population growth or through the establishment of trade relations with a larger neighbouring island, the conditions for the natural monopoly disappear.
- The debates over market enlargement in the context of the NAFTA negotiations are but one example of how politically difficult such an approach can be, even for relatively open economies.
- In other words, the government would grant a firm market power but would also impose the condition that it must supply specific markets that would be unprofitable in addition to those that it would supply if it was guided only by market forces.
- The UNCTAD Set provides for "preferential or differential treatment for developing countries" in section C, para. 7, especially with respect to "(a) promoting the establishment or development of domestic industries and the economic development of other sectors of the economy, and (b) encouraging ... economic development through regional or global arrangements among developing countries." (UNCTAD, 1996d, pp.133-144).
- 50 By way of illustration, entry into a market would be enhanced if, for example, a new entrant could enter a market by selling a product for which brand recognition was significant under the brand name of an established seller. Equally, the new entrant might try to establish a new brand name by degrading the established brand name, for example, by selling a tainted product under the established name. The problem with this from an economic efficiency perspective is that, in the absence of intellectual property protection, there would be little incentive for firms to undertake the costs of creating the brand name to begin with. A similar problem exists for proprietary technologies: if all potential new entrants into the market for a good embodying (either in product design or production process) a proprietary technology were allowed to copy the technology free of charge (that is, without having to make payments to the firm holding the technology), and assuming (as is likely) that the costs of imitation of the technology are significantly less than those associated with the innovation, there would be a major disincentive for firms to innovate in the first place. This disincentive would result from the fact that innovating firms might not reasonably expect to achieve a satisfactory return on an investment (sunk costs) in new technology creation if the successful technologies were to be rapidly imitated by competing firms. Patents, trademarks, and copyrights therefore exist in order to preserve incentives to innovate new technologies and designs, or to create brand names.
- For example, if air pollution is a problem in a given region, authorities might choose to disallow further entry to the industry as a means of limiting further emissions. Yet, this limit to contestability would be misplaced if entry served to replace older facilities with more technologically advanced cleaner facilities. An alternative solution to the dilemma might be the creation of a market for "pollution rights", so that a new entrant could buy the rights to emit a certain amount of effluent from another firm, which would

then use the proceeds gained from selling its own rights to shut down a facility. It has been noted that such a market can promote clean air, because if the right to pollute were to become extremely costly, heavy polluters would have an incentive to sell their rights (and shut down their facilities) because the value of the right on the market might exceed the ongoing value of the facility. While the existence of such markets would limit somewhat market contestability (because a new entrant would have to buy pollution rights, adding to the costs of entry), it would do so minimally.

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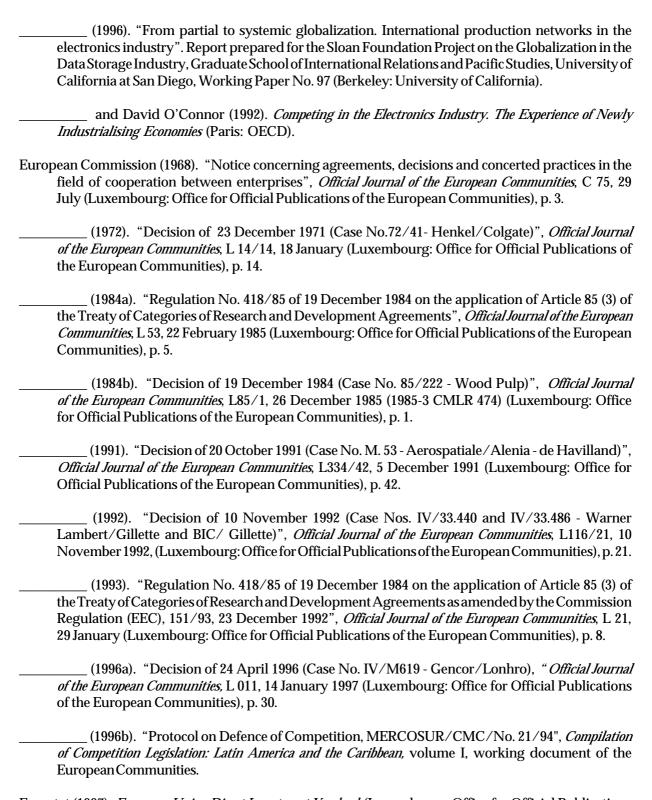
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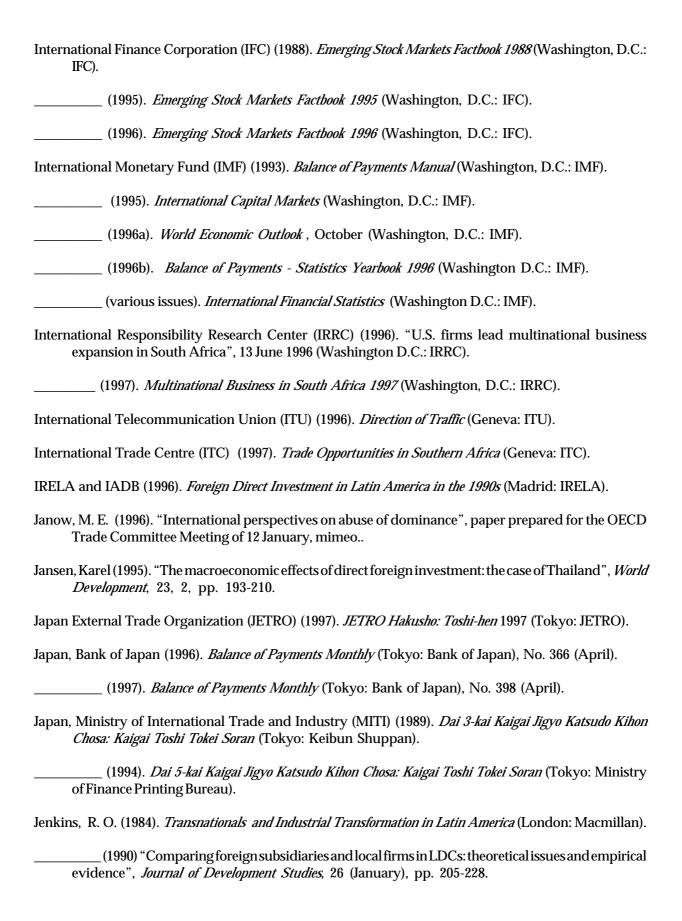
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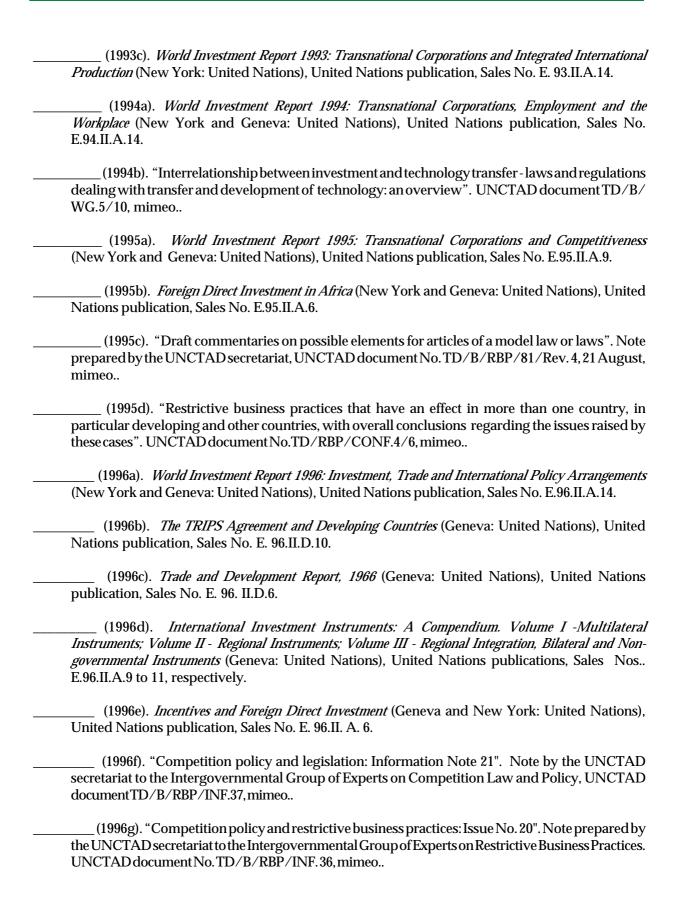
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ANNEXES

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Annex table A.1. FDI inflows, GDP growth rates, interest rates and the investment-savings gap, 1991-1996

	1991-1992	1995-1996
Items	(FDI recession)	(FDI boom)
FDI inflows (annual average)		
(Billions of dollars)		
World	166	333
Developed countries	117	207
Developing countries	46	113
Central and Eastern Europe	3	13
Real GDP growth rate ^a		
(Per cent)		
World	2.0	3.6
Developed countries	1.3	2.2
Developing countries	5.8	6.1
Central and Eastern Europe	-10.4	1.4
Interest rate ^b		
(Per cent)	8.2	6.6
Investment - savings gap ^c		
(Per cent)		
World	1.0	1.0
Developed countries	0.5	0.2
Developing countries	1.7	2.0

Source: UNCTAD, based on UNCTAD FDI/TNC database; IMF, 1996; and United Nations, 1996.

^a Average of growth rates of each year.

b Long-term interest rate of developed countries.

^c Shortage of savings as percentage of GDP.

Annex table A.2. Cross-border mergers and acquisitions deals over \$1 billion, 1996

Deal value (Billion dollars)	Acquiring company	Home country	Acquired company	Host country	Acquired firm industry
5.6	Carena Developments Ltd-led				
	consortium	Canada	Olympia and York Companies USA	United States	Real estate
4.2	Fresenius AG	Germany	National Medical Care Inc.	United States	Medical, dental, hospital
					equipment and supplies
3.5	Aegon NV	Netherlands	Providian Corp.	United States	Insurance
3.4	The Thomson Corp.	Canada	West Publishing Co.	United States	Printing and publishing
3.4	Hoechst AG	Germany	Roussel-Uclaf S.A.	France	Pharmaceutical preparations
3.3	Muenchener Rueckver-				
	sicherungsgesellschaft	Germany	American Re Corp.	United States	Insurance
3.2	Sophus Berendsen A/S				
	(through the Rentokil group PLC)	Denmark	BET PLC	United Kingdom	Business services
3.1	Credit Local de France S.A.	France	Credit Communal de Belgique S.A.	Belgium	Banking and Finance
2.9	Koninklijke Ahold NV	Netherlands	Stop and Shop Cos.	United States	Retail distribution
2.8	Farnell Electronics PLC	United Kingdom	Premier Industrial Corp.	United States	Wholesale distribution
2.7	Scheweizerische Rueckver-				
	sicherungs Gesellsc	Switzerland	Mercantile and General Reinsurance	United Kingdom	Life insurance
2.6	Avon Energy (GPU General Public				Production and distribution
	Utilities, Cinergy)	United States	Midlands Electricity PLC	United Kingdom	of energy
2.5	LVMH Moet-Hennessy L Vuitton	France	DFS Group Ltd.	United States	Retail stores
2.5	News Corp Ltd.	Australia	New World Commun Grp. (Mafco)	United States	Television broadcasting
					stations
2.3	Southern Electric Intl.	United States	Consolidated Electric Power	Hong Kong	Electric services
2.2	Adia S.A.	Switzerland	ECCO	France	Help supply services
2.2	DR Investments(Domion)	United Kingdom	East Midlands Electricity PLC	United Kingdom	Electric services
2.1	^в :	United Kingdom	AT&T Capital Corp	United States	Short-term business credit
					institutions
2.1	Energy Corp.	United States	London Electricity PLC	United Kingdom	Power plant(s)
2.0	Canal Plus S.A.	France	Nethold	South Africa	Television programmes
2.0	ABN AMRO Holding NV	Netherlands	Standard Federal Bancorp	United States	Banking and finance
1.9	Lucas Industries PLC	United Kingdom	Varity Corp.	United States	Farm machinery and
·		11			equipment
6:I	Coca Cola Enterprises inc.	United States	Coca-Cola & Schweppes Beverages	United Kingdom	Food, drink and tobacco

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Deal value (Billion dollars)	Acquiring company	Home country	Acquired company	Host country	Acquired firm industry
1.9	GRS Holdings Ltd.	United Kingdom	AT&T Capital	United States	Banking and finance
1.8	a	United Kingdom	Yallourn Energy	Australia	Electric services
1.8	Hazelwood Power Partnership	United Kingdom	Hazelwood Power Station	Australia	Gas and other services
					combined
1.7	The Great UniverS.A.1 Stores PLC	United Kingdom	Experian Corp.	United States	Business services
1.7	a	United States	Light SE	Brazil	Electric services
1.6	KPN Koninklijke PTT Nederland NV	Netherlands	TNT Ltd.	Australia	Courier services
1.6	Societe Generale de Belgique	Belgium	Tractebel S.A.	Belgium	Engineering services
1.5	Battle Mountain Gold Company Inc.	United States	Hemlo Gold Mines Inc.	Canada	Gold ores
1.5	Softbank Corporation	Japan	Kingston Technology Corp.	United States	Computer peripheral
1.5	Robert Bosch GmbH	Germany	Allied Signal Inc.	United States	equipment Motor vehicle parts and
		•)		accessories
1.4	а:	France	Fletcher Challenge Paper Ltd.	New Zealand	Pulp mills
1.4	Mobil Corporation	United States	Ampolex LTD	Australia	Extraction of mineral oil
					and natural gas
1.4	Kvaerner A/S	Norway	Trafalgar House PLC	United Kingdom	Construction
1.4	Malex Industries Bhd	Malaysia	Brierley Investments Ltd.	New Zealand	Banking and finance
1.3	Sonat Offshore Drilling	United States	Transocean Drilling A/S	Norway	Oil and gas field services
1.3	Calenergy Inc.	United States	Northern Electric PLC	United Kingdom	Power plant(s)
1.3	Henkel KGaA	Germany	Loctite Corp.	United States	Chemical industry
1.2	Saga Petroleum A/S (Aker A/S)	Norway	Santa Fe Exploration (UK) Ltd.	United Kingdom	Extraction of mineral oil
					and natural gas
1.2	Potash Corp. of Saskatchewan Inc.	Canada	Arcadian Corp.	United States	Chemical industry
1.1	Viag AG (through SKW				
	Trostberg AG)	Germany	Master Buildings Technologies AG	Switzerland	Chemical industry
1.0	General Motors Corporation	United States	Rocket Systems Corp.	Japan	Manufacture of launching
•	-			:	equipment
1.0	Banco de Santander S.A.	Spain	Banco Osorno and LA Union	Chile	Banking and finance

Source: UNCTAD, based on information provided by IFR Securities Data Company (London and New York).

^a The name of the acquiring company is not available.

Annex table A.3. FDI inflows and outflows during FDI-boom and FDI-recession periods, and 1994-1996 (Billions of dollars and percentage)

	Develope	d countries	Developi	ing countries		and Eastern rope	All c	ountries
Year	Inflows	Outflows	Inflows	Outflows	Inflows	Outflows	Inflows	
FDI-boom period								
(annual average)								
1979-1981	36.8	55.8	16.3	1.3	0.02	0.01	53.2	57.1
1986-1990	131.8	163.5	26.5	11.7	0.02	0.01	158.9	175.1
1995-1996	207.0	293.0	112.5	49.2	13.3	0.02	332.9	342.8
FDI-recession period								
(annual average)								
1975-1977	14.6	27.3	6.5	0.4	0.003	0.01	21.1	27.8
1991-1992	117.2	184.7	45.6	15.0	3.4	0.06	166.3	199.8
	142.3	209.7	90.4	40.7	5.8	0.7	238.7	251.1
1995	205.8	291.2	96.3	47.0	14.3	0.4	316.5	338.7
1996	208.2	294.7	128.7	51.5	12.2	0.6	349.2	346.8
			Share in tot	al (per cent)				
FDI-boom period								
(annual average)								
1979-1981	69.2	97.7	30.6	2.3	0.04	0.02	100	100
1986-1990	82.9	93.4	16.7	6.7	0.3	0.01	100	100
1995-1996	62.2	85.5	33.8	14.3	3.9	0.1	100	100
FDI-recession period								
(annual average)								
1975-1977	69.2	98.2	30.8	1.4	0.01	0.03	100	100
1991-1992	70.5	92.4	27.4	7.5	2.0	0.03	100	100
1994	59.7	83.5	37.9	16.2	2.4	0.3	100	100
1995	65.0	86.0	30.4	13.9	4.5	0.1	100	100
1996	59.6	85.0	36.9	14.8	3.5	0.2	100	100
			Growth rate	e (per cent) ^a				
FDI-boom period								
(annual average) 1979-1981	68.0	44.9	89.5	160.0	-20	-25	74.4	46.4
1986-1990	216.8	209.7	69.9	134.0	3233 ^b	1900 ^c	178.3	202.9
1995-1996	45.5	39.7	24.4	20.9	121.6	-28.6	39.6	36.5
FDI-recession period								
(annual average)								
1975-1977	-25.1	17.2	-27.0	300.0			-25.7	18.3
1991-1992	-31.1	-16.8	32.6	-15.7	183.3	57.9	-19.2	-16.6
1994	2.5	2.4	23.8	19.3	-7.9	250	9.4	5.0
1995	44.6	38.9	6.5	15.5	146.5	-42.9	24.6	34.9
1996	1.2	1.2	33.6	9.6	-17.5	50	10.3	2.4

Source: UNCTAD, based on UNCTAD FDI/TNC database and annex tables B.1 and 2.

a Growth rate of the period average over an immediate preceding year.

b The absolute values of FDI inflows in 1985 and average 1986-1990 are \$15 million and \$600 million, respectively.

^c The absolute values of FDI outflows in 1985 and average 1986-1990 are \$1 million and \$20 million, respectively.

Annex table A.4. Value of the gross product of foreign affiliates^a and their share in GDP, by region, 1982, 1990 and 1994

(Billions of dollars and percentage)

	of	Gross produc foreign affilia		Gross product of foreign affiliates as percentage of GDP			
Region	1982	1990	1994	1982	1990	1994	
Developed countries	403	1 098	1 099	5.1	6.7	5.4	
Western Europe	179	607	610	6.0	8.7	7.9	
European Union	164	570	568	5.7	8.6	7.7	
Other Western Europe	15	37	43	9.9	10.7	11.0	
North America	177	407	392	5.1	6.7	5.2	
Other developed countries	47	84	97	3.4	2.4	1.9	
Developing countries	150	283	445	6.0	7.0	9.1	
Africa	15	28	32	4.4	7.4	8.8	
Latin America and the Caribbean	59	101	162	7.6	9.3	10.3	
Asia	74	151	248	5.6	5.9	8.6	
West Asia	30	39	36	6.7	4.0	6.7	
South, East and South-East Asia	44	112	211	5.0	7.0	9.0	
Oceania	1.1	1.7	1.9	27.5	32.3	24.9	
Central and Eastern Europe	0.1	2.3	12.6	0.1	1.1	2.3	
World	553	1 383	1 557	5.2	6.7	6.0	

Source: UNCTAD estimates.

Worldwide gross product is estimated by extrapolating the worldwide gross product of foreign affiliates of United States TNCs on the basis of the relative share of that country in the worldwide outward FDI stock. Gross product in this table as well as in the text is of a value-added concept. Regional gross products are estimated by applying the relevant shares of each region in worldwide inward stock to the estimated worldwide product. The decline in worldwide gross product as a percentage of GDP between 1990 and 1994 reflects a decline in gross product associated with FDI of United States foreign affiliates, on the basis of which worldwide gross product is estimated. \$1 of FDI stock of United States TNCs produced gross product worth of \$0.64 in 1994, compared to \$0.82 in 1990.

Annex table A.5. Value of exports of foreign affiliates,^a their share in total sales, and exports to affiliated firms,^b by region, 1982 and 1994

(Billions of dollars and percentage)

	Exports of foreign affiliates		Exports of foreign affiliates as percentage of total sales of foreign affiliates		Exports to affiliated firms as percentage of total exports of foreign affiliates	
Region	1982	1994	1982	1994	1982	1994
Developed countries	491	1 255	27.7	25.1	44.2	55.1
Western Europe ^c	325	896	41.4	31.6	45.8	55.6
European Union	266	793	37.1	29.7	50.3	50.2
Other Western Europe	59	103	86.5	64.1	25.0	97.0
North America	140	288	18.1	16.5	42.7	55.7
Other developed countries ^d	26	71	12.3	17.0	33.8	45.9
Developing countries	242	585	38.1	35.6	49.5	55.8
Africa	23	15	21.5	9.4	73.3	68.0
Latin America and the Caribbean	109	139	42.6	24.3	47.8	59.6
Asia	110	431	41.3	47.9	46.2	54.2
West Asia	15	23	20.4	20.5	84.7	47.1
South, East and South-East Asia	95	408	49.3	52.0	40.2	54.6
Oceania						
Central and Eastern Europe	••			••	••	••
World	732	1 850	30.5	27.7	46.0	55.3

Source: UNCTAD estimates.

^a Worldwide exports of foreign affiliates are estimated by extrapolating the worldwide exports of foreign affiliates of Japanese and United States TNCs on the basis of the relative share of these countries in the worldwide inward FDI stock. Regional exports of foreign affiliates are also estimated by applying the same shares on the assumption that these countries account for the same share of FDI stock in each region. Japanese data on exports of foreign affiliates in 1982 are for fiscal year 1981 (March 1982).

Parent firms and other foreign affiliates. Worldwide exports to affiliated firms by foreign affiliates are estimated by extrapolating the worldwide exports to parent firms and other foreign affiliates by Japanese and United States foreign affiliates on the basis of the relative share of these countries in the worldwide inward FDI stock. Regional exports to affiliated firms from foreign affiliates are also estimated by applying the same shares on the assumption that these countries account for the same share of inward FDI stock in each region. For Japanese data, proportions of exports by foreign affiliates to their affiliated firms in total exports of foreign affiliates in fiscal years 1986 and 1992 are applied to exports of foreign affiliates of fiscal years 1982 and 1994, respectively, because the available data on exports to affiliated firms that are close to years 1982 and 1994 are only for 1986 and 1992.

^c Includes Central and Eastern Europe.

^d Includes developing Oceania.

Annex table A.6. Growth rates of FDI inflows in nominal and real prices,^a 1971-1996 (Percentage)

		In nominal pric	es	In real prices ^a			
Year	World	Developed countries	Developing countries	World	Developed countries	Developing countries	
1971	11.0	8.8	19.9	4.8	2.4	15.4	
1972	5.0	6.6	-0.9	-2.8	-1.2	-9.1	
1973	32.4	26.9	54.4	4.3	1.4	16.7	
1974	68.7	50.7	127.9	22.1	11.2	62.9	
1975	-18.2	-25.7	-2.0	-24.6	-33.4	-2.5	
1976	-28.4	-14.0	-52.1	-29.0	-14.2	-54.9	
1977	40.6	35.7	55.3	30.2	22.4	56.1	
1978	30.6	30.0	31.6	18.2	19.1	15.7	
1979	35.5	31.2	46.6	14.2	11.3	21.8	
1980	32.0	40.0	13.8	10.3	14.8	-0.5	
1981	16.5	2.7	55.2	18.4	2.9	61.9	
1982	-8.7	-22.6	17.1	-4.4	-18.7	21.2	
1983	-14.3	1.6	-33.9	-10.3	7.7	-31.9	
1984	19.6	27.0	5.7	16.3	21.2	7.0	
1985	-4.0	0.6	-14.4	0.1	6.8	-14.5	
1986	50.3	67.0	5.7	46.6	63.0	2.4	
1987	63.7	67.0	48.7	49.9	52.5	37.8	
1988	16.7	16.5	16.7	10.7	10.4	11.2	
1989	20.3	24.0	1.8	19.1	23.1	-1.5	
1990	4.1	1.4	18.5	-3.8	-6.7	11.2	
1991	-22.8	-32.5	21.2	-21.8	-31.8	22.7	
1992	9.3	4.3	19.0	8.1	3.1	16.2	
1993	25.5	15.9	47.2	32.1	24.6	49.9	
1994	9.5	2.6	23.8	7.1	-0.4	23.6	
1995	32.6	44.6	6.5	27.5	35.0	5.9	
1996	10.3	1.1	33.6	9.4	-0.1	33.8	

Source: UNCTAD, FDI/TNC database.

^a Deflated by the unit value index of imports, with 1987 as the base year.

Annex table A.7. The financial composition of total assets and total liabilities of United States affiliates abroad, 1994

(Billions of dollars)

Total assets	2009.1
Total liabilities	1331.6
Owed to parent firms	170.7
Owed to other persons in the home country	42.3
Owed to persons in the host country	611.5
Owed to other persons abroad	319.7
Other liabilities	187.4
Owner's equity	384.0
Held by parent firms	254.9
Held by persons in the home country	1.0
Held by persons in the host country	77.3
Held by other persons abroad	50.8
Retained earnings	294.0

Source: UNCTAD, based on United States, Department of Commerce, 1997, tables III.B 13-14 and III.C1.

Annex table A.8. The financing of FDI in the United States, by major home country and region, 1994-1995

	Percent	age of capital ir	nflows	<i>Memorandum:</i> Percentage of equity ^a in
Country/region	Equity capital	Reinvested earnings	Intra-company loans	FDI position in the country, 1995
All countries	67	17	16	72
Canada	62	52	-14	89
Europe	55	17	28	67
Japan	119	-0.3	-19	79
Other	115	1.7	-16	82
	Percenta	ge of capital ou	tflows	<i>Memorandum:</i> Percentage of equity ^a in
	Equity capital	Reinvested earnings	Intra-company loans	FDI position abroad, 1995
All countries	31	58	10	90
Canada	21	73	6	91
Europe	46	50	5	86
Latin America and the Caribbean	19	68	12	103
Asia and the Pacific	24	58	18	88

Source: United States, Department of Commerce, 1996c.

^a Includes capital stock, additional paid-in capital, retained earnings and cumulative translation adjustments.

Annex table A.9. United States direct investment in Japan: income and reinvested earnings, 1990-1995

	Income		Re	invested earnings	
Year	Million dollars	Percentage of FDI stocks ^a	Million dollars	Percentage of capital outflows	Percentage of income
1990	1 722	7.6	95	9.7	5.5
1991	2 293	9.0	873	_ b	38.1
1992	1 979	7.4	681	99.7	34.4
1993	1 801	5.8	611	37.6	33.9
1994	2 843	7.8	1 431	56.7	50.3
1995	4 504	11.5	2 053	129.7	45.6
Memorandum: All host countries,					
1990-1995°	61 928	11.3	28 419	51.7	45.9

Source: United States, Department of Commerce (various issues).

^a Direct investment position on a historical-cost basis.

b Negative capital flows.

^c Period average.

Annex table A.10. Mergers and acquisitions of firms in SADC countries by South African TNCs, 1991-1996

Year	Name of acquiring company	Name of acquired company	Industry of acquired company	Host country of investment	Percentage of shares acquired	Value of transaction (Million dollars)
1991	M-Net	M-Net Namibia	Television network	Namibia	50	2.7
	First National Bank	Bank of Credit and Commerce	Banking	Botswana	100	
1992	Standard Bank	ANZ Grindlay Bank	Banking	Botswana, Zambia		
				and Zimbabwe	100	37.0 ^a
1993	SA Breweries	Tanzanian Breweries	Brewery	United Republic of		
				Tanzania	50	21.0
1994	MacMed Health Care	Latric Surgical Supplies	Medical supplies	Zimbabwe	45	0.5
1995	Amalia Gold Mining	Minehead	Mining	Zimbabwe	100	1.1
	Nampak	Megapak	Packaging	Zimbabwe	49	
	Pick'n'Pay	TM Supermarkets	Retailing	Zimbabwe	25	
	African Life	Botswana Insurance Holdings	Insurance	Botswana	25	3.3
	AECI Anglo, De Beers	Botswana Ash	Mining	Botwana	50	
1996	Nampak	Packaging Industries Malawi	Packaging	Malawi	34	1.6
	Outspan International	Matola Cargo Terminal	Cargo terminal	Mozambique	100	
	BTR Dunlop	Dunlop Zimbabwe	Tyres	Zimbabwe	75	
	BTR Dunlop	National Tyre Service	Tyres	Zimbabwe	38	
	BTR Dunlop	Cobra Tyres	Tyres	Zimbabwe	94	
	BTR Dunlop	Rubber & Allied Products	Tyres	Zimbabwe	100	
	Norwich	Norwich Investments	Insurance	Namibia	51	
	McCarthy Retail	BM Engineering	Motor retailing	Botswana		2.9
	Simpson McKie	Quincor	Stockbroker	Zimbabwe	49	6.7

Source: UNCTAD, based on data provided by Ernst & Young South Africa.

^a Includes the acquisitions of ANZ Grindlay Bank's affiliates in Ghana, Kenya, Nigeria, Uganda and Zaire.

Annex table A.11. Total portfolio equity flows to emerging markets, 1986-1995

Region	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	Average (1986-95)	deviation (1986-95)	variance (1986-95)
All emerging markets													
FPEI (net) ^a	909	682	1061	3372	3200	7200	11000	45000	32700	32100	13692	16486.9	1.45
Near-equity debt securities ^b	100	30	130	80	190	1771	601	3532	6841	2437	1561	2220.9	2.02
Convertible bonds	100	30	130	30	120	1401	536	3325	62139	2228	1454	2174.9	2.24
Bonds with equity warrants ^c	1	1	1	50	70	370	65	207	102	209	153	116.2	0.57
Total portfolio equity and													
quasi-equity	206	712	1091	3452	3390	8971	11601	48532	39541	34537	15253	18335.4	1.44
FDI (net) ^d	16445	24163	28833	29977	33732	41323	50374	73133	87023	69966	48467	28542.1	0.35
By region: Asia													
FPEI (net) ^a	223	405	786	2791	1800	700	2500	16600	16300	17000	5911	7449.9	1.59
Near-equity debt securities ^b	09	30	30	80	190	1458	601	3192	4471	1957	1207	1562.7	1.68
Convertible bonds	09	30	30	30	120	1188	536	3142	4369	1748	1125	1530.1	1.85
Bonds with equity warrants ^c	İ	1	1	50	70	270	65	50	102	209	117	87.5	0.56
quasi-equity	283	435	816	2871	1990	2158	3101	19792	20771	18957	7117	8840.3	1.54
Memorandum item:													
FDI (net) ^d	6864	11786	15322	16137	20101	21038	27579	46599	53720	65140	28429	19740.3	0.48
Africa and Middle East													
FPEI (net) ^{a c}	ı	ı	ı	•	1	1	100	200	1000	5100	1600	2367.8	2.19
Near-equity debt securities b c	1	1	•	•	•	1	1	•	475	350	413	:	:
Convertible bonds	1	1	1	į	1	1	1	1	475	350	413	:	:
Bonds with equity warrants	1	ı	1	1	1	1	1	ı	1	1	•	:	:
Total portfolio equity and							•	0	i [1	,	1	,
quasi-equity ^c Momorandum itom:	ı	ı	ı	ı	ı	ı	100	200	14/5	5450	1806	2508.5	1.93
Temol anatam tiem: FDI (net)d	2013	3763	2612	5363	1631	9677	8827	6607	777	7125	5117	1513.0	000

.:.

(Annex table A.11, cont'd)

Region	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	Average (1986-95)	Standard deviation (1986-95)	Relative variance (1986-95)
Latin America and the Caribbean													
FPEI (net) ^{a c}	1	78	176	434	1099	6227	8228	27200	13200	7200	7094	8810.2	1.54
Near-equity debt securities b c	1	1	1	1	1	150	1	340	1895	130	503	787.6	2.45
Convertible bonds ^c	1	1	1	1	1	50	1	183	1895	130	452	810	3.22
Bonds with equity warrants ^c	1	1	1	ı	1	100	ı	157	1	ı	51	:	:
quasi-equity ^c	ı	78	176	434	1099	6377	8228	27540	15095	7330	7373	9087.0	1.52
Memoranaum tiem: FDI (net) ^d	6515	8288	9837	8416	8688	15362	17695	19455	25302	26558	14663	7349.8	0.25
Europe and Central Asia													
FPEI (net) ^{a c}	ı	ı	ı	70	235	1	100	1000	2300	2800	926	1165.8	1.57
Near-equity debt securities b c	40	1	100	1	1	163	1	ı	1	1	30	56.8	3.51
Convertible bonds	40	1	100	1	1	163	•	1	1	1	30	56.8	3.51
Bonds with equity warrants Total portfolio equity and	1	ı	ı	i	1	ı	İ	1	İ	1	ı	:	:
quasi-equity	40	•	100	70	235	163	100	1000	2300	2800	681	1033.0	2.30
FDI (net) ^d	9-	26	63	61	113	195	312	477	534	845	262	278.3	1.13

Sources: UNCTAD, based on World Bank, resource flows and transfers database and OECD, 1996d.

Note: FPEI = foreign portfolio equity investment.

^a Data from the World Bank database on resource flows and transfers. According to the Bank's definition, portfolio equity flows include country funds, depositary receipts and direct purchase of shares by foreign investors.

b Totals may differ from those reported in the OECD source publication due to adjustments which have been made to include emerging market OECD countries and exclude non-OECD developed markets.

Averages are calculated over the period commencing from the first year for which a positive balance is recorded.

Data on FDI are from the UNCTAD, FDI/TNC database.

Annex table A.12. Capital flows in Malaysia, 1991-1995

						Average	Standard deviation	Relative variance
Capital flows	1991	1992	1993	1994	1995	1991-95	1991-95	1991-95
Total net capital flows	5 624	8 739	10 815	1 294	7 437	6 782	3 225	0.23
Long-term	3 757	4 050	5 395	4 532	6 472	4 841	986	0.04
Short-term	1 867	4 689	5 421	-3 239	965	1 941	3 080	2.52
Direct investment, net	3 609	4 669	3 681	2 525	1 557	3 208	1 069	0.11
In reporting country	3 999	5 183	5 006	4 342	4 132	4 532	475	0.01
Abroad ^a	389	514	1 325	1 817	2 575	1 324	817	0.38
Portfolio investment a	-700	3 200	9 339	4 135	1 282	3 451	3 381	0.96
Equity securities	-682	2 787	8 953	4 290	1 234	3 317	3 266	0.97
Debt securities	-19	413	386	-155	48	135	226	2.81
Government	-19	413	386	-155	48	135	226	2.81
Corporate Money-market	-	-	-	-	-	-		
instruments	-	-	-	-	-	-		

Source: UNCTAD, based on data provided by Bank Negara Malaysia; UNCTAD FDI/TNC database.

^a Data on portfolio investment are not official balance-of-payments data, but are based upon the Central Bank's Cash Balance of Payments Reporting System.

Annex table A. 13. Capital flows in South Africa, 1986-1995

Capital flows	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	Mean (1986-95)	Standard deviation (1986-95)	Relative variance (1986-95)
Total net capital flows	-3796	-2245	-1382	-522	-1615	-334	632	635	2265	4536	-183	2248	151.31
Long-term Short-term	-1394	-835 -1410	-518 -863	-231 -291	-39 -1576	-628 294	-530 1163	762 -127	988 1277	4175	175 -357	1494 1141	73.14
Direct investment, net	-116	-163	93	-375	-118	-14	-804	-302	11	-235	-202	242	1.43
In reporting country Abroad	-53 63	-75 88	161	-207 168	-91 27	212 226	-42 762	-19	338 327	327 562	55 257	180 227	10.69
Portfolio investment	-678	-724	-200	-202	-518	-254	-112	1082	2130	2180	270	1055	15.26
Equity securities	-602	929-	7-	5	-637	-845	762-	860	110	1347	-124	200	32.31
Debt securities	-39	-50	-191	96-	50	591	685	222	1535	1308	401	581	2.10
Government	-19	-178	-54	-133	-48	176	107	136	1001	1256	224	468	4.35
Corporate	-20	128	-137	37	86	415	578	98	534	52	177	231	1.70
Money-market instruments	-37	2	-2	-112	69	1	ı	ı	485	-475	L-	219	1012.94

Source: UNCTAD, based on data provided by South African Reserve Bank; UNCTAD FDI/TNC database.

Annex table A.14. Capital flows in Thailand, 1989-1995

Capital flows	1989	1990	1991	1992	1993	1994	1995	Average (1989-95)	Standard deviation (1989-95)	Relative variance (1989-95)
Total net capital flows	4456	9678	11300	9478	10510	12137	21952	11358.6	4892.5	0.19
Long-term										
Short-term	••							••		
Direct investment, net	1725	2304	1847	1967	1497	829	1117	1612.3	369.7	0.08
In reporting country	1775	2444	2014	2114	1730	1322	2003	1914.6	325.7	0.03
Abroad	50	140	167	147	233	493	886	302.3	271.1	0.80
Portfolio investment	1486	-38	-81	924	5455	2486	4083	2045.0	1942.2	0.90
Equity securities	1424	440	37	455	2679	-389	2123	967.0	1050.2	1.18
Debt securities	63	-478	-118	469	2776	2875	1960	1078.1	1317.1	1.49
Government	73	-449	-	373	443	1246	991	382.4	541.6	2.01
Corporate	-9	-33	-118	96	2333	1629	969	695.3	900.5	1.68
Money-market										
instruments	-	-	-	-	-	-	-	-		

Source: UNCTAD, based on data provided by Bank of Thailand; UNCTAD FDI/TNC database.

Annex table A.15. Capital flows in Turkey, 1986-1996

Capital flows	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996a	Average (1986-95)	Standard deviation (1986-95)	Relative variance (1986-95)
Total net capital flows	2124	1891	-958	780	4037	-2397	3648	8963	-4194	4722	2456	1861.6	3612.9	3.77
Long-term Short-term	1312	1841	1323 -2281	1364 -584	1037 3000	623 -3020	2252 1396	5909 3054	933 -5127	241 <i>7</i> 2305	665 1791	1901.1	1440.3 2592.0	0.57
Direct investment, net	125	106	354	663	700	783	477	622	559	772	804 b	546.3	247.5	0.21
In reporting country Abroad	125	115	354		684 -16	810	844 65	636	608	885 113	116 b 312 b	572.4 26.1	266.6 37.2	0.22 2.03
Portfolio investment	146	282	1178	1386	547	623	2411	3917	1158	1724	798	1337.2	1081.0	0.65
Equity securities	1	-25	9-	-42	-45	56	300	431	994	1607	110	327.0	527.7	2.60
Debt securities	146	307	1184	1428	592	267	2111	3486	164	1117	889	1010.2	1033.1	1.05
Government	1	178	797	1043	572	593	2427	4233	513	720	526	1107.6	1214.7	1.20
Corporate	146	129	387	385	20	-26	-316	-747	-349	-603	162	-97.4	372.2	14.60
Money-market instruments	1	1	1	i	ı	1		1	1	1	1	:	:	

Source: UNCTAD, based on data provided by Central Bank of the Republic of Turkey; UNCTAD FDI/TNC database.

January through March 1996.
 Based on UNCTAD's estimates for 1996.

Annex table A.16. Capital flows in Venezuela, 1989-1996

Capital flows	1989	1990	1991	1992	1993	1994	1995a	1996ª	Average (1989-96)	Standard deviation (1989-96)	Relative variance (1989-96)
Total net capital flows	-5513	-3294	2962	3104	1878	-3153	-2807	-478	-912.6	3053.0	11.19
Long-term Short-term	-1318 -4195	-811 -2483	2490 472	2902 202	1842 36	-1354	-745 -2062	-235 -243	346.4 -1259.0	1654.3 1536.8	22.81
Direct investment, net	34	92	1728	473	-514	136	597	e78 b	410.0	615.3	2.35
In reporting country Abroad	213 179	451 375	1916 188	629 156	372 886	813 677	900	1300 ^b 622 ^b	824.3 423.3	522.0 255.3	0.40
Portfolio investment	-526	18008	409	1076	652	330	-94	759	2576.8	5851.2	5.16
Equity securities Debt securities	-526	18008	- 409	165	48 604	585 -255	270 -364	1033	262.6	346.4 5951.4	1.74 6.61
Government Corporate	-158 -368	12152 5856	617	1013	571 33	-249 -6	-164 -200	-274	1688.5 625.6	3981.0 1980.9	5.56 10.03
Money-market instruments	1	1	1	1	1	1	1	1	1	:	:

Source: UNCTAD, based on data provided by Central Bank of Venezuela; UNCTAD FDI/TNC database.

a Preliminary data.
 b Based on UNCTAD's estimates for 1996.

Annex table A.17. Stock market and macroeconomic indicators in Malaysia, South Africa, Thailand, Turkey and Venezuela, 1986-1995

Country	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Malaysia										
Market capital - GDP ratio (%)	54.3	58.6	67.2	105.2	113.5	124.4	162.0	347.8	282.1	:
Foreign investment (million dollars)	:	:	:	:	:	-682.1	2789.9	8938.7	4289.6	1150.0
Change in foreign investment (%)	:	:	:	:	:	:	509.0	220.0	-52.0	-73.0
Change in stock market index (%)	8.1	3.5	36.8	58.2	-15.0	6.6	15.8	0.86	-23.8	2.5
Price/earnings ratio	30.9	33.5	33.2	27.4	23.6	21.3	21.8	43.5	29.0	25.1
GDP growth rate (%)	1.2	5.4	8.9	9.2	9.7	8.7	7.8	8.3	8.7	:
Inflation rate (%)	0.7	0.3	2.6	2.8	2.6	4.4	4.8	3.4	3.7	5.3
Banking deposit rate % per annum	7.2	3.0	:	4.6	5.9	7.2	:	:	:	5.9
Change in exchange rate $(\%)^a$:	2.4	-3.9	-3.4	0.2	-1.7	7.4	-1.1	-1.9	4.6
South Africa										
Market capital - GDP ratio (%)	163.7	156.8	143.0	142.8	128.9	150.0	8.98	146.7	185.5	210.0
Foreign investment (million dollars)	-602.0	-676.0	-7.0	5.0	-637.0	-845.0	-797.0	860.0	110.0	1347.0
Change in foreign investment (%)	:	-12.3	100.0	171.4	-12840.0	-32.6	5.7	207.9	-87.2	1124.5
Change in stock market index (%)	49.2	-7.7	0.6	50.0	-8.6	26.5	-5.3	50.1	19.9	6.1
Price/earnings ratio	:	:	:	:	:	:	13.2	17.3	21.3	18.8
GDP growth rate (%)	0.1	2.0	4.2	2.5	-1.0	-1.0	-2.6	1.3	2.4	:
Inflation rate (%)	18.6	16.1	12.8	14.7	14.4	15.3	13.9	9.7	0.6	8.6
Banking deposit rate % per annum	11.0	8.7	13.5	18.1	18.9	17.3	13.8	11.5	11.1	13.5
Change in exchange rate $(\%)^a$:	10.9	-11.6	-15.4	1.4	-6.7	-3.3	-14.6	-8.7	-2.1
Thailand										
Market capital - GDP ratio (%)	6.7	10.8	14.3	35.5	27.9	36.3	52.2	104.2	91.8	:
Foreign investment (million dollars)	:	:	:	1426.4	449.5	36.4	453.2	2681.8	-408.1	2118.8
Change in foreign investment (%)	:	:	:	:	-68.5	-92.0	1145.0	491.7	-115.2	619.2
Change in stock market index (%)	53.5	37.5	35.7	127.3	-30.3	16.1	25.6	88.4	-19.2	-5.8
Price/earnings ratio	11.6	10.4	11.2	16.3	8.7	12.0	13.9	27.5	21.2	21.7
GDP growth rate (%)	5.6	9.6	13.3	12.2	11.7	8.4	7.9	8.3	8.6	:
Inflation rate (%)	1.8	2.5	3.9	5.4	5.9	5.7	4.1	3.6	5.1	7.3
Banking deposit rate % per annum	8.6	9.5	9.5	9.5	12.3	13.7	8.9	8.6	8.5	11.6
Change in exchange rate (%) ^a	:	2.2	1.7	-1.6	0.5	0.3	0.5	0.3	0.7	6.0

(Annex table A.17, cont'd)

Country	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Turkey										
Market capital - GDP ratio (%)	1.2	3.7	1.2	6.3	12.6	10.4	6.2	20.8	16.5	:
Foreign investment (million dollars)	:	-25.0	-6.0	-42.0	-45.0	56.0	300.0	431.0	994.0	1607.0
Change in foreign investment (%)	:	:	7.6	0.009-	-7.1	224.4	435.7	43.7	130.6	61.7
Change in stock market index (%)	:	293.9	-44.4	493.1	46.8	34.2	-8.3	416.0	31.8	468.0
Price/earnings ratio	:	:	2.0	16.5	13.2	13.7	6.9	36.3	31.0	8.4
GDP growth rate (%)	7.0	9.5	2.1	0.3	9.3	6.0	6.0	8.0	-5.5	:
Inflation rate (%)	34.6	38.8	73.7	63.3	60.3	0.99	70.1	55.2	106.3	93.6
Banking deposit rate % per annum	40.6	35.0	49.1	53.5	47.6	62.9	68.7	64.6	87.8	76.1
Change in exchange rate (%) ^a	:	-27.1	-65.9	-49.2	-22.9	-59.9	-64.7	-59.8	-169.5	-54.8
venezuela										
Market capital - GDP ratio (%)	2.5	4.9	3.0	3.4	17.2	21.0	12.6	13.3	7.0	:
Foreign investment (million dollars)	:	:	:	:	:	:	165.0	48.0	585.0	270.0
Change in foreign investment (%)	:	:	:	:	:	:	:	-70.9	1118.7	-53.8
Change in stock market index (%)	155.7	6.78	-1.6	-28.8	549.3	63.9	-32.2	-95.0	34.9	49.7
Price/earnings ratio	7.6	14.6	10.1	4.1	26.0	28.3	15.6	17.4	18.1	12.0
GDP growth rate (%)	6.3	4.5	6.2	-7.8	6.9	9.7	6.1	0.3	-2.8	:
Inflation rate (%)	11.5	28.1	29.5	84.2	40.8	34.2	31.4	38.1	8.09	59.9
Banking deposit rate % per annum	8.9	8.9	8.9	29.2	27.8	31.1	35.4	53.7	39.0	24.7
Change in exchange rate (%) ^a	:	-79.4	0.0	-139.2	-35.2	-21.1	-20.3	-32.8	-63.5	-19.1
Memorandum item:										
US treasury bill rate (%)	5.97	5.83	29.9	8.11	7.51	5.41	3.46	3.02	4.27	5.51

Source: IFC, 1996; and IMF, International Financial Statistics (various issues).

^a Negative sign indicates depreciation of the exchange rate.

Annex table A.18. Investment regulations for FPEI entering and exiting emerging stock markets, 1988 and 1995^a

	1988			1995	
Entry Are listed stocks		Exit	Entry Are listed stock	I	Exit
freely available to	Repa	triation of	freely available to		triation of
foreign investors?	Income	Capital	foreign investors?	Income	Capital
Free entry			Free entry		
Jordan	Free	Free	Argentina	Free	Free
Malaysia	Free	Free	Bangladesh	Free	Free
Portugal	Free	Free	Botswana	Free	Free
Tortugui	1100	Ticc	Brazil	Free	Free
Relatively free entry			Costa Rica	Free	Free
Argentina	Restricted	Only after 3 years	Cote d'Ivoire	Free	Free
Chile	Free	After 5 years	Croatia	Free	Free
Costa Rica	Some restrictions	Some restrictions	Czech Republic	Free	Free
Greece	Some restrictions	Some restrictions	Ecuador	Free	Free
Indonesia	Some restrictions	Some restrictions	Egypt	Free	Free
Jamaica	Some restrictions	Some restrictions	Ghana	Free	Free
Kenva	Some restrictions	Some restrictions	Greece	Free	Free
Sri Lanka	Some restrictions	Some restrictions	Hungary	Free	Free
Thailand	Free	Free	Jordan	Free	Free
Trinidad and Tobago	Relatively free	Relatively free	Malaysia	Free	Free
Venezuela	Some restrictions	Some restrictions	Mexico	Free	Free
venezueia	Some restrictions	Some restrictions	Namibia	Free	Free
Restricted by nationality	7		Oman	Free	Free
Pakistan	Only after 1 year	Only after 1 year	Pakistan	Free	Free
1 akistali	Only after 1 year	Only after 1 year	Panama	Free	Free
Special classes of shares			Peru	Free	Free
- ·	Free	Free	Poland	Free	Free
Mexico	Free	Free		Free	Free
Philippines			Portugal	Free	Free
Zimbabwe	Restricted	Restricted	South Africa	Free	Free
C			Turkey	Free	
Special funds only	Free	C	Zambia	Free	Free
Brazil India		Some restrictions	Dalatiraly fuse autur		
	Some restrictions	Some restrictions	Relatively free entry		Aften 1 years
Korea, Republic of Taiwan Province	Free	Free	Chile Indonesia	Free Some restrictions	After 1 year Some restrictions
of China	Euro	Free		Free	Free
	Free		Jamaica	Free	Free
Turkey	Free	Free	Kenya	Free Free	Free Free
Closed			Korea		Free
Closed	C	C	Lithuania	Free	
Bangladesh	Some restrictions	Some restrictions	Sri Lanka	Some restrictions	Some restrictions
Nigeria	Some restrictions	Some restrictions	Thailand	Free	Free
Peru	Restricted	Restricted	Trinidad and Tobag		Free
Colombia	Some restrictions	Free	Venezuela Zimbabwe	Some restrictions Free	Some restrictions Free
			Special classes of sh	ares	
			China	Free	Free
			Philippines	Free	Free
			Authorized investor		
			Colombia	Free	Free
			India	Free	Free
			Mauritius	Free	Free
			Taiwan Province		
			of China	Some restrictions	Some restrictions
			Closed	g	g
			Nigeria	Some restrictions	Some restrictions

Source: International Finance Corporation, 1989 and 1996.

Key to entry: Free entry: no significant restrictions to purchasing stocks; relatively free entry: some registration procedures required to ensure repatriation rights; special classes: foreigners restricted to certain classes of stocks, designated for foreign investors; authorized investors only: only approved foreign investors may buy stocks; closed: closed, or access severely restricted (e.g., for non-resident nationals only). **Key to Exit:** Repatriation of income: dividends, interest, and realized capital gains; repatriation of capital: Initial

Key to Exit: Repatriation of income: dividends, interest, and realized capital gains; repatriation of capital: Initial capital invested; free: repatriation done routinely; some restrictions: typically, requires some registration with or permission of Central Bank, Ministry of Finance, or an Office of Exchange Controls that may restrict the timing of exchange release.

Annex table A.19. International emerging market equity funds: total net assets of global, regional and country funds, 1986-1996

(Millions of dollars and number of funds)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ^a	qspunj
Asian regional funds	400	1234	1750	3100	4000	5350	8000	21500	32661	34800	40125	375
Country funds:												
Bangladesh	•	•	•	•	•	1	•	1	20	21	31	_
China	,	51	47	50	09	110	1300	3220	4000	5914	0899	108
India	200	208	270	300	830	970	1090	2055	4195	3000	3450	09
Indonesia	•	•	35	260	525	400	440	860	729	089	597	27
Korea, Republic of	700	885	066	1215	1205	1310	1710	3420	5406	5700	5150	94
Malaysia	•	26	75	240	505	009	620	995	1345	918	875	20
Myanmar	•	,	,	,	,	•	,	٠	25	28	09	2
Pakistan	,	,	,	,	•	65	65	310	276	113	86	9
Philippines	15	39	45	280	240	290	350	029	655	551	654	13
Sri Lanka	1	•	1	•	•	•	1	30	58	41	32	3
Taiwan Province of China	136	151	380	009	475	890	925	1860	3028	2750	3953	29
Thailand	165	170	845	1390	1400	1580	1920	2860	2862	3000	2855	31
Viet Nam	ı	ı	ı	ı	•	10	30	50	273	368	386	9
Total funds	9191	2794	4437	7435	9240	11575	16450	37830	55533	57884	64946	775
Latin American regional funds	•	•	•	175	380	1510	2000	5200	10919	8500	9750	155
Country funds:												
Argentina	1	•	ı	•	•	115	105	170	214	212	230	9
Brazil	•	63	220	320	165	380	485	625	1854	1350	1497	53
Chile	•	•	•	160	380	740	850	11115	1683	1620	1200	7
Columbia	1	٠	•	•	٠	•	17	63	33	28	40	2
Mexico	200	225	300	330	530	780	1040	1865	1783	1060	1348	12
Peru			•	•	•	•	20	30	52	41	48	33
Venezuela	•		•	•	•	•	•	•		1	1	1
Total funds	200	288	520	985	1455	3525	4517	8906	16538	12812	14114	230

(Annex table A.19, cont'd)

Region/economy	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ^a	No. of funds ^b
European regional funds	ı	1	•	15	103	127	150	168	792	677	1950	40
Country funds: Baltic Republics				•	•	•	1	1	15	34	43	2
Czech Republic			' (• (' (' (29	30	132	165	244	۲,
Greece			70	70	130	120	100	95	78	70	73	- с
nungary Poland				j '	'	004	507	507	007	18	0 1 7	1 71
Portugal	•	25	50	225	230	225	225	275	324	323	306	S
Russian Federation	•		•		•	•		•	222	488	1250	26
Turkey	•		•	115	115	06	80	145	119	113	130	m
Total funds	ı	25	120	200	692	762	789	816	1912	2389	4316	88
African and West Asian regional funds	•	•	•	•	•	•		30	323	440	468	15
Country funds: Egypt			•			•	•				150	m
Mauritius	٠	•			•	٠	٠	18	34	28	24	_
Morocco			•		•	•		2	58	43	46	ϵ
Oman			•	•	•	•		•	26	26	30	1
South Africa	80	100	115	125	200	550	999	595	935	1085	1062	12
Total funds	80	001	115	125	200	550	999	645	1376	1622	1780	35
Total regional and country funds	1896	3207	5192	9045	11964	16412	22421	48461	75359	74707	85156	1137
Global funds	20	592	006	1350	2300	3750	7750	24750	34716	36000	49500	298
Total regional, country and global funds	1966	3799	6092	10395	14264	20162	30171	73211	110075	110707	134656	1435

Source: UNCTAD, based on data provided by Micropal.

a All data are as at 31 December, except for 1996 which is as at 30 September.
 b Number of Funds as at 30 September 1996.
 Note: the definition of emerging markets utilized by Micropal in preparing this data differs somewhat from that used elsewhere in this Report.

<u>.:</u>

Annex table A.20. United States net FPEI in emerging markets, 1980-1996

(Millions of dollars)

Region/economy	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996a
All emerging markets	19	148	21	-150	264	%	120	40	207	215	1572	3073	5430	13688	6622	6292	5867
Europe	e	9	'n	-16	7	7	ю	35	-34	139	06	427	270	256	743	532	685
Greece	ı	ω	_	-12	7	7	ϵ	æ	П	S	14	20	47	93	113	78	72
Portugal	1	1	7	_	1	ı	7	5	11	55	38	31	116	59	130	199	155
Turkey	•	П	•	-13	1	8	1	ε-	-1	45	18	33	107	130	226	130	95
Former Yugoslavia	•	1	1	<u>6</u> -	-3	1	1	1	1	1	ı	1	11	1	-1	4-	36
Bulgaria	•	1	1	•	1	1	1	1	1	1	1	1	4	1	1	3	∞-
Czech Republic	•	٠	1	•	1	1	1	1	1	1	6	•	П	19	∞	26	52
Hungary	•	•	1	1	1	1	1	4	1	29	4	1	-2	7	36	9-	6-
Poland	1	1	1	1	1	1	1	1	'	1	1	1	1	19	19	65	165
Romania	•	1	1	1	1	ı	ı	1	ı	1	-	1	1	1	ı	ı	4
Russian Federation	٠	•	٠	٠	٠	•	1	•	•	•	•	٠	•	4	41	47	54
Other Europe ^b	3	-10	-5	Π	111	-3	П	34	-45	5	7	343	-15	225	171	9-	69
Latin America and																	
the Caribbean	31	115	7	-21	49	20	19	w	202	278	1293	2506	3972	9743	1313	2165	2112
Argentina	4	-1	•	2	~	•	-2	4	•	4	9	64	12	2337	1727	398	353
Brazil	2	1	14	-5	1	1	∞	4-	149	372	22	328	1062	1780	844	1402	1441
Chile	1	<u>6</u> -	ı	4	1	8	<u>-</u>	-12	28	77	86	-73	93	336	1203	102	164
Colombia	7	-1	1	3	-3	1	7	1	-2	-2	i	∞-	16	81	329	120	110
Ecuador	•	1	ı	1	1	1	-	-2	-2		-2	1	_	2	4	7	4
Guatemala	•	ı	ı	1	1	1	1	1	33	<u>.</u> 3	ı	-2	-1	-1	33	33	'
Jamaica	1	1	1	1	1	ı	1	1	ı	-25	∞	6	1	16	1	1	1
Mexico	26	121	-17	20	18	19	4	19	10	6	1062	2079	2765	5135	1205	159	137
Panama	-2	1	33	-25	35	26	16	2	26	6-	6-	132	21	2	-4954	-45	-13
Peru	•	1	•	•	•	ı	-1	9	ı	4	ı	-2	40	160	414	87	23
Trinidad and Tobago	•	ı	1	•	•	-	•	1	-	•	ı	•	1	•	-21	•	_
Uruguay	•	1	-1	-10	•	ı	•	4	-1	-11	13	<i>L</i> -	-31	-93	236	-19	-53
Venezuela	-1	-2	4	-2	8	•	4	_	<u>٠</u> -	-	-1	-49	79	9-	111	-41	-78
Other Latin America																	
and Caribbean	٠	,	4	1	"	<i>c</i> -	ر ₋	V	ς,	06-	90	3,5	××-	۲	711	o	CC

(Annex table A.20, cont'd)

Region/economy	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996a
Asia	-12	-22	17	6	54	31	129	27	31	-140	181	221	1194	3140	4311	3235	2390
China			ı	1	50	1	111	4	2	•	П	ı	4	107	588	160	52
India	1	1	1	1	1	-	2	1	1	_	-1	8	1	107	422	343	320
Indonesia	,	ı	1	ı	-1	1	-2	1	1	-2	26	91	175	302	296	289	51
Korea, Republic of	1	9	4	7	16	33	15	-10	-31	39	-30	ı	466	1253	1680	1637	1016
Lebanon	-	1	,	-	-11	-2	7	-3	1	-	-5	7	1	3	1	-5	-2
Malaysia	7	-2	1	1	1	П	7	92	23	28	136	-27	235	1103	26	-145	268
Pakistan	1	1	1	1	ı	1	1	1	1	1	1	-1	12	51	25	10	12
Philippines	43	-	3	11	1	İ	-16	-30	24	6	21	27	219	122	460	491	169
Syrian Arab Republic	,	1	,	1	1	1	1	_	1	_	ı	3	9	1	1	-5	7
Thailand	1	1	1	1	1	2	15	30	133	-2	42	90	121	48	192	-10	100
Other Asia	-56	-26	10	-1	<u>e</u> -	-2	-2	-50	-120	-213	6-	31	-36	4	-50	72	402
Africa	"	19	~	-122	130	4	۲.	7.7	œ	29-	œ	2	٢	249	255	360	089
	,	5	1		(21	٠	1	į	•	3	•	10	•	Ì			
Egypt	ı	•	1	-3	1	<u>-</u> -	•	1	•	•	22	-2	9	-25	-2	44	129
Ghana	•	1	•	•	•	1	1	•	ı	1	1	•	•	•	32	9	37
Liberia	•	1	-5	1	1	4	<u>~</u>	4	20	-12	2	-39	-39	188	13	•	∞
Morocco	•	1	•	1	ı	1	ı	•	ı	1	ı	1	1	2	20	-	9
South Africa	-2	63	4	-117	137	7	-25	-21	-12	-47	-25	-42	22	85	164	374	549
Zaire	•	-5	•	1	1	ı	_	•	ı	1	ı	1	1	•	4	•	1
Other Africa	-	ı	1	<u>-</u> 3	1	7	1	-2	1	-3	6	2	5	-1	24	-63	-49

Source: UNCTAD, based on data provided by United States Treasury.

a First two quarters only.
 b Includes transactions with the Bank for International Settlements (BIS) of unspecified magnitude.

<u>.:</u>

Annex table A.21. Emerging market issues of international equity-related bonds, 1986-1995

(Millions of dollars)

Region/economy	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
			0	Convertible bonds	spı					
All emerging markets	100	30	130	30	120	1400.8	535.8	3324.7	6738.7	2257.5
By region:										
Asia	09	30	30	30	120	1188.1	535.8	3142.1	4368.7	1747.5
China	ı	ı	1	ı	ı	ı	ı	125.3	1	45
India	1	1		1	1	1	1	445	533.4	
Indonesia	ı	,	ı	ı	1	369.1	206	06	540	88.9
Malaysia	ı	ı	1	ı	1	190.2	1	ı	1160	200
Pakistan	1	1	1	ı	1	1	ı	92.3	45	٠
Philippines	ı		1	ı	1	1	1	280	368.8	272.9
Korea, Republic of	09	30	30	30	120	597.4	258.7	492.1	640.6	836.1
Thailand	1	ı	ı	1	1	31.4	71.1	1617.4	1080.9	304.6
Africa and the Middle East	ı	1	1	1	ı	1	ı	ı	475	350
South Africa	ı	1	ı		•		ı		475	350
Latin America and the Caribbean	1	ı	1		,	50	ı	182.6	1895	130
Argentina	1	1	1	1	1		1	1	450	•
Chile	ı	ı	1	ı	ı	1	ı	182.6	ı	•
Mexico	ı	ı	ı	ı	ı	50	1	ı	1405	130
Peru	1	ı	1			ı	1	1	40	1
Europe and Central Asia	40		100	1	1	162.7	1	1	1	1
Portugal	40	ı	100	1	1	162.7	1	1	1	ı
			Bonds	Bonds with equity warrants	arrants					
All emerging markets	1	1	1	50	70	370	65	207	102.2	209
By region:				Ç	1	Č	i,	Ç	6	Ö
Asia	ı	ı		20	0/	7/0	65	20	102.2	506
Korea, Republic of	1	•	1	50	70	270	92	50	37.5	209
Thailand		ı		ı	1	1	1	•	64.7	•

(Annex table A.21, cont'd)

Region/economy	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Latin America and the Caribbean	ı	ı	ı	1	1	100	1	157	ı	1
Brazil	1	1	ı	ı	1	1	ı	57	1	1
Mexico	ı	ı	ı	ı	ı	100	ı	100	ı	ı
		C^{C}	Convertible bonds and bonds with equity warrants	s and bonds wi	h equity war	rants				
All emerging markets	100	30	130	80	190	1770.8	8.009	3531.7	6840.9	2436.5
By region:										
Asia	09	30	30	80	190	1458.1	8.009	3192.1	4470.9	1956.5
China	ı	1	1	ı	1	ı	ı	125.3	1	45
India	1	1	1	ı	1	1	1	445	533.4	ı
Indonesia	ı	ı	ı	1	1	369.1	206	06	540	88.9
Malaysia	ı	ı	1	ı	ı	190.2	ı	ı	1160	200
Pakistan	1	1	ı	ı	1	1	ı	92.3	45	ı
Philippines	1	1	1	ı	1	1	1	280	368.8	272.9
Korea, Republic of	09	30	30	80	190	867.4	323.7	542.1	678.1	1045.1
Thailand	ı	ı	1		1	31.4	71.1	1617.4	1145.6	304.6
Africa and the Middle East	ı	1	ı		ı	ı	ı	ı	475	350
South Africa	ı	ı	ı	1	ı	ı	ı	1	475	350
Latin America and the Caribbean	ı	1	ı	•	1	150	ı	339.6	1895	130
Argentina	ı	ı	1	ı	ı	1	ı	ı	450	1
Brazil	1	1	1	ı	1	1	1	57	1	ı
Chile	1	1	1	1	1	1	1	182.6	1	1
Mexico	ı	ı	1	ı	1	150	ı	100	1405	130
Peru	ı	ı	1		1	ı	ı	1	40	1
Europe and Central Asia	40	,	100	ı	1	162.7	ı		,	1
Portugal	40	ı	100	ı	•	162.7	ı	1	ı	ı

Source: OECD, 1996d.

Annex table A.22. Countries and territories with competition laws, 1996a

Developed countries	Africa	Asia and the Pacific	Latin America and the Caribbean	Central and Eastern Europe
Canada (1888)	Côte d'Ivoire (1978)	Lebanon (1967)	Argentina (1923)	Hungary (1984)
United States (1890)	Mauritius (1980)	India (1969)	Chile (1959)	Poland (1990)
Australia (1906)	Kenya (1988)	Pakistan (1970)	Colombia (1959)	Bulgaria (1991)
New Zealand (1908)	Gabon (1989)	Thailand (1979)	Brazil (1962)	Czech Republic (1991)
Sweden (1925)	Tunisia (1991)	Republic of Korea (1980)	Venezuela (1973)	Latvia (1991)
Japan (1947)	Mali (1992)	Sri Lanka (1987)	Peru (1991)	Romania (1991)
United Kingdom (1948)	Ghana (1993)	Cyprus (1989)	Mexico (1992)	Russian
Ireland (1953)	Zambia (1994)	Kazakstan (1991)	Jamaica (1993)	Federation (1991)
Norway (1953)	Algeria (1995)	Taiwan Province	Costa Rica (1994)	Slovakia (1991)
Denmark (1955)	Cameroon ^b	of China (1991)	Panama (1996)	Belarus (1992)
South Africa (1955)	Egypt ^b	Fiji (1992)	Bolivia ^b	Lithuania (1992)
Netherlands (1956)	Malawi ^b	Uzbekistan (1992)	Dominican Republic ^b	Ukraine (1992)
Finland (1957)	Morocco ^b	China (1993)	Ecuador ^b	Estonia (1993)
Germany (1957)	Senegal ^b	Tajikistan (1993)	El Salvador ^b	Albania (1995)
Israel (1957)	Zimbabwe ^b	Kyrgyzstan (1994)	Guatemala ^b	Moldova ^b
Belgium (1960)		Turkey (1994)	Honduras ^b	
Switzerland (1962)		Georgia (1996)	Nicaragua ^b	
Spain (1963)		Azerbaijan ^b	Paraguay ^b	
Luxembourg (1970)		Indonesia ^b	Trinidad and Tobago ^b	
Austria (1972)		Jordan ^b	-	
Yugoslavia (1974) ^c		Malaysia ^b		
France (1977)		Mongolia ^b		
Greece (1977)		Nepal ^b		
Iceland (1978)		Philippines ^b		
Portugal (1983)		Viet Nam ^b		
Italy (1990)		Turkmenistan ^b		
Slovenia (1993) ^c				
Malta (1994) ^c				
Croatia (1995) ^c				

Source: UNCTAD secretariat, based on national reports and various sources.

^a The year in which a competition law was first adopted is indicated in parenthesis. This list is not necessarily complete as an increasing number of countries is becoming interested in competition laws.

b Competition law under preparation.

^c Developing Europe.

Annex table A.23. Main features of merger, acquisition and joint venture control regulations in 16 developed countries and the European Union, 1994

Economy	System of notification	Notification thresholds	Time limit for initial decision	Criteria for decision	Confidentiality	Time limit for final decision	Risks of failure to notify
Australia	Voluntary			Substantial lessening of competition in a market.	Discretionary.	Up to 45 days for decision by trade practices Commission (extended if additional information requested). Parties have 21 days following TPC decisions to appeal. Appeal must be heard by Tribunal within 60 days (unless complex case or special circumstances).	Post-closing divestiture.
Austria	Compulsory	Post merger notification where enterprises have a combined share of at least 5 per cent of the domestic market.				Not Applicable.	
Belgium	Compulsory	Combined annual turnover of more than 1 billion BF and more than 20 per cent of the relevant market.	1 Month	Acquisition of or strengthening a dominant position and public interest criteria.	Assured.	75 days after a decision to begin a second phase investigation.	Fines from 20,000 to Imillion BF.
Canada	Compulsory	Combined assets/sales in, from or into Canada of C\$ 400 Million; target assets value or sales in/from Canada of C\$35 million.		Substantial lessening of competition in a market.	Assured.	7 days (short form), 21 days (long form), 10 days for a tender offer.	Fine, Imprisonment, divestiture.
France	Voluntary	Combined Market Share of 25 per cent or combined sales in France of F 7 billion and each of two or more parties has sales in France of F 2 billion.	2 months	Economic and social balance.	Assured.	6 months.	Post-closing divestiture.

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	O. cont.		Time limit	3.5			Distract
Economy	System of notification	Notification thresholds	decision	decision	Confidentiality	Time limit for final decision	failure to notify
Germany	Compulsory	Pre-merger: worldwide sales of DM 2 billion for any party; or worldwide sales by at least 2 parties of DM 1 billion. Post-merger: combined worldwide sales greater than DM 500 million.	1 month pre-merger	Competition. Minister of Economics can exempt on general economic policy grounds if Federal Cartel Office prohibits the transaction in question.	Generally assured.	Pre-merger , 4 months Pre-merger , 4 months	Fine, invalidity of transaction.
Greece	Compulsory	Pre-notification for horizontal mergers in sectors to be designated for enterprises with a combined market share of 30 per cent or aggregate turnover of ECU 65 million. Post-merger: more than 10 per cent market share or ECU 10 million turnover.		Competition.	Assured.	2 months (may be extended).	Fines: up to 15 per cent of aggregate turnover, for failure to prenotify. 3 per cent for postaggregate merger.
Ireland	Compulsory	Each of two or more parties has assets worth IR£ 10 million or sales of IR£20 million.	1 month	Competition and common good.	Assured.	3 months.	Fine, invalidity of transaction.
Italy	Compulsory	Aggregate sales in Italy of L500 billion or target company sales exceed L50 billion.	30 days	Competition.	Assured.	45 days after reference (can be extended).	Fine, post- closing divesti ture.
Japan	Compulsory	True mergers or acquisition of the whole or part of a substantial part of an ongoing business in Japan.	30 days	Competition.	Assured.	90 days.	Fine, post- closing divesti ture.
New Zealand	Voluntary	Nil.	10 working days	Market dominance & public benefit, including economic efficiency.	Assured.	60 working days.	Pecuniary penalties, divestiture, damages if courts hold dominant position created or strengthened.

(Annex table A.23, cont'd)

Economy	System of notification	Notification thresholds	Time limit for initial decision	Criteria for decision	Confidentiality	Time limit for final decision	Risks of failure to notify
Portugal	Compulsory	Mergers where enterprises have combined turnover of at least Esc. 30 000 million or they control at least 30 per cent of the relevant market.	50 days	Competition.	Assured.	50 days to which can be added 30 days and 15 days.	Fine, initiation of proceedings, lack of legal effect until authorized.
Spain	Voluntary	Combined Market Share in Spain of 25 per cent or combined sales in Spain of 20 billion.	1 month	Competition.	Assured.	6 months.	Post closing divestiture.
Sweden	Compulsory	Aggregate turnover in excess of SKr 4 billion.	1 month	Competition and detriment to public interest.	Assured.	Further 3 months to bring before Stockholm City Court.	Fines.
United Kingdom	Voluntary	Assets acquired greater than STG£30 or combined 25 per cent market share in United Kingdom.	20 working days (may be extended to 45)	Public Interest.	Generally but qualified by some exceptions.	Case by case, maximum 6 months.	Post closing divestiture.
United States	Compulsory	One party has worldwide sales or total assets of US\$100 million and other has \$10 million of sales or assets, and acquirer will hold securities and assets worth greater than \$15 million, or represent greater than 15 per cent of outstanding voting assets or securities.	30 days	Competition.	Assured.	20 days after compliance with second request.	Periodic penalty payments, divestiture, or other equitable remedies.
European Union	Compulsory	Combined worldwide sales of ECU 5 billion and the aggregate turnover of the companies involved in a transaction must exceed ECU 250 million in the European Union, unless the two companies achieving the turnover of ECU 250 million do so in one and the same member state of the European Union.	1 month	Competition.	Assured.	4 months.	Fines, periodic penalty payments, divestiture.

Sources: OECD, 1994, updated and supplemented by various additional sources.

Annex B. Statistical annex

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DEFINITIONS AND SOURCES

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. A *foreign affiliate* is an incorporated or unincorporated enterprise in which an investor, who is resident in another country, 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). 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 intracompany 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. 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 non-residents 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 B.1 and B.2, as well as in 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. Tables 1 and 2 summarize the availability of each component of FDI during 1980-1995, the period covered in the *World Investment Report* for, respectively, FDI inward flows and FDI outward flows. 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*. The same data are also available in IMF's *International Financial Statistics* for certain countries. Therefore, data from IMF used in the *World Investment Report* were obtained directly from IMF's computer tapes containing balance-of-payments statistics and international financial 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 1980-1996 period that is used in the *World Investment Report*, data from UNCTAD FDI/TNC 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.⁵ 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 1980-1994 period, or part of that period, are listed below.

1980-1994	Bermuda, Cayman Islands, Cuba, Ethiopia, Democratic People's Republic of Korea, Macau and United States Virgin Islands.
1980-1993	Afghanistan, Hong Kong, United Arab Emirates and Western Samoa
1980-1991	Nepal and United Republic of Tanzania.
1980-1990	Iraq and Uganda.
1980-1989	Islamic Republic of Iran, Kuwait, Lebanon and Syrian Arab Republic.
1980-1988	Madagascar and Myanmar.
1980-1986	Viet Nam.
1980-1985	Guinea, India and Mozambique
1980-1984	Angola, Burundi and former Yugoslavia.
1981-1988 and 1992-1994 Equa	itorial Guinea.
1982-1994	Benin and Gibraltar.
1982-1991	Somalia.
1982-1988 and 1990-1993 Suda	ın.
1982 and 1984-1994	Malawi.
1983-1992	Qatar.
1983-1991	Djibouti.
1983-1986	Gambia.
1983-1985 and 1989-1991 Urug	guay.
1984-1994	Guinea-Bissau.
1985-1989	Namibia.
1986-1991	Guyana.
1987-1991	Nicaragua.
1988-1993	Liberia.
1990-1994	Burkina Faso.
1992-1993	Togo.

As of 1 June 1997, data on FDI inflows for 1996 were available for Argentina, Austria, Azerbaijan, Bahamas, Bahrain, Belarus, Bolivia, Brazil, Bulgaria, Georgia, India, Italy, Japan, Republic of Korea, TFYR Macedonia, Mexico, Republic of Moldova, New Zealand, Norway, Paraguay, Philippines, Poland, Portugal, Romania, Russian Federation, Singapore, Slovenia, Thailand, Turkmenistan, Ukraine, United States, Uraguay, Uzbekistan and Viet Nam (from UNCTAD FDI/TNC database) and Australia, Belgium and Luxembourg, Canada, Denmark, Ecuador, Estonia, Finland, France, Hungary, Israel, Lithuania, Netherlands, Spain and Sweden (from IMF's balance-of-payments and international-financial-statistics tapes).

For many other countries FDI inflows for 1996 are estimated. Data for Germany and Taiwan Province of China, which are provided by the national authorities, are estimated by annualizing, respectively, data for the the first 11 months and the first two quarters. For Peru and the United Kingdom FDI inflows for 1996 are estimated by annualizing the data for the first three quarters; for Albania, Cambodia, Chile, Guatemala, Lao People's Democratic Republic and Latvia, the first two quarters; and for Indonesia and Turkey, the first quarter (data from IMF's balance-of-payments and international-financial-statistics tapes).

For those countries for which FDI data were not available throughout the period (up to 1996), data have been estimated by UNCTAD. Those economies for which estimation was made are listed below:

1996: Aruba, Bangladesh, Barbados, Belize, Botswana, Brunei Darussalam, Cape Verde, Colombia, Costa Rica, Côte d'Ivoire, Croatia, Cyprus, Czech Republic, Djibouti, Dominican Republic, Egypt, El Salvador, Fiji, Gambia, Guinea, Greece, Guyana, Honduras, Iceland, Ireland, Islamic Republic of Iran, Jamaica, Kenya, Madagascar, Malaysia, Malta, Mauritania, Mauritius, Mongolia, Morocco, Myanmar, Namibia, Netherlands Antilles, Nicaragua, Oman, Pakistan, Papua New Guinea, Saint Vincent and the Grenadines, Saudi Arabia, Seychelles, Slovakia, South Africa, Sri Lanka, Syrian Arab Republic, Swaziland, Switzerland, Trinidad and Tobago, Tunisia, Uganda, United Republic of Tanzania, Vanuatu, Venezuela and Yemen.

1995-1996: Antigua and Barbuda, Armenia, Bermuda, Burkina Faso, Cayman Islands, Central African Republic, Chad, Congo, Cuba, Dominica, Equatorial Guinea, Ethiopia, Gabon, Ghana, Gibraltar, Guinea-Bissau, Grenada, Jordan, Kazakhstan, Kiribati, Democratic People's Republic of Korea, Kyrgyztan, Lesotho, Malawi, Mali, Macau, New Caledonia, Niger, Nigeria, Panama, Rwanda, Saint Kitts and Nevis, Saint Lucia, Senegal, Sierra Leone, Surinam, Tajikistan, Virgin Islands, Zaire and Zimbabwe.

1994-1996: Angola, Benin, Burundi, Cameroon, Liberia, Maldives, Sudan, Togo, Tonga, United Arab Emirates and Western Samoa.

Table 1. List of economies for which at leat one component of foreign-direct-investment inward flows is not available ^a

Equity investment	Reinvested earnings	Intra-company loans
Developed countries:		
Denmark ^b , Canada, Iceland ^c , Ireland, Israel, Italy, Spain, Sweden, Switzerland ^b , United Kingdom ^d	Austria ^e , Belgium and Luxembourg, Canada ^b , Denmark, France ^e , Greece ^f , Iceland, Ireland ^g , Italy, Japan, Norway, South Africa, Spain, Sweden ^h , Switzerland ^b	Austria, Denmark ⁱ , Greece ^j , Iceland ^k , Italy, Spain ^g , Switzerland ^d
Developing economies:		
Africa:		
Angola ^f , Benin, Burkina Faso, Burundi ^l , Cape Verde ^m , Chad ^d , Comoros ^m , Djibouti ⁿ , Egypt, Equatorial Guinea ^o , Gambia ^m , Guinea ^c , Lesotho ^c , Libyan Arab Jamahiriya, Madagascar ^o , Mali, Mauritius, Morocco ^f , Mozambique ^c , Namibia ^g , Niger ^p , Nigeria, Seychelles ^o , Sierra Leone ^q , Somalia, Uganda ⁿ , United Republic of Tanzania ^r , Zambia ^o	Algeria, Angola ^f , Benin ^e , Burundi, Cape Verde, Central African Republic ^h , Chad ^r , Comoros ^m , Djibouti ^r , Egypt, Equitorial Guinea, Gambia ^m , Ghana ^s , Guinea ^c , Libyan Arab Jamahiriya ^t , Lesotho, Madagascar, Malawi, Mali ^o , Mauritania, Mauritius ^u , Mozambique, Namibia ^g , Nigeria, Somalia, Sudan, Tunisia, Uganda ⁿ , United Republic of Tanzania, Zimbabwe ^s	Algeria, Angola ¹ , Benin ^e , Burundi, Cape Verde, Chad ^c , Comoros, Djibouti, Equatorial Guinea, Gambia ^e Ghana ^e , Guinea ^o , Kenya ^m , Lesotho ^s Madagascar, Malawi, Mauritania, Mozambique, Namibia ^g , Somalia ^p , Sudan, Uganda ^f , United Republic of Tanzania, Zimbabwe ^c
Latin America and the Caribbean:		
Antigua and Barbuda ^c , Aruba, Bolivia ^q , Colombia,Guyana, Jamaica ^m , Nicaragua ^r , Peru ^l , Saint Kitts and Nevis ^c , Saint Lucia ^c , Saint Vincent and the Grenadies ^c	Antigua and Barbuda ^c , Argentina ^w , Aruba, Bahamas, Chile ^m , Dominica ^c , Dominican Republic ⁿ , Grenada ^c , Guyana ^p , Haiti, Paraguay ^g , Nicaragua ^r , Saint Kitts and Nevis ^c , Saint Lucia ^u , Saint Vincent and the Grenadines ^c , Suriname, Uraguay ^c , Venezuela	Argentina, Aruba ^g , Bolivia ^m , Barbados ^h , Chile, Dominica ^c , Dominican Republic ⁿ , Ecuador, Guatemala ^u , Grenada ^c , Haiti, Honduras ^m , Nicaragua, Paraguay ^u , Peru ^s , Uraguay ^c , Venezuela ^x
Developing Europe:		
Croatia, Slovenia ^r , TFYR Macedonia ^x	Croatia, Slovenia, TFYR Macedonia	Croatia ⁿ , Slovenia, TFYR Macedonia

(Table 1, cont'd)

Equity investment	Reinvested earnings	Intra-company loans
West Asia:		
Bahrain, Cyprus, Islamic	Bahrain, Islamic Republic of Iran,	Islamic Republic of Iran, Oman, Syrian
Republic of Iran ^x , Jordan ^m ,	Jordan, Saudi Arabia, Syrian Arab	Arab Republic, Turkey, Yemen f
Saudi Arabia, Syrian Arab	Republic, Turkey ^y , Yemen	
Republic ^c		
Central Asia:	'	
Armenia ^x	Armenia	Armenia
South, East and South-East Asia:		
Cambodia ^r , Indonesia ^b , Lao	Bangladesh, Cambodia n, China,	Bangladesh ^c , Cambodia, China,
People's Democratic Republic,	Indonesia, Republic of Korea o,	Republic of Korea, Lao People's
Malaysia, Maldives, Mongolia r,	Lao People's Democratic Republic,	Democratic Republic ^u , Maldives,
Myanmar ^o	Malaysia, Maldives ^c , Mongolia,	Mongolia, Myanmar, Pakistan n,
	Myanmar, Pakistan n, Singapore,	Singapore, Sri Lanka
	Sri Lanka ^c , Thailand	
The Pacific:		
Kiribati ^b , Papua New Guinea ^f ,	Kiribati ¹ , Solomon Islands, Tonga	Kiribati, Solomon Islands m, Tongac
Tonga ^m , Vanuatu		
Central and Eastern Europe:		
Albania ^r , Bulgaria ^g , Czech	Albania, Bulgaria, Czech Republic,	Albania, Bulgaria, Czech Republic,
Republic ⁿ , Hungary ^f , Latvia ^r ,	Hungary, Latvia, Lithuania ^y ,	Hungary, Latvia, Lithuania y, Republic
Lithuania ⁿ , Republic of	Republic of Moldova, Poland ^g ,	of Moldova ^y , Poland ^x , Romania,
Moldova ^y , Romania ^f ,	Romania, Russian Federation,	Russian Federation, Slovakia ^y ,
Russian Federation, Slovakia x,	Slovakia, Ukraine	Ukraine
Ukraine		

Source: UNCTAD, based on International Monetary Fund, balance-of-payments tape, retrieved in June 1997.

^a Countries not available at least one year are all reported in the table.

b	Started reporting since 1983.	n	Started reporting since 1993
c	Started reporting since 1986.	0	Started reporting since 1989.
d	Started reporting since 1984.	p	Stopped reporting since 1985.
e	Stopped reporting since 1981.	q	Stopped reporting since 1987.
f	Started reporting since 1991.	r	Started reporting since 1992.
g	Started reporting since 1990.	S	Stopped reporting since 1984.
h	Started reporting since 1982.	t	Stopped reporting since 1983.
i	Stopped reporting since 1982.	u	Started reporting since 1988.
j	Stopped reporting since 1990.	v	Stopped reporting since 1986.
k	Stopped reporting since 1989.	W	Stopped reporting since 1991.
1	Started reporting since 1985.	X	Started reporting since 1994.
m	Started reporting since 1987.	y	Started reporting since 1995.

1993-1996: Afghanistan, Iraq, Mozambique, Qatar and Solomon Islands.

1992-1996: Algeria, Comoros, Nepal, Somalia and Zambia.

1991-1996: Libyan Arab Jamahiriya.

1990-1996: Haiti, Kuwait and Lebanon.

For Viet Nam, data from 1988 to 1994 are estimated by applying an average implementation ratio of 20 per cent (the ratio of realized FDI to approved FDI), to the approved data. The data for India are converted to those on a calandar year basis from those reported on the basis of fiscal year.

2. Outflows

As of 1 June 1997, FDI outflows for 1996 were available for Austria, Bolivia, Hungary, Italy (on a preliminary basis), Republic of Korea, Norway, Portugal, Philippines, Singapore, Swaziland, Taiwan Province of China, Thailand and the United States (from UNCTAD, FDI/TNC database) and for Australia, Belgium and Luxembourg, Canada, Denmark, Estonia, Finland, France, Israel, Netherlands, Spain and Sweden (from the IMF's balance-of-payments tape).

Outflows for 1996 for Germany, which are provided by the national authority, are estimated by annualizing data for the first 11 months. Quarterly FDI outflows are also available from the IMF's balance-of-payment tapes. For Bulgaria, Lithuania and Slovenia FDI outflows in 1996 are estimated by annualizing the first three quarters, for Argentina, Chile, Russian Federation, Slovakia and South Africa on the basis of the first two quarters and for Czech Republic, Iceland, Indonesia, Turkey and Ukraine on the basis of the first quarter.

In the case of countries for which FDI outflows were unavailable from national authorities, inflows to large recipient economies were used as a proxy. Thus, for India - up to 1995, Indonesia - up to 1992, and the Philippines - up to 1992, inflows to the European Union and the United States were used as a proxy. In the case of Hong Kong - up to 1995, inflows to China, the European Union and the United States are used as a proxy. For Argentina (1984-1991), Bahamas (1981-1995), Bahrain (1981-1995), Bermuda (1981-1995), Cameroon (1994-1995), Central African Republic (1995), Chad (1995), Dominican Republic (1992-1995), Gabon, (1995), Greece (1991-1995), Iraq (1994-1995), Ireland (1984-1989), Lebanon (1982-1995), Liberia (up to 1995), Mexico (up to 1995), Netherlands Antilles (up to 1995), Nigeria (1982-1995), Oman (1988-1995), Panama (1981-1995), Peru (1992-1995), Saudi Arabia (up to 1995), Trinidad and Tobago (1993-1995), United Arab Emirates (up to 1995) and Uruguay (1989-1993), inflows into the United States were used as a proxy of their outflows.

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.

The 1996 FDI outward flow for the United Kingdom is estimated by using the growth rate of mergers and aquisitions for 1996.

Outflows for Albania, Bahamas, Bahrain, Barbados, Belize, Bermuda, Botswana, Bosnia and Herzegovina, Brazil, Burundi, Cameroon, Central African Republic, Chad, China, Colombia, Costa Rica, Cyprus, Egypt, Fiji, Gabon, Greece, Hong Kong, India, Iraq, Ireland, Jordan, Kuwait, Latvia, Lebanon, Liberia, Malaysia, Malta, Mauritius, Mexico, Republic of Moldova, Morocco, Namibia, Netherlands Antilles, Nigeria, Oman, Pakistan, Panama, Poland, Romania, Saudi Arabia, Senegal, Seychelles, Sri Lanka, Switzerland, Tunisia, United Arab Emirates and Venezuela in 1996 are based on UNCTAD's own estimates.

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 B.3 and B.4), FDI stocks are estimated by cumulating FDI flows over a period of time. For a number of countries (indicated in annex tables B.3 and B.4), estimates of FDI stocks are obtained by adding flows to a FDI stock that has been obtained for a particular year. Almost all of FDI stocks for 1996 are obtained by adding FDI flows for 1996 to the stock figures of 1995. For further detail, refer to notes to annex tables B.3 and B.4.

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.

Table 2. List of economies for which at leat one component of foreign-direct-investment outward flows is not available ^a

Equity investment	Reinvested earnings	Intra-company loans
Developed countries: Denmark b, Canada, Icelandc,	Austria, Belgium and Luxembourg,	Austria h, Denmark e, Iceland i,
Ireland, Israel, Sweden, Switzerland ^d , United Kingdom ^d	Canada ^b , Denmark, France ^c , Iceland, Ireland ^f , Italy, Japan, Norway, Portugal ^g , South Africa, Spain, Switzerland ^b	Ireland, Italy, Spain ^f , Switzerland ^d
Developing economies:	-	
Africa:		
Benin, Burkina Faso c, Cape Verdeg, Chadd, Comorosf, Djiboutij, Egyptf, Equatorial Guineak, Kenyak, Lesotho, Mauritaniac, Mauritius, Moroccol, Namibiaf, Nigerm, Seychelles, Zimbabwen	Algeria, Angola, Benin, Botswana ^o , Burkina Faso Burundi, Cape Verde, Cameroon ^k , Central African Republic, Chad, Comoros ^f , Djibouti ^p , Egypt, Equatorial Guinea, Gabon, Libyan Arab Jamahiriya, Lesotho, Mauritania, Mauritius ^q , Morocco, Namibia ^f , Niger ^c , Nigeria, Senegal ^r , Tunisia, Zimbabwe	Algeria, Angola, Burkina Faso Burundi, Cameroon k, Cape Verde, Central African Republic, Chad, Comoros, Djibouti, Equatorial Guinea, Gabon, Kenya s, Libyan Arab Jamahiriya, Mauritania, Mauritius n, Morocco, Namibia f, Zimbabwe
Latin America and the Caribbea	n:	
Barbados °, Bolivia ¹, Belize ¹, Chiled, Colombia, Trinidad and Tobago b, Venezuela °	Argentina, Belize, Bolivia ^m , Brazil, Chile, Haiti, Trinidad and Tobago, Uruguay, Venezuela ^g	Argentina, Bolivia, Barbados°, Belize, Chile, Colombia, Costa Rica¹, Haiti¹, Haiti, Trinidad and Tobago, Uruguay, Venezuela
Developing Europe:		
Malta ^b , Slovenia ^p	Malta ^u , Slovenia	Malta ^u , Slovenia
West Asia:		
Cyprus, Jordan, Turkey, Yemen ¹	Cyprus, Jordan, Kuwait, Turkey, Yemen	Cyprus ^g , Kuwait, Turkey, Yemen ^h
South, East and South-East Asia	:	
Indonesia ^v , Pakistan ^d , Philippines ^j , Sri Lanka	China, Indonesia, Pakistan, Philippines, Singapore, Sri Lanka, Thailand	China, Indonesia, Pakistan, Philippines, Singapore, Sri Lanka, Thailand
The Pacific:		
Fiji d, Papua New Guinea,	Fiji ⁿ , Papua New Guinea,	Kiribati
Central and Eastern Europe:		
Bulgaria w, Czech Republic j, Estonia, Hungary j, Latvia p, Lithuania w, Republic of Moldova, Romania f, Slovakia u	Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Republic of Moldova, Poland ¹ , Romania, Slovakia	Bulgaria, Czech Republic, Estonia, Hungary, Latvia ^p , Lithuania, Republic of Moldova ^w , Poland ¹ , Romania, Slovakia ^w

Source: UNCTAD, based on International Monetary Fund, balance-of-payments tape, retrieved in June 1997.

- Countries not available at least one year are all reported in the table.
- Started reporting since 1983.

Stopped reporting since 1983.

Started reporting since 1986. d

Stopped reporting since 1988.

Started reporting since 1984.

o Started reporting since 1982.

Stopped reporting since 1982. Started reporting since 1990.

p Started reporting since 1992. Reported 1989 only.

Started reporting since 1985.

Reported 1982 only.

Stopped reporting since 1981.

Started reporting since 1989.

Stopped reporting since 1986.

- Started reporting since 1993.

Stopped reporting since 1987.

Started reporting since 1989. Started reporting since 1991.

- Started reporting since 1994.
- Reported 1993 only. Started reporting since 1995.

All FDI data and estimates in the *World Investment Report* are continuously revised. Because of the ongoing revision, FDI data reported in the *World Investment Report* may differ from those reported in earlier *Reports* or other publications of UNCTAD. In particular, recent FDI data are being revised in many countries according to the fifth edition of the IMF's balance-of-payments manual. Data taken from the IMF are based on the balance-of-payments and international financial statistics tapes, retrieved in June 1997.

C. Definitions and sources of the data in annex tables B.5-B.10

Annex tables B.5 and B.6

These two annex tables show the ratio of inward and outward FDI flows to gross fixed capital formation (annex table B.5) and inward and outward FDI stock to GDP (annex table B.6), respectively. All of these data are in current prices. The data on both gross fixed capital formation and GDP were obtained from the IMF's international-financial-statistics tape, retrieved on 1 June 1996. For some economies such as Taiwan Province of China, the data are supplemented from national sources. Data on FDI are from annex tables B.1-B.4.

Annex tables B.7, B.8 and B.9

Data on cross-border mergers and acquisitions (M&As) are obtained from the KPMG. This consulting firm collects information through a variety of secondary sources including newspapers and other periodicals, and a quarterly meeting of the 42-member KPMG Corporate Finance Network. All data in the text refer to only cross-border M&A transactions which result in the equity holding of more than 50 per cent (unless otherwise indicated). Data on minority investments are not included in the discussion on the assumption that portfolio investments account for the bulk of minority-held investments. However, in annex tables B.7, B.8 and B.9, all M&As (including minority-held investments) are also presented for information. Cross-border M&As are recorded in both directions of transactions; i.e., when a cross-border M&A takes place, it registers as both a sale in the country of the target firm, and as a purchase in the home country of the acquiring firm. Data showing cross-border M&A activities on an industrial basis refer to only sales figures (annex table B.9). Thus, if a food company acquires a chemical company, this transaction is recorded in the chemical industry.

Annex tables B.10

Data on bilateral investment treaties presented in this table are taken from UNCTAD, database on BITs. Information contained in this database is provided by governments. This information includes: the treaty partner, data of signature and date of entry into force. Most of the information has been confirmed by the two countries involved in the treaty. However, where one country has not provided information on its BITs, the information provided by the other treaty partner reporting on the BIT was accepted. Where both countries report and discrepency exists as to the information provided, the matter was clarified with the countries involved and through independent sources. Failing to resolve the discrepancy, such information was omitted. In this table, when a country in Central and Eastern Europe (e.g. Albania) has concluded a BIT with a country in developing Europe, this case is counted under the intraregional BITs under the developing country column.

Notes

- ¹ In some countries such as Germany and the United Kingdom, a stake of 20 per cent or more is a threshold.
- 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).
- 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.
- Includes Austria, Belgium, Canada, Denmark, Finland, France, Germany, Italy, Japan, the Netherlands, Norway, Spain, Sweden, United Kingdom and United States.

Annex table B.1. FDI inflows, by host region and economy, 1985-1996

(Millions of dollars)

Host region/economy	1985-1990 (Annual average	1991 e)	1992	1993	1994	1995	1996 ^a
World	141930	158936	173761	218094	238738	316524	349227
Developed countries	116744	114792	119692	138762	142395	205876	208226
Western Europe	55625	81627	85861	83979	77120	115589	105379
European Union	52685	78777	83793	81029	72395	110884	99416
Austria	407	360	947	977	1311	639	3806
Belgium and Luxembourg	4069	9363	11286	10750	8514	10299	13920
Denmark	514	1553	1017	1713	5006	4139	773
Finland	427	-233	396	864	1496	1044	1227
France	7161	15153	21840	20754	16628	23735	20809
Germany	2338	4110	2640	1820	810	8940	3851
Greece	711	1135	1144	977	981	1053	1004
Ireland	192	1062	1438	1113	934	2317	1455
Italy	3409	2401	3950	4383	2163	4878	3739
Netherlands	5558	6372	7850	8756	7382	10766	6290
Portugal	1041	2448	1873	1534	1270	653	607
	6570	12493	13276	8144	9359	6118	6396
Spain							
Sweden United Kingdom	1264 19023	6351 16210	-5 16140	3705 15540	6241 10300	14273 22030	5486 30053
Other Western Europe	2940	2850	2068	2950	4725	4705	5963
Gibraltar	27	37	89	40	-1	1	1
Iceland	-1	33	14	8	-1	4	4
Norway	597	-398	716	2003	623	2100	3424
Switzerland	2317	3178	1249	899	4104	2600	2534
North America	53858	25539	23402	48531	57202	71634	91310
Canada	5235	2740	4517	4997	7299	10786	6681
United States	48623	22799	18885	43534	49903	60848	84629
Other developed countries	7261	7626	10429	6252	8073	18653	11536
Australia	5377	4044	5091	3012	3881	14251	6043
Israel	155	350	539	580	442	1525	2015
Japan	375	1730	2756	210	888	41	220
New Zealand	1474	1290	2086	2469	2524	2509	2928
South Africa	-119	212	-42	-19	338	327	330
Developing countries	24736	41696	49625	73045	90462	96330	128741
Africa	2869	2752	3151	3691	5496	4699	4949
North Africa	1285	886	1582	1679	2364	1265	1633
Algeria	6	12	10	13	15	8	13
Egypt	1086	253	459	493	1256	598	740
Libyan Arab Jamahiriya	35	180	165	120	110	105	110
Morocco	83	317	422	491	551	290	400
Sudan	-4	-1		-	-		
Tunisia	80	125	526	562	432	264	370

(Annex table B.1, cont'd)

Host region/economy	1985-1990 Annual average)	1991	1992	1993	1994	1995	1996 ^a
Other Africa	1584	1866	1569	2012	3132	3434	3316
Angola	105	665	288	302	340	300	290
Benin	-	13	1	-	-	1	1
Botswana	69	-8	-2	-287	-14	70	23
Burkina Faso	2	1	-	13	4	2	3
Burundi	1	1	1	1	1	2	-
Cameroon	39	-15	29	5	43	52	35
Cape Verde	-	1	-1	3	2	10	8
Central African Republic	4	-5	-11	-10	4	4	2
Chad	21	4	2	15	27	13	18
Comoros	3	3	3	2	3	3	2
Congo	16	5	4	149	3	8	9
Côte d'Ivoire	51	16	-231	88	27	19	21
Djibouti	-	-	2	1	1	3	4
Equatorial Guinea	3	42	1	1	_	3	4
Ethiopia	1	1	-	-	3	8	5
Gabon	65	-55	127	-114	-103	95	65
Gambia	2	10	6	11	10	8	12
Ghana	8	20	23	125	233	240	255
Guinea	11	39	20	3	-	1	1
Guinea-Bissau	1	2	6	-2	_	-	1
Kenya	37	19	6	2	4	33	37
Lesotho	11	8	3	15	19	23	28
Liberia	196	8	-11	30	19 14	23	28 17
		8 14					
Madagascar	9		21	15	6	10	12
Malawi	13	18	2	10	9	13	17
Mali	-	4	-8	-20	45	17	23
Mauritania	4	2	8	16	2	7	5
Mauritius	22	19	15	15	20	19	21
Mozambique	4	23	25	32	28	33	29
Namibia	9	120	104	39	52	47	52
Niger	12	15	56	-34	-11	-	-
Nigeria	690	712	897	1345	1959	1830	1720
Rwanda	16	5	2	6	-1	-	-
Senegal	12	-8	21	-1	67	57	53
Seychelles	19	20	9	19	30	40	47
Sierra Leone	-17	8	-6	-8	-4	2	-
Somalia	-2	-	-	-	-	1	1
Swaziland	42	79	81	60	81	58	67
Togo	12	7	-2	1	2	-	1
Uganda	-1	1	3	55	88	121	135
United Republic of Tanzania	2	3	12	20	50	150	190
Zaire	-1	12	-1	7	-2	-	-
Zambia	103	34	45	52	56	67	58
Zimbabwe	-10	3	15	28	35	43	47
Latin America and the Caribbean	8145	15356	16204	18072	26974	25424	38563
South America	3764	6782	7391	8411	11874	14432	26237
Argentina	914	2439	2555	3482	603	1319	4285
Bolivia	8	52	93	123	145	393	527
Brazil	1315	1103	2061	1292	3072	4859	9500
Chile	700	523	699	809	1773	1695	3140

(Annex table B.1, cont'd)

Host region/economy	1985-1990 (Annual average	1991)	1992	1993	1994	1995	1996 ^a
Colombia	549	457	729	959	1667	2501	3000
Ecuador	118	160	178	469	531	470	447
Guyana	1	13	147	70	107	74	81
Paraguay	17	84	137	111	180	184	225
Peru	30	-7	136	670	2859	1895	3556
Suriname	-67	10	-30	-47	-30	19	7
Uruguay	36	32	58	102	155	124	169
Venezuela	143	1916	629	372	813	900	1300
Other Latin America and the Cari	bbean 4381	8574	8814	9661	15100	10991	12326
Antigua and Barbuda	36	55	20	15	25	27	31
Aruba	22	185	-37	-18	-73	-6	30
Bahamas	2	55	73	118	137	171	210
Barbados	8	7	14	9	13	12	22
Belize	11	14	16	9	15	21	26
Bermuda	1143	2489	3231	2707	1079	1350	2100
Cayman Islands	121	-9	27	447	447	470	510
Costa Rica	100	178	226	247	298	396	410
Cuba	_	10	7	3	14	9	12
Dominica	11	15	21	13	22	25	19
Dominican Republic	87	145	180	91	132	271	160
El Salvador	15	25	15	16	23	38	25
Grenada	10	15	23	20	19	16	19
Guatemala	122	91	94	143	65	75	100
Haiti	7	14	8	8	2	2	3
Honduras	40	52	48	27	35	50	35
Jamaica	37	133	142	78	117	167	175
Mexico	2618	4762	4393	4389	10972	6963	7535
Netherlands Antilles	-22	33	40	11	22	10	11
Nicaragua	-1	1	15	39	40	70	45
Panama	-111	41	139	156	549	-20	18
Saint Kitts and Nevis	23	21	13	130	15	20	17
Saint Lucia	22	58	41	34	32	35	39
Saint Lucia Saint Vincent and the Grenadines		9	19	31	51	33	45
Trinidad and Tobago	57	169	178	379	516	299	320
Virgin Islands	37 17	5	-131	675	532	490	410
Developing Europe	49	195	231	269	369	369	571
Bosnia and Herzegovina							
Croatia			 16	 74	98	81	300
Malta	33	 77	40	56	120	98	103
Slovenia			111	113	128	176	160
TFYR Macedonia					24	14	8
Former Yugoslavia	 15	118	64	25			
Asia	13492	23129	29632	50924	57507	65249	84283
West Asia	1135	1900	1823	3452	1396	-763	1893
Bahrain	72	-7	-9	-5	-31	-27	47
Cyprus	69	82	107	83	75	119	100
Iran, Islamic Republic of	-130	23	-170	-50	2	17	100
Iraq	3	-3	-170	1	-	-	-
Jordan	25	-12	41	-34	3	43	5

(Annex table B.1, cont'd)

Host region/economy	1985-1990 (Annual average)	1991	1992	1993	1994	1995	1996 ^a
Kuwait	-	1	35	13	16	15	20
Lebanon	4	2	4	6	7	35	30
Oman	114	132	101	147	62	35	80
Qatar	-2	43	40	29	37	35	35
Saudi Arabia	586	160	-79	1369	350	-1877	100
Syrian Arab Republic	62	62	67	176	143	65	120
Turkey	340	810	844	636	608	885	1116
United Arab Emirates	8	26	130	183	113	110	130
Yemen	-17	583	714	897	11	-218	100
Central Asia	-	-	140	195	393	836	1149
Armenia					8	12	34
Azerbaijan					22	275	601
Georgia					8	6	40
Kazakstan			100	150	185	280	310
Kyrgyzstan					10	30	16
Tajikistan					10	13	13
Turkmenistan					100	100	80
Uzbekistan			40	45	50	120	55
South, East and South-East Asia	12357	21228	27668	47278	55718	65175	81241
Afghanistan		-	-	-	-	-	-
Bangladesh	2	1	4	14	11	2	9
Brunei Darussalam	-	1	4	14	6	7	9
Cambodia			33	54	69	151	350
China	2654	4366	11156	27515	33787	35849	42300
Hong Kong	1597	538	2051	1667	2000	2100	2500
India	169	155	233	574	1314	1929	2587
Indonesia	551	1482	1777	2004	2109	4348	7960
Korea, Democratic People's Repu	ablic of 95	-	42	6	7	3	4
Korea, Republic of	705	1180	727	588	809	1776	2308
Lao People's Democratic Republ	ic 2	7	8	30	59	88	104
Macau	_	3	2	3	-	2	2
Malaysia	1054	3998	5183	5006	4342	4132	5300
Maldives	4	7	7	7	6	5	7
Mongolia			2	8	7	10	5
Myanmar	28	238	171	149	91	115	100
Nepal	2	2	1	4	6	5	5
Pakistan	167	257	335	347	419	639	690
Philippines	413	544	228	1238	1591	1478	1408
Singapore	2952	4887	2204	4686	5480	6912	9440
Sri Lanka	37	48	123	195	166	63	170
Taiwan Province of China	879	1271	879	917	1375	1559	1402
Thailand	1017	2014	2114	1730	1373	2003	2426
Viet Nam	30	229	385	523	742	2003	2156
The Pacific	181	264	407	89	116	590	375
Fiji	28	15	51	29	65	67	47
Kiribati	-	-	-	-1	-	-	1
New Caledonia	7	3	17	20	10	17	13
Papua New Guinea	130	203	294	-2	-5	453	230
Solomon Islands	6	15	14	13	11	18	21
****	-	-		2	2	-	_

(Annex table B.1, cont'd)

Host region/economy	1985-1990	1991	1992	1993	1994	1995	1996 ^a
	Annual average)						
Vanuatu	9	25	26	26	30	31	36
Western Samoa	1	3	4	2	3	2	4
Central and Eastern Europe	449	2448	4444	6287	5882	14317	12261
Albania		-1	20	58	53	70	72
Belarus			7	10	15	7	18
Bulgaria	1	56	42	55	105	90	150
Czech Republic				654	878	2568	1200
Czechoslovakia (former)	77	600	1103				
Estonia	••		82	162	215	202	138
Hungary	345	1462	1479	2350	1144	4519	1982
Latvia			29	45	214	180	292
Lithuania	••	••	10	30	31	73	152
Moldova, Republic of			17	14	12	64	46
Poland	26	291	678	1715	1875	3659	5196
Romania	••	40	77	94	341	419	624
Rusian Federation	••		700	700	637	2017	1800
Slovakia	••		••	199	203	183	150
Ukraine	••		200	200	159	267	440
Memorandum:							
Least developed countries ^b							
Total	555	1830	1459	1743	994	1024	1603
Africa	511	936	470	540	696	823	865
Latin America and the Caribbean	7	14	8	8	2	2	3
Asia	21	837	937	1155	252	148	674
West Asia	-17	583	714	897	11	-218	100
South, East and South-East Asia	37	255	224	258	242	366	574
The Pacific	17	44	45	40	44	51	62
Oil-exporting countries ^c							
Total	7321	14797	14987	17318	24039	19080	27172
Africa	2121	1883	2505	2876	4055	3260	3352
North Africa	1206	570	1160	1188	1813	975	1233
Other Africa	915	1313	1345	1688	2242	2285	2119
Latin America and the Caribbean	2944	7059	5471	5732	12977	9025	10129
South America	269	2128	900	964	1489	1763	2274
Other Latin America and the							
Caribbean	2674	4931	4571	4768	11488	7262	7855
Asia	2256	5855	7011	8711	7006	6795	13691
West Asia	651	374	47	1687	549	-1692	422
South, East and South-East Asia	1605	5481	6964	7024	6457	8487	13269
All developing countries minus Ch	ina 22082	37330	38469	45530	56675	60481	86441

Source: UNCTAD, FDI/TNC database.

Estimates. For details, see definitions and sources.

b Includes Afghanistan, Angola, Bangladesh, Benin, Burkina Faso, Burundi, Cambodia, Cape Verde, Central African Republic, Chad, Comoros, Djibouti, Equatorial Guinea, 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, Uganda, United Republic of Tanzania, Vanuatu, Yemen, Zaire and Zambia.

^c Includes Algeria, Angola, Bahrain, 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 B.2. FDI outflows, by home region and economy, 1985-1996 (Millions of dollars)

Home region/economy	1985-1990 (Annual average)	1991	1992	1993	1994	1995	1996 ^a
World	155578	198143	201465	239090	251117	338729	346824
Developed countries	145005	189782	179671	204818	209726	291271	294732
Western Europe	86589	114690	116609	106239	125306	163822	176181
European Union	80285	106362	110521	96596	112836	149118	160372
Austria	597	1293	1872	1465	1203	1046	1410
Belgium and Luxembourg	3564	6271	11407	4904	1371	11399	8983
Denmark	975	1852	2236	1373	4162	2969	2510
Finland	1780	120	757	1401	4354	1678	3538
France	14279	23932	31269	20605	22801	18734	25186
Germany	12858	23720	19670	15280	16690	34890	28652
Greece	-	-2	-44	29	-4	-6	6
Ireland	340	195	215	220	438	820	493
Italy	3424	6928	6502	9271	5639	6925	5866
Netherlands	8810	13576	14349	12258	17188	13250	19984
Portugal	57	463	687	147	287	685	770
Spain	1267	4442	2192	2652	3831	3635	4629
Sweden	7157	7262	419	1471	6596	10733	4847
United Kingdom	25177	16310	18990	25520	28280	42360	53499
Other Western Europe	6304	8328	6088	9643	12470	14704	15809
Gibraltar							
Iceland	3	5	6	3	3	6	4
Norway	1264	1782	411	877	1628	2847	5320
Switzerland	5037	6541	5671	8763	10839	11851	10484
North America	26442	39111	42613	80662	58454	98690	92445
Canada	4846	5655	3635	5825	7447	5761	7543
United States ^b	21596	33456	38978	74837	51007	92929	84902
Other developed countries	31975	35981	20449	17917	25966	28759	26106
Australia	3144	3022	854	1768	5243	4092	1343
Israel	76	423	651	736	735	671	762
Japan	27812	31620	17390	13830	18090	22510	23440
New Zealand	867	690	792	1300	1571	924	-157
South Africa	77	226	762	283	327	562	718
Developing countries	10554	8324	21695	34067	40711	47034	51469
Africa	1081	962	441	750	627	647	786
North Africa	71	138	41	23	73	110	115
Algeria	5	50					
Egypt	13	62	4		43	93	90
Libyan Arab Jamahiriya	53						
Morocco	••	23	32	23	24	12	20
Sudan							
Tunisia	-	3	5		6	5	6

(Annex table B.2, cont'd)

Iome region/economy	1985-1990 (Annual average)	1991	1992	1993	1994	1995	1996 ^a
Other Africa	1010	824	400	727	554	537	67
Angola	-			2	-2		
Benin	••						
Botswana	1	9	10	10	10	41	20
Burkina Faso	••						
Burundi	-			-	-	1	
Cameroon	18	22	33	22	26	27	23
Cape Verde	-				1		
Central African Republic	3	4	6	5	7	6	(
Chad	6	11	14	11	1	12	1
Comoros	-						
Congo							
Côte d'Ivoire							
Djibouti							
Equatorial Guinea	-	-				••	
Ethiopia				1	-1	••	
Gabon	11	15	26	3	1	10	
Gambia	••						
Ghana	••						
Guinea	••						
Guinea-Bissau	••						
Kenya	7						
Lesotho	-						
Liberia	42	348	-30	-4	47	4	1
Madagascar							
Malawi							
Mali							
Mauritania	-						
Mauritius	-	11	43	33	1	4	1
Mozambique							
Namibia	-	6	-2	11	4	6	
Niger	8	3	41	6	-2		
Nigeria	902	390	176	593	386	385	45
Rwanda	••						
Senegal	2	-19	51	_	17	23	1
Seychelles	5	1	1	1	1	2	
Sierra Leone							
Somalia						••	
Swaziland	8	25	31	29	58	17	10
Togo							
Uganda							
United Republic of Tanzania							
Zaire						••	
Zambia						••	
Zimbabwe	 -4			5			
atin America and the Caribbear	n 1354	-453	2561	2264	4171	3919	385
South America	546	1313	685	2108	2919	2822	302
Argentina	32	-41	-7		126	155	24
Bolivia	1	2	2	2	2	2	24
Brazil	288	1014	137	491	1037	1384	97
Chile	200 8	123	378	434	925	687	95
Colombia	8 26	24	50			284	22.
Coloniola	20	24	30	240	152	284	2.

(Annex table B.2, cont'd)

Home region/economy	1985-1990 Annual average)	1991)	1992	1993	1994	1995	1996 ^a
Ecuador							
Guyana			-2	2			
Paraguay							
Peru			-1	21		7	
Suriname							
Uruguay	4	3	-28	32			
Venezuela	188	188	156	886	677	303	622
Other Latin America and							
the Caribbean	808	-1766	1876	156	1252	1097	828
Antigua and Barbuda Aruba							
Bahamas	 266	-2533	1359	 646	 -146	620	373
Barbados	200	1	1337	3	2	2	2
Belize		2	2	2	2	2	2
Bermuda	 143	28	-471	-35	479	-9	145
Cayman Islands							
Costa Rica	4	 6	4	2	 5	 6	4
Cuba	-						-
Dominica	••	••	••		••	••	••
Dominica Republic	••	••	 -1	 7	••	2	••
El Salvador	••	••			••		••
Grenada	••	••		••	••	••	••
Guatemala	••	••		••	••		••
Haiti	 -1	 -14	••	••	••	••	
Honduras			••	••	••		••
Jamaica	••	••	••	••	••	••	
Mexico	 155	 167	730	 16	1045	 597	 553
Netherlands Antilles	133	107	2	-2	1043	1	333
Nicaragua	_						
Panama	237	 576	250	 -486	 -141	 -126	-251
Saint Kitts and Nevis							
Saint Lucia	••	••	••	••	••	••	••
Saint Lucia Saint Vincent and the Grenadine	••	••		••	••		••
Trinidad and Tobago	s 2	••		3	 5	3	-
Virgin Islands		••					
	••		••	••		••	••
Developing Europe	-	-	-4	4	-4	22	11
Bosnia and Herzegovina			-2	2		7	4
Croatia	••	••	••	••	••		••
Malta				1	-1	9	3
Slovenia			-2	1	-3	6	4
TFYR Macedonia	••					••	
Former Yugoslavia	••	••					
Asia	8109	7819	18695	31042	35913	42437	46816
West Asia	731	-332	1315	762	1109	809	1141
Bahrain	7	-8		-20	6	-5	-6
Cyprus	1	15	15	12	6	7	8
Iran, Islamic Republic of							
Iraq					-8	-3	-10
Jordan	-2	14	-3	-53	-23	-32	-36
Kuwait	467	-186	1211	848	1031	717	865

(Annex table B.2, cont'd)

Home region/economy	1985-1990 Annual average)	1991	1992	1993	1994	1995	1996 ^a
Lebanon	6	6	7	6	7	7	7
Oman	-	-2	-1	-4	7	1	1
Qatar							
Saudi Arabia	248	-198	5	-49	82	13	15
Syrian Arab Republic							
Turkey	-1	27	65	14	49	113	312
United Arab Emirates	5	1	17	8	-48	-8	-16
Yemen	-						
Central Asia					••		
Armenia							
Azerbaijan							
Georgia							
Kazakstan						••	
Kyrgyzstan					••	••	
Tajikistan	••				••		
Turkmenistan	••	••	••			••	•
Uzbekistan							
South, East and South-East Asia	7378	8151	17380	30280	34804	41627	45675
Afghanistan							
Bangladesh	••	••	••	••	••	••	•
	••	••	••	••	••	••	•
Brunei Darussalam	••	••	••	••	••	••	
Cambodia							
China	697	913	4000	4400	2000	2000	2200
Hong Kong	2062	2825	8254	17713	21437	25000	27000
India	6	-11	24	41	49	38	43
Indonesia	11	13	52	356	609	603	512
Korea, Democratic People's Republic of							
Korea, Republic of	 771	1500	1208	1361	2524	3529	418
Lao People's Democratic Republi							
Macau	••		••	••			
Malaysia	281	389	514	1325	1817	2575	190
Maldives							
Mongolia	••						
Myanmar		••	••		••	••	•
Nepal	••	••	••	••	••	••	•
Pakistan			-12	 -2			•
	11	-4 26			1	6	
Philippines	3	-26	5	374	302	399	182
Singapore	610	526	1317	2021	3104	3906	480
Sri Lanka	1	5	2	7	8	7	;
Taiwan Province of China	2861	1854	1869	2451	2460	2678	309
Thailand	64	167	147	233	493	886	1740
Viet Nam		••	••			••	
The Pacific	10	-4	2	6	4	9	(
Fiji	13	-4	2	6	4	9	6
Kiribati					-		
New Caledonia							
Papua New Guinea	-2						
Solomon Islands	-						
Tonga		-	-	-	••	••	
Vanuatu	••					••	
	••	••	••	•••	••	•••	•

(Annex table B.2, cont'd)

•	1985-1990 nual average)	1991	1992	1993	1994	1995	1996 ^a
Central and Eastern Europe	18	37	99	205	679	424	623
Albania			20	7	9	12	10
Belarus							
Bulgaria						8	-27
Czech Republic				90	116	37	80
Czechoslovakia (former)	4	14	30				
Estonia			2	6	2	3	40
Hungary		27	28	11	49	43	58
Latvia			2	5	65	65	1
Lithuania						1	1
Moldova, Republic of						1	1
Poland	12	-7	13	18	29	42	30
Romania	3	3	4	7	1	2	5
Rusian Federation					386	191	406
Slovakia				61	14	10	-6
Ukraine					8	10	24
Memorandum:							
Least developed countries ^c							
Total	59	351	30	21	51	23	30
Africa	60	365	30	21	51	23	30
Latin America and the Caribbean	-1	-14					
Asia	-	-	-	-	-	-	-
West Asia	-						
South, East and South-East Asia	-						
The Pacific	-				-		•
Oil-exporting countries ^d							
Total	2367	907	2930	3991	5685	5318	5024
Africa	1001	541	244	620	460	520	580
North Africa	71	115	9		49	98	96
Other Africa	930	426	235	620	411	422	484
Latin America and the Caribbean	347	357	888	907	1729	905	1177
South America	189	190	158	888	679	305	624
Other Latin America and							
the Caribbean	158	167	730	19	1050	600	553
Asia	1019	9	1798	2464	3496	3893	3267
West Asia	727	-393	1232	783	1070	715	850
South, East and South-East Asia	292	402	566	1681	2426	3178	2418
All developing countries minus China	9857	7411	17695	29667	38711	45034	49269

Source: UNCTAD, FDI/TNC database.

a Estimates. For details, see definitions and sources.

b Excluding FDI in the financial sector of the Netherlands Antilles. For details, see definitions and sources.

c Includes Afghanistan, Angola, Bangladesh, Benin, Burkina Faso, Burundi, Cambodia, Cape Verde, Central African Republic, Chad, Comoros, Djibouti, Equatorial Guinea, 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, Uganda, United Republic of Tanzania, Vanuatu, Yemen, Zaire and Zambia.

d Includes Algeria, Angola, Bahrain, 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 B.3. FDI inward stock, by host region and economy, 1980, 1985, 1990, 1995 and 1996 (Millions of dollars)

Host region/economy	1980	1985	1990	1995	1996 ^a
World	479175	745171	1726199	2865839	3233228
Developed countries	372857	537718	1370597	2042058	2269313
Western Europe	200287	244950	757970	1192155	1302485
European Union	184960	226613	711481	1114812	1219179
Austria	4459	6122	10765	18636	19886
Belgium and Luxembourg	7306	8840	36635 b	86847 ^b	100767 ^b
Denmark	4193	3613	9192	22620 ^c	23393 ^c
Finland	540	1339	5132	8465	9401
France	22617	33392	86514	147623 ^d	168432 ^d
Germany	36630	36926	111231	167137 ^d	170989 ^d
Greece	4524	8309	14016 ^b	19306 ^b	20310 b
Ireland	3749	4649	5634 ^e	12498 ^e	13953 ^e
Italy	8892	18976	57985	63455	74991
Netherlands	19167	25071	73337	112336 ^d	118626 ^d
Portugal	1102	1339	5132	6139 ^f	6747 ^f
Spain	5141	8939	65234	98580	104976 g
Sweden	3626	5071	12461	36521 ^d	42007 d
United Kingdom	63014	64028	218213	314650	344703 g
Other Western Europe	15328	18337	46489	77343	83306
Gibraltar ^h		32	197	363	364
Iceland ⁱ	123	226	198	256	259
Norway	6699 ^j	8021 ^j	12402	19652	23076 ^g
Switzerland	8506	10058	33693	57073	59607 ^g
North America	137209	249272	507965	682557	773867
Canada	54163	64657	113054	122469	129150 g
United States	83046	184615	394911	560088	644717 ^g
Other developed countries	35361	43496	104662	167345	192961
Australia	13173	25049	76359	107419	123853
Israel ⁱ	727	1132	1963	5398	7413
Japan	3270	4740	9850	17814	18029
New Zealand	2363	2043	8065	26237	32858
South Africa	15827	10533	8425	10477 ^d	10807 ^d
Developing countries	106241	207283	352751	789743	917553
Africa	11454	21323	35580	54688	59528
North Africa	4546	9273	15472	22568	24091
Algeria ⁱ	1320	1281	1315	1373	1386
Egypt ^k	2256	5700	11039	14098	14838
Libyan Arab Jamahiriya					
Morocco ⁱ	189	441	918	2989	3389
Sudan ^h		29	7	7	7
Tunisia ⁱ	781	1822	2193	4102	4472

(Annex table B.3, cont'd)

lost region/economy	1980	1985	1990	1995	1996
Other Africa	6908	12050	20109	32121	35437
Angola ⁱ	61	675	1024	2919	3209
Benin ⁱ	32	34	36	52	53
Botswana ^k	266	515	877	636	659
Burkina Faso ⁱ	18	25	38	58	61
Burundi ⁱ	7	23	29	34	34
Cameroon ⁱ	330	1125	1044	1159	1194
Cape Verde ^l	••		3	18	26
Central African Republic ⁱ	50	77	96	78	80
Chadi	123	186	255	317	335
Comoros ^m		••	15	29	31
Congo ⁿ	309	479	563	733	742
Côte d'Ivoire ⁱ	530	699	975	895	916
Djibouti ^o	3	3	6	14	18
Equatorial Guinea ^p		5	23	70	74
Ethiopia ⁱ	110	114	120	133	138
Gabon ⁱ	511	833	1208	1159	1224
Gambia ⁱ	21	21	36	81	93
Ghana ⁱ	229	272	316	956	1211
Guinea ^o	2	2	70	132	132
Guinea-Bissau ^k	_	4	8	14	152
Kenya ⁱ	344	434	626	689	726
Lesotho ^q	5	24	84	150	178
Liberia ^h		104	1297	1360	1377
Madagascar ⁱ	 36	47	103	169	181
Malawi ⁱ	100		215	267	284
Malawi ^a	13	143		267 67	
		35	29		90
Mauritania ⁱ	-11	33	51	86	91
Mauritius ⁱ	20	37	162	249	270
Mozambique ⁱ	15	17	42	183	212
Namibia ^r		16	53	415	467
Niger ⁱ	188	203	284	310	311
Nigeria ⁱ	2406	4418	8073	14816	16536
Rwandai	54	133	213	224	224
Senegali	150	191	277	414	467
Seychelles ^s	37	87	187	304	351
Sierra Leone ⁱ	77	66	-3	-11	-11
Somalia ⁱ	29	4	-7	-6	-6
Swaziland ^t	149	184	426	785	852
Togo ⁱ	176	210	264	271	272
Uganda ⁱ	9	7	4	272	407
United Republic of Tanzaniai	47	91	89	324	514
Zaire ^k	440	351	277	293	293
Zambia ⁱ	25	121	684	938	996
Zimbabwe ^u	-	2	-62	61	108
atin America and the Caribbean	47800	76836	126050	278073	316120
South America	29329	42116	68066	168558	194689
Argentina	5344	6563	8778	24630	28915
Bolivia	420	592	708	1554	2063
Brazil	17480	25665	37143	98839	108339
Chile	886	2321	10067	15547	18687
Colombia	1061	2231	3500	9813 °	12813

(Annex table B.3, cont'd)

ost region/economy	1980	1985	1990	1995	1996
Ecuador	719	982	1370	3178 ^c	3625
Guyana					
Paraguay ⁱ	218	298	401	1095	1321
Peru	898	1152	1254	5477	9033
Suriname			123 .	3177	7032
Uruguay ^u	700	 766	980	1450	1618
Venezuela	1604	1548	3865	6975	8275
Other Latin America	18470	34720	57984	109515	121431
Antigua and Barbuda ^u	23	94	292	433	464
Aruba ^v			131	182	212
Bahamas ^o	298	 294	336	890	1099
Barbados ⁱ	102	123	169	225	24
Belize ⁱ	12	10	72	146	172
Bermuda ⁱ	5132	8052	13849	24705	2680
Cayman Islands ^t	223	1479	1749	3132	364
Costa Rica	672	957	1447	2791 ^c	320
Cuba ^q	-	1	3	45	5
Dominica ^h		6	66	163	18
Dominican Republic	239	265	572	1390 ^c	155
El Salvador	154	181	212	293	31
Grenada ^h	1	13	70	164	18
Guatemala ⁱ	701	1050	1723	2190	229
Haiti ⁱ	79	112	149	183	18
Honduras ⁱ	93	172	383	594	62
Jamaica ⁱ	501	458	690	1327	150
Mexico ⁱ	8105	18802	32523	64002	7153
Netherlands Antilles ^w	568	55	206	321	33
Nicaragua ⁱ	109	109	105	270	31
			624 b	1488 b	150
Panama	387	533			
Saint Kitts and Nevis ^q	1	32	160	243	26
Saint Lucia ^s	94	197	315	515	55
Saint Vincent and the Grenadines ^x	1	9	48	189	23
Trinidad and Tobago	976	1719	2093	3634 ^c	395
Virgin Islands	••				
Developing Europe	297	465	722	1691	226
Bosnia and Herzegovina					
Croatia ^y				268	56
Malta ⁱ	156	286	465	856	95
Slovenia ^y				529	68
TFYR Macedonia ^z				38	4
Former Yugoslavia ⁱ	141	179	257		
Asia	45524	107489	188271	451697	53567
West Asia	13221	43103	48172	55978	5786
Bahrain ^{aa}		306	638	559	60
Cyprus ⁱ	460	789	1146	1613	171
Iran, Islamic Republic of ⁱ	1106	925	184		
Iraq					
Jordan ^w	155	493	615	656	66
Kuwait ^o	30	33	26	106	120

(Annex table B.3, cont'd)

Lebanon	1996 8	1995	1990	1985	1980	Host region/economy
Oman¹ 476 1195 1716 2193 Qataro 83 77 55 239 Saudi Arabia¹ 10306 38217 41241 41164 Syrian Arab Republic² 37 374 887 Turkey 107 360 1320 5103 ° United Arab Emirates¹ 409 482 751 1312 Yemen³ 68 155 53 2039 Central Asia 20 Azerbaijan² 20 Azerbaijan² 297 Georgia² 11 Kazgakhstan³ 297 Georgia² <td>137</td> <td>107</td> <td>53</td> <td>34</td> <td>20</td> <td>Lebanonⁿ</td>	137	107	53	34	20	Lebanon ⁿ
Qatar ^b 83 77 55 239 Saudi Arabia [†] 10306 38217 41241 41164 Syrian Arab Republic [†] 37 374 887 Turkey 107 360 1320 5103 c United Arab Emirates [‡] 409 482 751 1312 Yemen* 68 155 53 2039 Central Asia 20 Azerbaijan ^Z 297 Georgia ² 297 Georgia ² 114 Kazakhstan ³ 297 Georgia ² <	2273					
Saudi Arabia¹ 10306 38217 41241 41164 Syrian Arab Republic¹ 37 374 887 Turkey 107 360 1320 5103 ° United Arab Emirates¹ 409 482 751 1312 Yemen¹* 68 155 53 2039 Central Asia 20 Azerbaijan² 297 Georgia² 114 Kazakhstan³ 114 Kazakhstan³ 297 Georgia² 114 Kazakhstan³ <td< td=""><td>274</td><td></td><td></td><td></td><td></td><td></td></td<>	274					
Syrian Arab Republic	41264					
Turkey United Arab Emirates	1007					
United Arab Emirates¹ 409 482 751 1312 Yemen¹¹ 68 155 53 2039 Central Asia 1564 Armenia² 20 Azerbaijan² 297 Georgia² 14 Kazakhstan³ 23 Turkmenistan² 200 Uzbekistan³ 225 South, East and South-East Asia 32302 64386 140099 394154 Afghanistan¹ 11 12 12 147 ab 180 ab Brunei Darussalam¹ 19 33 30 62 2 Cambodia³ 307 China 57 344 <td< td=""><td>6219 c</td><td></td><td></td><td></td><td></td><td>-</td></td<>	6219 c					-
Yemen ⁿ 68 155 53 2039 Central Asia 1564 Armenia² 20 Azerbaijan² 297 Georgia² 14 Kazakhstan³ 40 Tajkistar² 23 Turkmenistan² 200 Uzbekistan³ 255 South, East and South-East Asia 32302 64386 14009 394154 Afghanistan¹ 11 12 12 12 Bangladesh 63 112 147 ab 180 ab Brunei Darussalam¹ 19 33 30 62 Cambodia² 307 China	1442					
Armenia²	2139					
Azerbaijan	2713	1564			••	Central Asia
Azerbaijan	54	20				Armenia ^z
Georgia² 14 Kazakhstan³ 715 Kyrgyzstar² 23 Turkmenistar² 200 Uzbekistan³ 200 Uzbekistan³ 200 Uzbekistan³ <td>898</td> <td></td> <td>••</td> <td>••</td> <td>••</td> <td></td>	898		••	••	••	
Kazakhstan ^y 40 Tajikistan ² 23 Turkmenistan ² 200 Uzbekistan ^y 255 South, East and South-East Asia 32302 64386 140099 394154 Afghanistan ⁱ 11 12 12 12 12 Bangladesh 63 112 147 ab 180 ab 180 ab 180 ab 180 ab 180 ab 180 ab 180 ab 180 ab 180 ab 180 ab 180 ab 180 ab 180 ab 180 ab 180 ab 180 ab 180 ab 180 ab 180 ab 180 ab 180 ab 180 ab 180 ab 180 ab 180 ab 180 ab 180 ab 180 ab 180 ab 180 ab 180 ab 180 ab 180 ab 180 ab 180 ab 180 ab 180 ab 180 ab 180 ab	54		••	••	••	
Kyrgyzstan² <t< td=""><td>1025</td><td></td><td>••</td><td></td><td>••</td><td></td></t<>	1025		••		••	
Tajikistan ²	56		••	••	••	
Turkmenistan²	36		••	••		
Uzbekistany 255 South, East and South-East Asia 32302 64386 140099 394154 Afghanistani 11 12 12 12 Bangladesh 63 112 147 ab 180 ab Brunei Darussalami 19 33 30 62 Cambodiay 307 China 57 3444 14135 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 12769 b 12760 b 12760 b 12871 ab 1297 ab 12080 ab 12680			••	••	••	
South, East and South-East Asia 32302 64386 140099 394154 Afghanistani 11 12 12 12 Bangladesh 63 112 147 ab 180 ab Brunei Darussalami 19 33 30 62 Cambodiay 307 China 57 3444 14135 b 126808 b Hong Kong 1729 3520 13413 b 21769 b India 1177 1075 1667 ab 5871 ab Indonesia 10274 24971 38883 50603 c Korea, Democratic People's Republic of ^m 572 630 Korea, Republic of 1140 1806 5727 10478 10478 Lao People's Democratic Republici 2 2 14 206 Macau ^w 2 10 11 20 Malaysia 6078 8510 14117 ab 36778 ab	280		••	••	••	
Afghanistan ⁱ 11 12 12 12 12 Bangladesh 63 112 147 ab 180 ab Brunei Darussalam ⁱ 19 33 30 62 Cambodia ^y 307 China 57 3444 14135 b 126808 b Hong Kong 1729 3520 13413 b 21769 b India 1177 1075 1667 ab 5871 ab Indonesia 10274 24971 38883 50603 c Korea, Democratic People's Republic of ^m 572 630 Korea, Republic of 1140 1806 5727 10478 Lao People's Democratic Republic de 1140 1806 5727 10478 Lao People's Democratic Republic de 1140 1806 5727 10478 Lao People's Democratic Republic de 2 2 14 206 Macau ^w 2 10 11 20 Malaysia 6078 8510 14117 ab 36778 ab Maldives ^o 5 3 25 56 Mongolia ^y 26 Myanmar ^w 5 5 5 173 937 Nepal ¹ 1 2 12 29 Pakistan 688 1079 1887 36957 d Philippines 1225 1302 2098 b 6830 b Singapore 6203 13016 28565 57324 d Sri Lanka 231 517 681 ab 1276 ab Taiwan Province of China 2405 2930 9735 ab 15736 ab Thailand 981 1999 7980 b 17163 b Viet Nam ⁱ	310	255	••	••	••	Uzbekistan ⁵
Bangladesh 63 112 147 ab 180 ab Brunei Darussalami 19 33 30 62 Cambodiay 307 China 57 3444 14135 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 126808 b 12760 b 14113 b 21769 b 1673 a 1674 a 1681 a 1681 a 1681 a 1681 a 1681 a 1681 a 1681 a 1681 a	475100	394154	140099	64386	32302	South, East and South-East Asia
Brunei Darussalami 19 33 30 62 Cambodiay 307 China 57 3444 14135 b 126808 b Hong Kong 1729 3520 13413 b 21769 b India 1177 1075 1667 ab 5871 ab Indonesia 10274 24971 38883 50603 c Korea, Democratic People's Republic of ^m 572 630 Korea, Republic of 1140 1806 5727 10478 Lao People's Democratic Republici 2 2 14 206 Macau ^w 2 10 11 20 Malaysia 6078 8510 14117 ab 36778 ab Maldives ^o 5 3 25 56 Mongolia ^y 26 Myanmar ^w <td>12</td> <td></td> <td></td> <td>12</td> <td>11</td> <td>Afghanistanⁱ</td>	12			12	11	Afghanistan ⁱ
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Indonesia 10274 24971 38883 50603 c Korea, Democratic People's Republic of 572 630 Korea, Republic of 1140 1806 5727 10478 Lao People's Democratic Republici 2 2 14 206 Macauw 2 10 11 20 Malaysia 6078 8510 14117 ab 36778 ab Maldiveso 5 3 25 56 Mongoliay 26 Myanmarw 5 5 5 173 937 937 Nepalt 1 2 12 29 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 <td>8458 ab</td> <td></td> <td></td> <td></td> <td></td> <td></td>	8458 ab					
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Nepal ^t 1 2 12 29 Pakistan 688 1079 1887 36957 d Philippines 1225 1302 2098 b 6830 b Singapore 6203 13016 28565 57324 d Sri Lanka 231 517 681 ab 1276 ab Taiwan Province of China 2405 2930 9735 ab 15736 ab Thailand 981 1999 7980 b 17163 b Viet Nami 7 38 216 4096	31					
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Taiwan Province of China 2405 2930 9735 ab 15736 ab Thailand 981 1999 7980 b 17163 b Viet Nami 7 38 216 4096	66764 ^d					
Thailand 981 1999 7980 b 17163 b Viet Nami 7 38 216 4096	1446 ^{ab}				231	Sri Lanka
Viet Nam ⁱ 7 38 216 4096	17138 ab			2930	2405	Taiwan Province of China
	19589 ^b	17163 ^b	7980 ^b	1999	981	
The Pacific 1167 1171 2127 3594	6252	4096	216	38	7	Viet Nam ⁱ
	3968	3594	2127	1171	1167	The Pacific
Fiji 358 393 390 ^b 616 ^b	663 b	616 ^b	390 b	393	358	Fiji
Kiribati ^r 1 2	3		1	-		
New Caledonia ^r 40 107	120			_		
Papua New Guinea 748 683 1508 b 2451 b	2681 b			683		
Solomon Islands ^k 28 32 69 140	161					
TP 30	30					
Vanuatu ^o 33 62 110 249	285					
Western Samoa ^t 1 1 8 22	263					

(Annex table B.3, cont'd)

Host region/economy	1980	1985	1990	1995	1996 8
Central and Eastern Europe	77	170	2851	34038	46363
Albania ^{ad}				200	272
Belarus ^y		••		39	57
Bulgaria ^v		••	4	352	502
Czech Republic ^{ae}		••		4100	5300
Czechoslovakia (former) ^{af}		••	464		
Estonia		••		637	838
Hungary ^q	1	3	2073	13027	15009
Latvia ^y				468	760
Lithuania ^y				144	297
Moldova, Republic of ^y				107	153
Polands	76	167	310	8528	13724
Romania ^{ad}				971	1595
Rusian Federation ^y			••	4054	5854
Slovakia ^{ae}				585	735
Ukraine ^y				826	1266
Memorandum:					
Least developed countries ^{ag}					
Total	1921	3287	6164	13215	14819
Africa	1626	2789	5391	8856	9720
Latin America and the Caribbean	79	112	149	183	186
Asia	155	292	436	3765	4439
West Asia	68	155	53	2039	2139
South, East and South-East Asia	88	137	383	1726	2300
The Pacific	61	95	188	412	474
Oil-exporting countries ^{ah}					
Total	48580	114721	164659	252718	279752
Africa	7974	16332	26460	40359	43601
North Africa	4357	8803	14547	19573	20696
Other Africa	3617	7529	11913	20786	22905
Latin America and the Caribbean	11824	23642	40559	79343	89454
South America	2743	3121	5943	11707	13963
Other Latin America and					
the Caribbean	9081	20521	34616	67636	75491
Asia	28782	74748	97641	133016	146697
West Asia	12411	41235	44611	45574	45986
South, East and South-East Asia	16370	33513	53030	87443	100712
All developing countries minus China	106184	203839	338616	662935	748445

Source: UNCTAD, FDI/TNC database.

Note: in 1996 the IMF began publication of a new series of stock data. However, until this new series has been extended to cover a substantial number of countries, this *Report* contiues to use information from the old series, as adjusted in accordance with UNCTAD's own estimates.

- ^a Estimates. For details, see definition and sources.
- 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 1994.
- e Estimated by adding flows to the stock of 1986.
- f Estimated by adding flows to the stock of 1993.
- g Estimated by adding flows to the stock of 1995.
- h Estimated by accumulating flows since 1982.
- ⁱ Estimated by accumulating flows since 1970.

- j Stock data prior to 1987 was estimated by subtracting flows.
- k Estimated by accumulating flows since 1975.
- Estimated by accumulating flows since 1986.
- m Estimated by accumulating flows since 1987.
- ⁿ Estimated by accumulating flows since 1971.
- Estimated by accumulating flows since 1973.
- p Estimated by accumulating flows since 1981.
- Estimated by accumulating flows since 1981.
- ^q Estimated by accumulating flows since 1980.
- ^r Estimated by accumulating flows since 1985.
- Estimated by accumulating flows since 1976.
- t Estimated by accumulating flows since 1974.
- ^u Estimated by accumulating flows since 1977.
- Estimated by accumulating flows since 1990.
- w Estimated by accumulating flows since 1972.
- x Estimated by accumulating flows since 1978.
- y Estimated by accumulating flows since 1992.
- ^z Estimated by accumulating flows since 1994.
- aa Estimated by accumulating flows since 1983.
- ab Estimated by adding flows to the stock of 1988.
- ac Estimated by accumulating flows since 1984.
- ^{ad} Estimated by accumulating flows since 1991.
- ae Estimated by accumulating flows since 1993.
- af Estimated by accumulating flows since 1989.
- ag Includes: Afghanistan, Angola, Bangladesh, Benin, Burkina Faso, Burundi, Cambodia, Cape Verde, Central African Republic, Chad, Comoros, Djibouti, Equatorial Guinea, 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, Uganda, United Republic of Tanzania, Vanuatu, Yemen, Zaire and Zambia.
- ah Includes: Algeria, Angola, Bahrain, 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 B.4. FDI outward stock, by home region and economy, 1980, 1985, 1990, 1995 and 1996 (Millions of dollars)

Home region/economy	1980	1985	1990	1995	1996 a
World	518869	690423	1690082	2811007	3178169
Developed countries	507480	664216	1615764	2577645	2893406
Western Europe	236579	312445	854862	1395195	1585772
European Union	213143	286472	778224	1229819	1404587
Austria	747	1908	4656	12887	13542
Belgium and Luxembourg	6037	4688	28965 b	64317 b	73300 ^b
Denmark	2065	1801	7342	19934 ^c	22444 ^c
Finland	743	1829	11227	15177	18300
France	23604	37077	110126	181255 ^d	206441 ^d
Germany	43127	59909	151581	259746 ^d	288398 ^d
Greecee		1	1	20	26
Ireland ^f	••	202	2150	4038	4531
Italy	7319	16301	56105	97042	118474
Netherlands	42116	47772	109124	164754 d	184738 ^d
Portugal ^g	116	186	503	2772	3542
Spain	1226	2076	16128	33540	38169 h
Sweden	5611	12408	49491	71491	76338 h
United Kingdom	80434	100313	230825	302847	356346 h
emida iinigaani	00.0.	100010	250025	2020.7	2000.0
Other Western Europe	23435	25974	76638	165376	181185
Gibraltar					
Iceland ^e		1	19	42	46
Norway	1944 ⁱ	4623 i	10888	22519	27840 h
Switzerland	21491	21350	65731	142814	153299 ^h
North America	242750	291981	514072	812921	905366
Canada	22572	40947	78853	103721	111264 ^h
United States	220178	251034	435219	709200	794102 ^h
Other developed countries	28151	59789	246830	369529	402268
Australia	2260	6653	30112	41497	46038
Israel ^j	28	510	912	4128	4890
Japan	18833	44296	204659	306769	330209
New Zealand	1308	1826	3320	7148	10426
South Africa	5722	6504	7827 ^k	9987 ^k	10705 ^k
Developing countries	11310	26107	74109	231405	282216
Africa	529	6369	11581	15008	15794
North Africa	300	456	882	1267	1382
NOTELI ATTICA	300	730	004	1407	1304
Algeria ^l	99	157	185	235	235
Egypt ^l	39	91	163	365	455
Libyan Arab Jamahiriya ^m	162	206	526	526	526

(Annex table B.4, cont'd)

Home region/economy	1980	1985	1990	1995	1996 a
Morocco ⁿ				114	134
Sudan					
Tunisia ^o		2	8	27	33
Other Africa	229	5913	10699	13741	14411
Angola ^p			1	1	1
Benin ^q	-	2	2	2	2
Botswana ^r	3	3	10	88	108
Burkina Faso ^s	3	3	3	3	3
Burundi ^t			-	1	1
Cameroon ^u	23	53	150	279	304
Cape Verde ^t			1	2	2
Central African Republic ^g	3	4	21	49	55
Chad ^v	1	1	36	84	92
Comoros ^p		••	1	1	1
Congo		••	••		
Côte d'Ivoire					
Djibouti					
Equatorial Guinea ^t		••	_	_	
Ethiopia ^w				_	
Gabon ^s	77	102	163	216	221
Gambia					
Ghana					
Guinea					
Guinea-Bissau			••		•
Kenya ^g	18	60	 99	 99	99
Lesotho ^x			-		,
Liberia ^y	 48	 361	453	817	833
Madagascar					
Malawi	••	••	••	••	
Mali ^g	 22	22	 22	22	22
Mauritania ^z			3	3	3
Mauritius ^k	••	••	1	93	106
Mozambique	••	••			
Namibia ^p	••	••			33
Namioia ^r Niger ^s		8	1 54	26 102	102
	2 5	5193	9508	11438	11893
Nigeria ^q Rwanda	3	3193	9308	11436	11093
	••			 11 <i>6</i>	120
Senegal ^s	- 14	37 44	43	116	129
Seychelles ^r			61	68	69
Sierra Leone	••	••	••	••	•
Somalia Swaziland ^{aa}			 61		226
	9	19	64	224	326
Togo ^{aa}	2	2	2	2	2
Uganda	••	••	••	••	
United Republic of Tanzania			••	••	•
Zaire	••	••	••	••	
Zambia			••		
Zimbabwe ^w		••	••	5	5
tin America and the Caribbean	2945	7243	12689	25004	28854
South America	960	2280	4727	14088	17110

(Annex table B.4, cont'd)

Iome region/economy	1980	1985	1990	1995	1996 a
Argentina ^{ab}	70	280	420	586	832
Bolivia	1	1	6	16	18
Brazil	652	1361	2397	6460 ^c	7431
Chile	42	102	178	2759 ac	3715
Colombia	137	301	402	1152 °	1378
Ecuador					
Guyana ^w			••	2	2
Paraguay ^r	30	30	30	30	30
Peru	3	38	63	90 °	90
Suriname					
Uruguay ^y	3	2	 9	 17	 17
Venezuela	23	165	1221	2975 ad	3597
venezuera		103		2913	3391
Other Latin America	1985	4963	7962	10916	11744
Antigua and Barbuda				••	
Aruba			••	••	••
Bahamas ^{ab}	285	154	1535	1658	2031
Barbados ^j	5	12	22	31	33
Belize ⁿ				10	12
Bermuda ^{ab}	727	2002	1550	1912	2057
Cayman Islands					
Costa Rica ^v	6	26	43	66	70
Cuba					
Dominica					
Dominican Republic ^w				9	9
El Salvador					
Grenada					
Guatemala					
Haiti					
Honduras					
Jamaica ^{aa}	 5	 5	5	5	5
Mexico ^{ab}	136	533	575	2681	3234
Netherlands Antilles ^{aa}	10	12	23	26	26
Nicaragua					20
Panama ^{ab}			4188	 4487	4236
	811	2204	4100	4467	4230
Saint Kitts and Nevis		••	••	••	•
Saint Lucia	••	••	••	••	•
Saint Vincent and the Grenadines	••				22
Trinidad and Tobago ^{ae}	••	15	21	32	32
Virgin Islands	••		••		••
Developing Europe	••	••	••	18	28
Bosnia and Herzegovina ^{af}				7	11
Croatia					
Malta ^w				9	11
Slovenia ^{ag}				2	6
TFYR Macedonia	••		••		
Former Yugoslavia					
a	7816	12449	49747	191267	237425

(Annex table B.4, cont'd)

Home region/economy	1980	1985	1990	1995	1996 ^a
Bahrain ^{ah}	_	4	46	20 ad	14 ^{ad}
Cyprus ^e		-	9	63	71
Iran, Islamic Republic of					
Iraq ^{ai}				 -11	 -21
Jordan ^m	23	26	 16	-82	-118
Kuwait ^g	944	1306	4039	7660	8525
Lebanon ^{ab}	1	40	-16	-35	-28
Oman ^{ab}	1	40	7	-	1
Qatar					
Saudi Arabia ^{ab}	228	420	 1811	1686	1701
Syrian Arab Republic					
Turkey ^{aj}			 -7	261	573
United Arab Emirates ^{ab}	5	 19	99	51	35
Yemen ^{ak}		4	5	5	5
Central Asia				••	
Armenia	••	••	••	••	
Azerbaijan	••	••	••	••	
Georgia	••	••	••	••	••
Kazakhstan	••	••	••	••	••
Kyrgyzstan	••	••	••	••	
Tajikistan	••	••	••	••	••
Turkmenistan	••	••	••	••	••
Uzbekistan	••	••	••	••	••
South, East and South-East Asia	6614	10590	43739	181650	226667
Afghanistan					
Bangladesh					
Brunei Darussalam					
Cambodia					
China	-	131	2489 b	15802 b	18002 b
Hong Kong ^{al}	148	2345	13242	85156	112156
India ^{ab}	4	19	30	124	167
Indonesia ^{ab}	-1	49	25	701	1213
Korea, Democratic People's Republic					
Korea, Republic of	142	526	2301	10227	13757
Lao People's Democratic Republic					
Macau					
Malaysia	414	749	2283 k	8903 k	10809 ^k
Maldives					
Mongolia					
Myanmar					
Nepal					
Pakistan	40	126	244	272 ^d	274 ^d
Philippines	171	171	155 ^k	1209 ^k	1391 ^k
Singapore ⁱ	5586	6254	9675	32695	37495 ^h
Sri Lanka ^e		1	8	37	44
Taiwan Province of China	97	204	12888 ^k	24200 k	27296 ^k
Thailand	13	14	398 ^b	2324 b	4064 ^b

(Anr	ex	table	B.4.	cont'd)

Home region/economy	1980	1985	1990	1995	1996 ^a
The Pacific	21	45	92	108	115
Fiji ^{aa}	10	23	86	102	108
Kiribati ^{ai}				-	-
New Caledonia	••				
Papua New Guinea	10	22	7 b	7 b	7 b
Solomon Islands	••				
Tonga ⁿ				-	-
Vanuatu					
Western Samoa					
Central and Eastern Europe	79	100	209	1957	2546
Albania ^{ag}				48	58
Belarus					
Bulgaria ^{af}				8	-19
Czech Republic ^w				243	323
Czechoslovakia (former) ^t			21		
Estonia				50	109
Hungary				489	494
Latvia ^{ag}				137	138
Lithuania ^{af}				1	2
Moldova, Republic of ^{af}				1	2
Poland ^r	79	100	170	265	295
Romania ^p			18	35	40
Russian Federationai	••			577	983
Slovakia ^w				85	79
Ukraine ^{ai}				18	42
Memorandum:					
Least developed countries am					
Total	80	408	603	1092	1122
Africa	80	404	599	1088	1118
Latin America and the Caribbean					
Asia		4	5	5	5
West Asia		4	5	5	5
South, East and South-East Asia					
The Pacific			••	-	-
Oil-exporting countries ^{an}					
Total	2268	9487	20205	37523	42475
Africa	405	5804	10703	13088	13667
North Africa	300	456	882	1153	1249
Other Africa	105	5348	9821	11935	12419
Latin America and the Caribbean	272	1097	1191	5425	6531
South America	24	166	1227	2991	3615
Other Latin America and					
the Caribbean	136	548	596	2713	3265
Asia	1591	2587	8310	19010	22277
West Asia	1178	1789	6002	9406	10256
South, East and South-East Asia	413	798	2308	9604	12022
Developing countries minus China	11310	25976	71620	215604	264215

Source: UNCTAD, FDI/TNC database.

Note: in 1996 the IMF began publication of a new series of stock data. However, until this new series has been extended to cover a substantial number of countries, this *Report* contiues to use information from the old series, as adjusted in accordance with UNCTAD's own estimates.

- ^a Estimates. For details, see definition and sources.
- 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 1994.
- Estimated by accumulating flows since 1985.
- f Estimated by accumulating flows since 1984.
- g Estimated by accumulating flows since 1975.
- Estimated by adding flows to the stock of 1995.
- Stock data prior to 1990 was estimated by subtractiong flows.
- j Estimated by accumulating flows since 1970.
- Estimated by adding flows to the stock of 1988.
- Estimated by accumulating flows since 1977.
- m Estimated by accumulating flows since 1972.
- Estimated by accumulating flows since 1991.
- Estimated by accumulating flows since 1981.
- p Estimated by accumulating flows since 1990.
- ^q Estimated by accumulating flows since 1979.
- ^r Estimated by accumulating flows since 1976.
- s Estimated by accumulating flows since 1974.
- t Estimated by accumulating flows since 1989.
- ^u Estimated by accumulating flows since 1973.
- V Estimated by accumulating flows since 1978.
- w Estimated by accumulating flows since 1993.
- x Estimated by accumulating flows since 1988.
- V Estimated by decumulating nows since 1966.
- y Estimated by using the inward stock of the United States as a proxy and accumulating flows since 1994.
- ^z Estimated by accumulating flows since 1986.
- aa Estimated by accumulating flows since 1980.
- ab Estimated by using the inward stock of the United States as a proxy and accumulating flows since 1993.
- ac Estimated by adding flows to the stock of 1992.
- ad Estimated by adding flows to the stock of 1993.
- ae Estimated by accumulating flows since 1983.
- ^{af} Estimated by accumulating flows since 1995.
- ^{ag} Estimated by accumulating flows since 1992.
- ah Stock data prior to 1986 was estimated by subtractiong flows.
- ai Estimated by accumulating flows since 1994.
- aj Estimated by accumulating flows since 1987.
- ak Estimated by accumulating flows since 1982.
- Estimated by using the inward stock of the United States and China as a proxy and accumulating flows since 1994.

am Includes Afghanistan, Angola, Bangladesh, Benin, Burkina Faso, Burundi, Cambodia, Cape Verde, Central African Republic, Chad, Comoros, Djibouti, Equatorial Guinea, 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, Uganda, United Republic of Tanzania, Vanuatu, Yemen, Zaire and Zambia.

^{an} Includes Algeria, Angola, Bahrain, 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 B.5. Inward and outward FDI flows as a percentage of gross fixed capital formation, by region and economy, 1985-1995

(Percentage)

	(-					
Region/economy	1985-1990	1991	1992	1993	1994	1995
	(Annual average)					
World						
inward	5.4	3.1	3.3	4.4	4.5	5.2
outward	6.0	3.9	3.8	4.8	4.7	5.6
Developed countries						
inward	5.5	3.2	3.2	3.7	3.5	4.4
outward	8.0	5.3	4.8	5.4	5.1	6.3
Western Europe						
inward	8.9	5.3	5.3	5.8	5.1	6.7
outward	12.5	7.4	7.2	7.4	8.2	9.5
European Union						
inward	9.1	5.4	5.5	5.9	5.0	6.8
outward	12.3	7.3	7.2	7.1	7.9	9.2
Austria						
inward	3.0	0.9	2.0	2.2	2.7	1.1
outward	5.3	3.1	4.0	3.3	2.4	1.8
Belgium and Luxembourg						
inward	37.0	23.2	25.2	26.7	20.0	24.2
outward	26.4	15.6	25.5	12.2	3.2	26.8
Denmark						
inward	13.3	7.3	4.6	8.5	23.1	15.0
outward	12.9	8.7	10.1	6.8	19.2	10.7
Finland						
inward	3.0	-0.9	2.0	6.9	10.5	5.5
outward	7.7	0.4	3.9	11.2	30.7	8.9
France						
inward	10.3	5.9	8.2	9.0	6.9	8.6
outward	14.1	9.4	11.8	8.9	9.5	6.8
Germany						
inward	1.6	1.0	0.6	0.4	0.2	1.7
outward	10.4	6.0	4.3	3.7	3.7	6.7
Greece						
inward	9.0	5.7	5.4	5.1	5.0	4.6
outward	-	-	-	-	-	-
Ireland						
inward	23.1	14.1	18.0	15.9	11.9	24.0
outward	6.8	2.6	2.7	3.1	5.6	8.5
Italy						
inward	2.6	1.0	1.7	1.9	0.9	2.1
outward	4.6	3.0	2.8	4.0	2.4	3.0
Netherlands	20.2	10.0	10.0	1.4.5	11.5	10.0
inward	20.2	10.8	12.2	14.6	11.5	13.9
outward	32.5	22.9	22.3	20.4	26.7	17.0
Portugal	17.5	10.5	0.5	0.1	- 1	2.2
inward	17.7	13.7	8.5	8.1	6.4	3.2
outward	4.1	2.6	3.1	0.8	1.4	3.4
Spain	140	0.0	10.7	0.7	0.0	<i>5</i> 2
inward	14.8	9.9	10.5	8.6	9.8	5.3
outward	4.7	3.5	1.7	2.8	4.0	3.1

(Annex table B.5, cont'd)

Region/economy	1985-1990 (Annual average)	1991	1992	1993	1994	1995
Sweden						
inward	16.0	13.7	_	14.0	23.3	42.8
outward	20.2	15.7	1.0	5.6	24.6	32.2
United Kingdom	_ , _					
inward	13.7	9.4	9.8	11.0	6.8	13.2
outward	18.3	9.5	11.6	18.0	18.6	25.4
Other Western Europe						
inward	5.9	3.4	2.5	3.8	5.5	4.6
outward	14.9	9.8	7.3	12.6	14.5	14.3
Gibraltar						
inward	••					
outward	••				••	
Iceland						
inward	1.0	2.6	1.2	0.8	-0.1	0.4
outward	0.5	0.4	0.5	0.3	0.3	0.6
Norway						
inward	4.5	-1.6	2.8	8.4	2.4	6.7
outward	6.7	7.3	1.6	3.7	6.3	9.1
Switzerland						
inward	6.6	5.4	2.2	1.7	7.0	3.7
outward	19.5	11.1	9.9	16.8	18.4	16.9
North America						
inward	5.5	3.0	2.6	4.9	5.0	6.3
outward	6.8	4.6	4.8	8.2	5.2	8.7
Canada						
inward	6.6	2.4	4.2	5.0	7.2	11.0
outward	5.7	4.9	3.4	5.8	7.4	5.9
United States						
inward	5.3	3.1	2.4	4.9	4.8	5.9
outward	6.9	4.5	4.9	8.5	4.9	9.0
Other developed countries						
inward	1.3	0.7	0.9	0.5	0.6	1.0
outward	3.7	3.1	1.7	1.3	1.8	1.6
Australia						
inward	11.2	6.6	8.7	5.3	5.7	20.0
outward	4.6	5.0	1.5	3.1	7.6	5.7
Israel						
inward	8.4	2.4	3.5	3.9	2.6	7.4
outward	8.0	3.0	4.3	5.0	4.3	3.3
Japan						
inward	0.2	0.2	0.2	-	0.1	-
outward	3.5	3.0	1.5	1.1	1.4	1.5
New Zealand						
inward	27.7	19.4	31.6	31.2	24.7	20.5
outward	15.1	10.4	12.0	16.4	15.4	7.5
South Africa	13.1	10.7	12.0	10.7	13.4	7.5
inward	0.7	1.1	-0.2	-0.1	1.7	0.1
	V. /	1.1	-U.Z	-t/. I	1./	U. I

(Annex table B.5, cont'd)

Region/economy	1985-1990 (Annual average	1991	1992	1993	1994	1995
	(Annual average	·)				
Developing countries						
inward	8.0	4.4	5.1	6.6	8.0	8.2
outward	3.5	0.9	2.2	3.1	3.6	4.0
Africa						
inward	4.7	4.2	4.7	5.6	8.3	6.9
outward	1.0	1.5	0.7	1.1	0.9	0.9
North Africa						
inward	2.7	2.2	3.8	4.1	5.7	3.0
outward	0.2	0.3	0.1	0.1	0.2	0.3
Algeria						
inward	0.1	0.1	0.1	0.1	0.1	0.1
outward	0.1	0.4				
Egypt			,-			
inward	3.1	2.8	5.3	6.4	14.8	7.2
outward	0.2	0.7	-		0.5	1.1
Libyan Arab Jamahiriya	0.2	0.7		••	0.5	1.1
inward	1.7	2.1	1.8	1.3	1.2	1.2
outward	0.2					
Morocco	0.2	••	••		••	••
	0.5	5 1	6 6	9.0	0 0	4.1
inward	8.5	5.1	6.6	8.0	8.8	4.1
outward	0.4	0.4	0.5	0.4	0.4	0.2
Sudan	0.5	0.1				
inward	-0.5	-0.1	-	-	-	-
outward	••	••	••		••	••
Tunisia		4.0			40.5	
inward	14.7	4.0	12.5	13.7	10.2	6.1
outward	0.1	0.1	0.1		0.1	0.1
Other Africa						
inward	9.2	7.3	6.4	8.2	12.5	13.2
outward	3.0	3.2	1.6	3.0	2.2	2.1
Angola						
inward	44.8	107.5	45.5	48.0	54.2	47.6
outward	-			0.3	-0.3	
Benin						
inward	1.4	5.1	0.3	0.1	0.1	0.3
outward						
Botswana						
inward	-4.6	-0.6	-0.1	-20.2	-1.0	4.9
outward	2.7	0.7	0.8	0.7	0.7	2.9
Burkina Faso						
inward	0.5	0.1	-	2.1	0.6	0.4
outward						
Burundi			,-			••
inward	0.6	0.5	0.3	0.3	0.5	1.9
outward	0.1			0.3	0.1	0.6
Cameroon	0.1	••	••	0.1	0.1	0.0
inward	-	-0.7	2.5	0.5	3.9	4.8
outward	0.8	1.1	2.9	2.0	2.4	2.5

gion/economy	1985-1990 (Annual average	1991	1992	1993	1994	199
	(Annual average)				
Cape Verde						
inward	2.6	1.0	-0.6	2.4	1.9	7.8
outward	0.2				0.8	
Central African Republic						
inward	-2.1	-2.8	-6.8	-9.4	3.4	4.
outward	3.8	2.0	3.7	5.0	6.8	5.
Chad						
inward	12.6	3.0	1.8	13.5	24.0	11.
outward	8.1	7.6	12.4	9.7	0.5	10.
Comoros						
inward	5.3	5.5	6.6	4.8	6.7	5.
outward	0.4					
Congo						
inward	6.4	1.8	0.9	40.2	0.8	2.
outward						
Côte d'Ivoire						
inward	-0.6	2.1	-29.1	10.7	3.3	1.
outward						
Djibouti						
inward	1.2	-	1.8	1.1	1.1	2.
outward						
Equatorial Guinea						
inward	30.9	140.1	3.7	3.1	0.3	6.
outward	0.1	0.4			••	
Ethiopia						
inward	0.3	0.1	0.1	0.1	0.4	1.
outward				0.1	-0.1	
Gabon						
inward	0.4	-5.1	10.5	-9.6	-8.7	8.
outward	1.2	1.4	2.1	0.2	0.1	0.
Gambia						
inward	18.9	20.0	8.8	19.4	16.5	12.
outward						
Ghana						
inward	17.8	2.3	2.5	9.4	22.6	22.
outward						
Guinea						
inward	3.3	7.8	4.0	0.5	-	0.
outward						
Guinea-Bissau						
inward	2.2	3.3	10.0	-2.6	0.0	0.
outward						
Kenya						
inward	1.3	1.2	0.5	0.2	0.3	1.
outward						
Lesotho						
inward	6.0	1.7	0.5	2.6	3.3	4.
outward						
Liberia						
inward	43.2	8.2	-11.1	31.1	14.1	21.
outward	56.6	341.1	-30.7	-4.1	47.4	4.
Madagascar						
inward	4.5	6.4	6.2	4.0	1.8	2.
outward						

(Annex table B.5, cont'd)

egion/economy	1985-1990	1991	1992	1993	1994	199	
	(Annual average))					
Malawi							
inward	6.2	4.9	0.8	4.9	6.3	6.1	
outward							
Mali							
inward	1.4	0.7	-1.4	-4.2	10.4	2.9	
outward							
Mauritania							
inward	3.7	0.9	2.8	6.7	0.9	2.9	
outward							
Mauritius							
inward	4.5	2.4	1.7	1.6	1.9	1.9	
outward	3.3	1.4	4.9	3.6	0.1	0.4	
Mozambique							
inward	3.8	2.6	3.2	3.5	2.8	3.6	
outward	••		••				
Namibia	· ·	- -				••	
inward	22.9	30.5	18.1	6.7	8.2	6.7	
outward	1.5	1.6	-0.3	1.8	0.6	0.9	
Niger	1.0	1.0	0.0	1.0	0.0	0.2	
inward	3.8	5.3	18.1	-10.7	-3.7	0.1	
outward	2.7	0.9	13.0	1.8	-0.6		
Nigeria	2.7	0.7	13.0	1.0	0.0	••	
inward	34.9	19.8	26.3	36.5	50.5	50.0	
outward	15.0	10.8	5.2	16.1	10.0	10.5	
Rwanda	13.0	10.0	3.2	10.1	10.0	10	
inward	1.0	2.0	0.9	2.4	-0.4	0.1	
outward							
Senegal	••		••	••	••	••	
inward	5.8	-1.0	2.6	-0.1	11.8	7.8	
outward	1.9	-2.6	6.3	0.0	3.1	3.2	
Seychelles	1.9	-2.0	0.3	0.0	3.1	3.2	
inward	38.2	24.5	9.9	14.8	30.2	38.4	
			1.3				
outward	2.1	1.4	1.3	0.9	1.3	1.4	
S ierra Leone	<i>5</i> 7	12.0	10.4	15.6	0.0	4.7	
inward	5.7	13.9	-10.4	-15.6	-8.8	4.2	
outward	••	••	••	••	••	••	
Somalia	0.2	0.1	0.1	0.1		0.0	
inward	0.3	-0.1	0.1	0.1	-	0.2	
outward	••	••	••	••	••	••	
Swaziland	71 0	44.0	20.5	20.4	40.0	20.	
inward	51.9	44.3	38.7	28.4	48.9	29.5	
outward	21.9	14.0	14.8	13.8	34.8	8.9	
Togo							
inward .	1.7	2.7	-0.5	0.9	1.4	0.2	
outward	••	••	••	••	••	••	
Uganda	0.4		0.4	10.1			
inward	8.4	0.2	0.6	10.1	12.6	21.1	
outward	••						
United Republic of Tanzania							
inward	3.3	0.3	1.1	2.0	5.1	14.4	
outward	••		••	••	••		
Zaire							
inward	-	2.2	-0.2	2.9	-0.4	-	
outward							

egion/economy	1985-1990 (Annual average)	1991	1992	1993	1994	1995
Zambia						
inward	27.2	8.9	12.9	10.4	14.0	19.0
outward					••	
Zimbabwe						
inward	1.8	0.2	1.1	2.0	2.4	3.1
outward	0.1			0.3		
Latin America and the Ca	ribbean					
inward	11.3	7.8	8.1	7.2	10.3	11.0
outward	1.7	-0.2	1.3	0.9	1.6	1.7
South America						
inward	7.4	5.2	6.2	5.1	7.0	8.2
outward	1.5	1.0	0.6	1.3	1.7	1.6
Argentina						
inward	13.0	15.1	25.5	31.0	4.8	11.7
outward	0.3	-0.3	-0.1		1.0	1.4
Bolivia						
inward	25.0	6.5	11.2	14.9	17.6	47.7
outward	0.3	0.2	0.2	0.2	0.3	0.2
Brazil						
inward	3.1	1.4	3.0	1.3	3.0	4.7
outward	1.1	1.3	0.2	0.5	1.0	1.3
Chile						
inward	21.5	7.3	7.2	6.9	14.0	10.8
outward	9.0	1.7	3.9	3.7	7.3	4.4
Colombia						
inward	17.0	7.6	10.6	10.0	11.9	14.8
outward	1.9	0.4	0.7	2.5	1.1	1.7
Ecuador						
inward	14.6	6.9	7.2	16.5	17.0	14.1
outward	••					
Guyana						
inward	56.9	10.6	73.0	28.6	41.7	31.9
outward	••		-1.0	0.8		
Paraguay						
inward	11.3	5.6	9.7	7.3	10.2	8.9
outward						
Peru						
inward	15.5	-0.1	2.9	8.7	37.3	24.7
outward	0.1	••	_	0.3		0.1
Surinam						
inward	-7.8	2.2	-4.7	-3.4	-3.6	2.0
outward						
Uruguay	••			. .	••	••
inward	11.1	2.7	3.9	5.3	7.0	5.7
outward	0.1	0.3	-1.9	1.7		
Venezuela	V.1			-••	••	••
inward	8.3	19.7	4.9	3.2	7.2	7.6
outward	4.2	1.9	1.2	7.6	6.0	2.5

(Annex table B.5, cont'd)

gion/economy	1985-1990 (Annual average	1991 e)	1992	1993	1994	199
Other Latin America						
inward	22.6	13.0	11.0	11.1	16.6	19.8
outward	2.4	-2.7	2.3	0.2	1.4	2.0
Antigua and Barbuda						
inward						
outward	••		••	••		
Aruba						
inward						
outward						
Bahamas						
inward	15.2	8.6	11.1	17.8	21.0	25.
outward	42.9	-395.1	206.4	97.7	-22.3	94.
Barbados						
inward	4.3	2.6	9.6	4.5	5.6	6.
outward	0.7	0.5	0.5	1.2	0.9	1.
Belize						
inward	21.8	10.7	11.6	5.8	12.8	15.
outward	2.4	1.6	1.5	1.3	1.7	1.
Bermuda						
inward						
outward						
Cayman Islands						
inward			••			
outward						
Costa Rica						
inward	26.5	16.1	16.2	14.1	18.1	23.
outward	0.4	0.5	0.3	0.1	0.3	0.
Cuba						
inward			••			
outward						
Dominica						
inward	41.7	20.1	29.5	18.4	30.5	35.
outward	••					
Dominican Republic						
inward	11.4	8.8	9.2	4.1	5.7	9.
outward	0.1		-0.1	0.3		0.
El Salvador						
inward	2.9	3.1	1.5	1.3	1.5	2.
outward			••			
Grenada						
inward	31.6	18.3	32.5	27.6	21.8	20.
outward						
Guatemala	••	••	••	••	••	••
inward	8.4	7.9	5.8	7.8	3.5	3.
outward						
Haiti			••	••	••	••
inward	2.1	4.0	2.3	2.3	0.6	0.
outward Hondures	-1.1	-4.0		••	••	••
Honduras	<i>E</i> 1	9.0	6.2	26	26	_
inward	6.4	8.9	6.2	2.6	3.6	5.
outward	••		••	••	••	••

egion/economy	1985-1990 (Annual average)	1991)	1992	1993	1994	199
Jamaica						
inward	16.3	13.6	13.7	5.8	8.9	13.5
outward						
Mexico						
inward	16.9	8.5	6.4	6.0	14.3	17.1
outward	1.4	0.3	1.1	-	1.4	1.5
Netherlands Antilles						
inward						
outward			••			
Nicaragua						
inward	6.8	0.3	4.2	9.5	8.6	15.2
outward						
Panama						
inward	24.4	4.7	11.3	9.3	30.2	-1.3
outward	23.1	65.9	20.4	-28.9	-7.7	-8.0
Saint Kitts and Nevis	23.1	03.7	20.1	20.9	,.,	0.
inward	40.2	30.3	17.6	17.9	21.1	27.
outward						
Saint Lucia	••	••	••	••	•••	
inward						
outward	••	••	••	••	••	••
	dinas	••	••	••	••	••
Saint Vincent and the Grena		1.4.1	22.4	<i>5</i> 2.9	95.0	52
inward	57.7	14.1	33.4	52.8	85.0	53.
outward	••	••	••	••	••	
Trinidad and Tobago	21.2	20.2	24.0	64.1	71.0	40
inward	31.2	20.2	24.0	64.1	71.3	43.
outward	0.2	••	••	0.5	0.7	0.
Virgin Islands						
inward _		••	••	••		
outward			••	••		••
Developing Europe						
inward	1.4	0.8	30.6	9.0	10.4	15.
outward	-	••	-0.5	0.1	-0.1	0.
Bosnia and Herzegovina						
inward						
outward	••	••	••	••	••	••
Croatia		••	••	••	••	••
inward						
inwara outward	••	••	••	••	••	••
Malta	••	••	••	••	••	••
inward	15.6	10.4	5.2	7.9	16.2	12
	15.6	10.4	5.2			13.
outward	0.3	••	••	0.1	-0.1	1.
Slovenia				5.0	4.5	10
inward			••	5.0	4.5	10
outward			••	0.1	-0.1	0.
TFYR Macedonia						
inward .		••	••		••	
outward			••			
Former Yugoslavia						
inward	0.3	0.5	••	••	••	••
outward				••		

(Annex table B.5, cont'd)

Region/economy	1985-1990 (Annual average)	1991	1992	1993	1994	199
Asia						
inward	7.6	3.4	4.2	6.5	7.2	7.5
outward	4.5	1.2	2.6	3.9	4.5	4.9
West Asia						
inward	1.2	1.7	1.5	2.2	1.0	-0.6
outward	0.4	-0.3	1.1	0.5	0.8	0.6
	***	-		-	***	
Bahrain						
inward	-1.4	-0.6	-0.6	-0.4	-2.1	-1.9
outward	-0.8	-0.7		-1.4	0.4	-0.4
Cyprus						
inward	10.0	5.8	6.1	5.6	5.0	6.3
outward	1.0	1.0	0.8	0.8	0.4	0.4
Iran, Islamic Republic of						
inward	-0.1	0.1	-0.7	-0.1	_	_
outward						
Iraq			••			
inward	_					
outward	_	••	••	••	••	••
Jordan	-	••	••	••	••	••
	1.2	1.0	2.6	1.0	0.1	2
inward	1.2	-1.2	2.6	-1.8	0.1	2.
outward	-1.9	1.4	-0.2	-2.8	-1.2	-1.
Kuwait						
inward	0.4	-	1.0	0.3	0.4	0.
outward	19.1	-4.6	35.1	20.6	26.1	21.
Lebanon						
inward	3.7	0.2	0.4	0.3	0.4	1.
outward	2.5	0.7	0.6	0.3	0.4	0.
Oman						
inward	5.9	7.7	5.1	7.0	3.2	1.
outward		-0.1	-0.1	-0.2	0.4	0.
Qatar		0.1	0.1	V.2	· · ·	•
inward	3.1	4.1	3.6	2.6	3.4	3.
outward						
Saudi Arabia	••	••	••	••	••	
	1.7	0.7	0.2	5.2	1.6	7
inward	1.7	0.7	-0.3	5.2	1.6	-7.
outward	-0.7	-0.9	-	-0.2	0.4	0.
Syrian Arab Republic						_
inward	2.2	1.2	0.9	1.8	1.1	0.
outward		••	••	••	••	
Turkey						
inward	3.5	2.3	2.3	1.4	1.6	2.
outward	0.2	0.1	0.2	0.0	0.1	0.
United Arab Emirates						
inward	1.2	0.4	1.6	2.0	1.2	1.3
outward	-0.1	-	0.2	0.1	-0.5	-0.
Yemen						
inward	40.7	34.9	32.8	35.9	0.4	-8.
outward						
Central Asia inward						
	••	••	••	••	••	••
outward	••	••	••	••	••	••

egion/economy	1985-1990	1991	1992	1993	1994	199
	(Annual average)	<u> </u>				
Armenia						
inward	••					
outward			••	••		
Azerbaijan						
inward	••					
outward			••	••		
Georgia						
inward			••	••		
outward			••	••		
Kazakstan						
inward						
outward	••					
Kyrgyzstan						
inward						
outward						
Tajikistan						
inward						
outward			••			
Turkmenistan						
inward						
outward			••			
Uzbekistan						
inward						
outward			••			
South, East and South-Eas						
inward	9.7	3.8	4.7	7.5	8.3	9.0
outward	5.9	1.5	2.9	4.8	5.2	5.
Afghanistan						
inward						
outward						
Bangladesh						
inward	0.3	0.1	0.1	0.4	0.3	_
outward			••	••		
Brunei Darussalam						
inward			••			
outward						
Cambodia						
inward						
outward						
China						
inward	14.5	3.3	7.8	20.0	24.5	25.
outward	1.8	0.7	2.8	3.2	1.5	1.
Hong Kong						
inward	12.2	2.3	7.7	7.1	8.2	8.
outward	94.3	12.1	31.0	75.5	87.6	100.
India	,				20	100.
inward	1.2	0.3	0.4	1.0	2.4	3.
outward	-	-	-	0.1	0.1	0.
Indonesia				J.1	3.1	٥.
inward	7.6	3.6	3.9	3.8	3.7	6.
	1.0	2.0	0.1	0.7	1.1	0.

(Annex table B.5, cont'd)

egion/economy	1985-1990	1991	1992	1993	1994	199
	(Annual average))				
Korea, Democratic People's						
Republic of						
inward						
outward						
Korea, Republic of						
inward	1.9	1.0	0.6	0.5	0.6	1.
outward	3.5	1.3	1.1	1.1	1.9	2.
Lao People's Democratic Rep	ublic					
inward				••		
outward	••			••		
Macau						
inward						
outward						
Malaysia						
inward	43.7	23.8	26.0	22.5	16.1	17.
outward	12.5	2.3	2.6	5.9	6.7	11.
Maldives						
inward						
outward						
Mongolia						
inward				••		
outward				••		
Myanmar						
inward	10.1	12.1	7.9	6.8	4.3	5.
outward			••			
Nepal						
inward	0.7	0.4	0.2	0.7	1.0	0.
outward	••			••		
Pakistan	••	•				
inward	5.1	3.3	3.5	3.5	4.6	6.
outward	-	-0.1	-0.1	-	-	0.
Philippines		0.1	0.1			0.
inward	13.6	6.0	2.1	9.6	10.5	9.
outward	2.5	-0.3	-	2.9	2.0	2.
Singapore	2.3	-0.5		2.7	2.0	2.
inward	59.3	33.6	12.4	23.0	23.0	24.
outward	25.7	3.6	7.4	9.9	13.0	13.
Sri Lanka	23.1	3.0	7.4	7.7	13.0	13.
inward	6.9	2.4	5.4	7.5	5.3	2.
outward	0.3	0.2	0.1	0.3	0.3	0.
Taiwan Province of China	0.5	0.2	0.1	0.5	0.5	0.
inward	5.1	3.1	1.8	1.8	2.5	2.
outward	11.6	4.5	3.8	4.7	4.4	2. 4.
Thailand	11.0	7.5	5.0	7./	4.4	4.
inward	10.2	4.9	4.8	3.4	2.3	2.
ınwara outward	1.8	4.9 0.4	0.3	0.5	0.8	2. 1.
Viet Nam	1.0	0.4	0.3	0.3	0.8	1.
inward		••		••		
outward	••	••	••	••	••	••
he Pacific		•• -				
inward	32.6	20.5	32.4	7.3	9.2	47.
outward	0.4	-0.3	0.1	0.5	0.3	0.

gion/economy	1985-1990 (Annual average)	1991	1992	1993	1994	199
Fiji						
inward	28.1	8.3	27.1	12.8	33.0	33.2
outward	1.8	-2.4	0.8	2.7	1.9	4.0
Kiribati						
inward						
outward						
New Caledonia						
inward						
outward						
Papua New Guinea						
inward	27.9	19.1	28.8	-0.2	-0.5	45.
outward		••	••	••		
Solomon Islands						
inward	34.1					
outward						
Tonga						
inward		••		••	••	
outward						
Vanuatu						
inward	68.6	54.1	53.1	51.9	60.8	62.
outward	••	••	••	••	••	••
Western Samoa						
inward	••		••	••	••	••
outward		••		••	••	
Central and Eastern Europe						
inward	1.0	0.4	0.8	7.9	5.0	5.
outward	-	-	-	0.3	0.6	0.
Albania						
inward	••					
outward						
Belarus						
inward						
outward						
Bulgaria						
inward	0.4	2.8	2.0	2.5	4.8	4.
outward	-	••	••	••	••	0.
Czech Republic						
inward	••	••	••	7.9	8.1	17.
outward	••		••	1.1	1.1	0.
Czechoslovakia (former)	- .	• • •				
inward	5.4	21.8	••	••	••	••
outward	0.2	0.5		••	••	
Estonia				40.6	25.6	22
inward	••	••	••	40.6	35.6	22.
outward	••	••	••	1.6	0.4	0.
Hungary inward	22.2	21.2	20.2	22.7	12.0	50
	33.3	21.2 0.4	20.2	32.7 0.2	13.9	59.
<i>outward</i> Latvia	0.4	0.4	0.4	0.2	0.6	0.
Latvia inward						
inwara outward	••	••	••	••	••	••
	••	••	••		••	

(Annex table B.5, cont'd)

Region/economy	1985-1990 (Annual average)	1991	1992	1993	1994	1995
Lithuania						
inward						
outward	••		••		••	
Moldova, Republic of						
inward						
outward	••					
Poland						
inward	9.6	2.0	4.8	12.6	12.5	18.1
outward	0.1	-	0.1	0.1	0.2	0.2
Romania						
inward	1.1	1.0	2.0	2.0	5.7	8.7
outward	-	0.1	0.1	0.1	-	-
Russian Federation						
inward	0.1	••	0.1	1.8	0.9	0.9
outward	-	••			0.6	0.1
Slovakia						
inward				5.1	5.0	3.6
outward				1.6	0.3	0.2
Ukraine						
inward	••					
outward		••	••			••
Memorandum:						
Least developed countries ^a						
Total						
inward	2.3	2.4	2.0	2.1	1.3	1.3
outward	0.1	0.5	-	-	0.1	-
Africa						
inward	5.6	8.4	4.1	4.8	6.3	7.3
outward	0.8	3.3	0.3	0.2	0.5	0.2
Latin America and the Caribbean						
inward	2.1	4.0	2.3	2.3	0.6	0.6
outward	-1.1	-4.0	••		••	
Asia						
inward	1.3	1.3	1.5	1.6	0.4	0.2
outward						
West Asia						
inward	40.7	34.9	32.8	35.9	0.4	-8.7
outward						-0.7
South Fact and South Fact Asia						
South, East and South-East Asia inward	0.6	0.4	0.4	0.4	0.4	0.6
inwara outward	0.6	0.4		0.4		0.6
The Pacific	(7.0	02.5	90.5	90.4	00.2	102.5
inward	67.0	92.5	89.5	80.4	90.3	103.5

(Annex table B.5, cont'd)

Region/economy	1985-1990	1991	1992	1993	1994	1995
	(Annual average))				
Oil-exporting countries ^b						
Total						
inward	6.6	6.4	5.8	5.7	8.2	7.1
outward	1.4	0.4	1.1	1.3	1.9	2.0
Africa						
inward	4.6	4.6	6.1	7.1	9.9	8.0
outward	1.1	1.3	0.6	1.5	1.1	1.3
North Africa						
inward	2.3	1.7	3.4	3.5	5.4	2.9
outward	0.1	0.3	-		0.1	0.3
Other Africa						
inward	17.4	17.4	19.5	24.3	31.4	33.0
outward	6.5	5.7	3.4	8.9	5.7	6.1
Latin America and the Cari						
inward	15.3	10.2	6.4	6.4	14.0	15.7
outward	1.9	0.5	1.0	1.0	1.9	1.6
South America						
inward	10.1	16.6	5.6	6.3	9.7	11.0
outward	3.3	1.5	1.0	5.8	4.4	1.9
Other Latin America and t	the Caribbean					
inward	17.2	8.7	6.6	6.4	14.8	17.5
outward	1.3	0.3	1.1	-	1.4	1.4
Asia						
inward	4.5	4.8	5.3	5.0	4.4	4.0
outward	1.3	-	1.4	1.4	2.2	2.3
West Asia						
inward	0.4	0.6	0.1	1.7	0.7	-2.1
outward	0.5	-0.6	1.8	0.8	1.4	0.9
South, East and South-East						
inwrad	16.7	9.4	10.6	9.4	7.7	9.4
outward	3.9	0.7	0.9	2.2	2.9	3.5
All developing countries n						. .
inward	6.7	4.5	4.6	4.7	5.7	5.9
outward	3.8	0.9	2.1	3.1	3.9	4.4

Source: UNCTAD, FDI/TNC database.

^a Includes Afghanistan, Angola, Bangladesh, Benin, Burkina Faso, Burundi, Cambodia, Cape Verde, Central African Republic, Chad, Comoros, Djibouti, Equatorial Guinea, 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, Uganda, United Republic of Tanzania, Vanuatu, Yemen, Zaire and Zambia.

^b Includes Algeria, Angola, Bahrain, 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 B.6. Inward and outward FDI stock as a percentage of gross domestic product, by region and economy, 1980, 1985, 1990 and 1995

(Percentage)

Region/economy	1980	1985	1990	1995
World				
inward	4.6	6.4	8.3	10.1
outward	4.9	5.9	8.1	9.9
Developed countries				
inward	4.8	6.0	8.3	9.1
outward	6.5	7.5	9.8	11.5
Western Europe				
inward	5.7	8.4	10.9	13.4
outward	6.7	10.7	12.3	15.7
European Union				
inward	5.5	8.2	10.8	13.2
outward	6.3	10.4	11.8	14.6
	0.5	10.7	11.0	17.0
Austria				
inward ,	5.8	9.4	6.8	8.0
outward	1.0	2.9	2.9	5.5
Belgium and Luxembourg		10.6	10.1	21.1
inward	6.0	10.6	18.1	31.1
outward	4.9	5.6	14.3	23.0
Denmark	6.2	6.2	7.1	12.1
inward	6.3 3.1	6.2 3.1	7.1 5.7	13.1 11.5
<i>outward</i> Finland	5.1	5.1	3.7	11.5
inward	1.1	2.5	3.8	6.8
outward	1.4	3.4	8.3	12.1
France	1.4	3.4	0.3	12.1
inward	3.4	6.4	7.2	9.6
outward	3.6	7.1	9.2	11.8
Germany	3.0	7.1	7.2	11.0
inward	4.5	6.0	7.4	6.9
outward	5.3	9.7	10.1	10.8
Greece	0.0			- 0.0
inward	11.3	24.9	16.9	16.9
outward		-	-	-
Ireland				
inward	19.5	24.5	12.5	20.2
outward		1.1	4.8	6.5
Italy				
inward	2.0	4.5	5.3	5.7
outward	1.6	3.8	5.1	8.7
Netherlands				
inward	11.3	19.6	25.9	28.4
outward	24.9	37.3	38.5	41.7
Portugal			_	
inward .	4.4	6.5	7.6	7.4
outward	0.5	0.9	0.7	3.3
Spain	2.4	F 4	12.2	17.4
inward	2.4	5.4	13.3	17.6
outward	0.6	1.3	3.3	6.0

ion/economy	1980	1985	1990	1995
Sweden				
inward	2.9	5.0	5.4	15.9
outward	4.5	12.3	21.5	31.2
United Kingdom				
inward	11.7	14.0	22.3	28.5
outward	14.9	21.9	23.6	27.4
Other Western Europe				
inward	9.4	11.9	13.4	16.9
outward	14.4	16.9	22.0	36.2
Gibraltar				
inward				
outward				
Iceland	••	••	••	
inward	3.8	7.8	3.2	3.6
outward		-	0.3	0.6
Norway	••		3.5	0.0
inward	11.6	13.8	10.8	13.4
outward	3.4	7.9	9.4	15.4
Switzerland	2.1		···	20.1
inward	8.4	10.8	14.9	18.8
outward	21.1	23.0	29.1	47.0
North America	4.6	<i>E</i> 7	0.2	0 7
inward	4.6	5.7	8.3	8.7
outward	8.2	6.7	8.4	10.4
Canada				
inward	20.4	18.5	19.7	21.7
outward	8.5	11.7	13.7	18.3
United States				
inward	3.1	4.6	7.2	7.7
outward	8.1	6.2	7.9	9.8
Other developed countries				
inward	2.7	2.7	3.1	2.9
outward	2.1	3.7	7.2	6.4
Australia				
inward	8.7	15.6	25.9	30.8
outward	1.5	4.1	10.2	11.9
Israel				
inward	3.3	4.7	3.8	6.2
outward	0.1	2.1	1.7	4.8
Japan				
inward	0.3	0.4	0.3	0.3
outward	1.8	3.3	7.0	6.0
New Zealand				
inward	10.5	9.0	18.7	43.9
outward	5.8	8.1	7.7	12.0
South Africa				
inward	20.4	19.1	7.9	7.8
outward	7.4	11.8	7.3	7.5

(Annex table B.6, cont'd)

Region/economy	1980	1985	1990	1995
Developing countries				
inward	4.3	8.1	8.7	15.4
outward	0.5	1.0	1.8	4.5
Africa				
inward	3.2	6.4	9.2	13.3
outward	0.1	1.9	3.0	3.6
outwara	0.1	1.9	3.0	3.0
North Africa				
inward	3.3	5.9	7.1	10.2
outward	0.2	0.3	0.4	0.6
Algeria				
inward	3.1	2.2	2.1	3.3
outward	0.2	0.3	0.3	0.6
Egypt	0.2	3.5	5.5	0.0
inward	9.6	12.0	23.0	23.3
outward	0.2	0.2	0.3	0.6
Libyan Arab Jamahiriya	0.2	0.2	0.5	0.0
inward				
inwara outward	 0.5	0.8	1.2	1.2
	0.3	0.8	1.4	1.2
Morocco	1.0	2.4	2.6	0.2
inward	1.0	3.4	3.6	9.2
outward	•••	••	••	0.4
Sudan		0.4		
inward	••	0.4	-	-
outward		••	••	
Tunisia				
inward	9.0	22.0	17.8	22.8
outward	••	-	0.1	0.2
Other Africa				
inward	3.1	6.8	11.9	16.8
outward	0.1	3.3	6.3	7.2
Angolo				
Angola <i>inward</i>	1.7	11.1	12.4	33.6
inwara outward			12.4	33.0
Benin	••		-	-
inward	2.7	3.1	2.0	2.5
inwara outward		0.2	0.1	0.1
Botswana		0.2	0.1	0.1
inward	27.4	45.3	26.6	16.5
inwara outward	0.3	0.2	0.3	2.3
<i>outwara</i> Burkina Faso	0.5	0.∠	0.3	2.3
	1 1	2.4	1 /	2.1
inward	1.4	2.4	1.4	
outward	0.2	0.3	0.1	0.1
Burundi	0.7	2.0	2.5	2.7
inward	0.7	2.0	2.5	2.7
outward	••	••	-	0.1
Cameroon	4 4	12.0	0.5	10.7
inward	4.4	13.8	8.5	18.7
outward	0.3	0.6	1.2	4.5
Cape Verde			0.0	~ ~
inward	••	••	0.8	5.6
outward	••	••	0.3	0.6

Region/economy	1980	1985	1990	1995
Central African Republic				
inward	6.2	11.0	6.6	7.1
outward	0.3	0.6	1.4	4.4
Chad				
inward	13.0	27.9	20.9	32.1
outward	0.1	0.2	2.9	8.5
Comoros				
inward			6.2	10.5
outward			0.5	0.4
Congo				
inward	18.1	22.1	20.1	36.5
outward				
Côte d'Ivoire				
inward	5.2	10.0	9.9	8.9
outward		••		
Djibouti				
inward	0.9	0.9	1.3	3.3
outward		••		
Equatorial Guinea				
inward		6.3	15.7	44.2
outward		••	0.2	0.2
Ethiopia				
inward	2.7	2.4	2.0	2.4
outward		••		
Gabon				
inward	11.9	22.7	22.0	29.6
outward	1.8	2.8	3.0	5.5
Gambia				
inward	8.7	9.4	11.9	26.8
outward				
Ghana				
inward	1.5	4.3	5.1	15.8
outward		••		
Guinea				
inward	0.1	0.1	2.3	4.3
outward				
Guinea-Bissau				
inward	-	0.8	3.4	6.2
outward				
Kenya				
inward	4.8	7.1	7.3	7.7
outward	0.2	1.0	1.2	1.1
Lesotho				
inward	1.2	9.8	13.4	19.3
outward		••	-	-
Liberia				
inward		9.7	108.7	113.9
outward	5.2	33.8	37.9	68.4
Madagascar				
inward	1.1	1.7	3.3	5.3
outward				
Malawi				
inward	8.1	12.6	11.6	18.2
outward				

(Annex table B.6, cont'd)

n/economy	1980	1985	1990	1995
Mali				
inward	0.9	2.8	1.2	2.9
outward	1.5	1.8	0.9	1.0
Mauritania	1.3	1.0	0.9	1.0
inward	-1.6	4.8	4.9	8.9
inwara outward				
Mauritius	••	••	0.2	0.3
inward	1.8	3.5	(2	()
inwara outward			6.3	6.3
Mozambique	••	••	0.1	2.4
inward	0.6	0.7	2.9	12.2
outward				
Namibia		••	••	
inward		1.3	2.3	13.3
outward	••		0.1	0.8
Niger	•••	••	0.1	0.8
inward	7.4	14.1	11.7	13.5
inwara outward	0.1	0.6	2.2	4.4
<i>Outwara</i> Nigeria	0.1	0.0	2.2	4.4
inward	2.6	5.5	24.9	22.7
inwara outward		6.4	29.3	17.5
Rwanda	••	0.4	29.3	17.3
inward	4.6	7.8	9.1	18.2
inwara outward				
Senegal			••	••
inward	5.1	7.6	4.9	8.6
outward	J.1 -	1.5	0.8	2.4
Seychelles	-	1.5	0.8	2.4
inward	24.9	51.7	50.6	65.1
outward	9.4	25.9	16.6	14.5
Sierra Leone	7.4	23.7	10.0	14.5
inward	7.0	5.0	-0.5	-1.2
outward				
Somalia	••	••		••
inward	1.1	0.2	-0.8	-0.5
outward				
Swaziland	••			••
inward	27.5	55.0	47.9	80.4
outward	1.7	5.7	7.2	22.9
Togo	1./	5.1	1.2	22.7
inward	15.6	27.9	16.1	22.3
outward	0.2	0.3	0.1	0.2
Uganda	0.2	0.5	0.1	0.2
inward	_	0.2	0.1	5.6
outward		0.2	0.1	
United Republic of Tanzania	••	••	••	••
inward	0.9	1.4	2.3	9.1
outward				
Zaire				
inward	7.1	11.8	2.5	3.6
outward				
Zambia		••		••
inward	0.6	5.4	18.3	22.8
outward				

gion/economy	1980	1985	1990	1995
Zimbabwe				
inward	-	-	-0.9	1.1
outward				0.1
Latin America and the Caribbean				
inward	6.4	10.8	11.6	18.4
outward	0.4	1.0	1.2	1.7
South America				
inward	5.8	8.9	8.7	14.3
outward	0.2	0.5	0.6	1.2
Argentina				
inward	6.9	7.4	6.2	8.7
outward	0.1	0.3	0.3	0.2
Bolivia	0.1	0.0	0.0	0.2
inward	13.7	14.7	14.6	22.3
outward	-	-	0.1	0.2
Brazil				
inward	6.9	11.3	8.1	17.8
outward	0.3	0.6	0.5	1.2
Chile				
inward	3.2	14.1	33.1	23.1
outward	0.2	0.6	0.6	4.1
Colombia				
inward	3.2	6.4	8.7	12.1
outward	0.4	0.9	1.0	1.4
Ecuador				
inward _	6.1	6.2	12.8	17.7
outward	••	••	••	••
Guyana				
inward	••	••	••	
outward	••	••	••	0.4
Paraguay	4.0	<i>(5</i>	7.6	10.0
inward	4.9 0.7	6.5 0.7	7.6 0.6	12.2
outward Porn	0.7	0.7	0.6	0.3
Peru <i>inward</i>	4.3	6.7	3.7	9.3
inwara outward	4.5	0.7	0.2	0.2
Suriname	-	0.2	0.2	0.2
inward				
outward		••	••	••
Uruguay	••	••	••	••
inward	6.9	16.2	11.7	8.1
outward	-	-	0.1	0.1
Venezuela			0.1	0.1
inward	2.7	2.6	8.0	9.3
outward	-	0.3	2.5	4.0
Other Latin America				
inward	7.7	14.5	19.0	33.1
outward	0.8	2.1	2.6	3.3
Antigua and Barbuda				
inward	24.6	54.2	87.3	111.9
outward				

(Annex table B.6, cont'd)

on/economy	1980	1985	1990	1995
Aruba				
inward				
outward				
Bahamas				
inward	25.5	12.7	10.7	29.0
outward	24.4	6.6	48.8	54.1
Barbados				
inward	11.8	10.3	9.9	13.0
outward	0.6	1.0	1.3	1.8
Belize				
inward	6.4	5.0	17.8	25.3
outward		••	••	1.7
Bermuda				
inward				
outward				
Cayman Islands				
inward			••	
outward		••	••	
Costa Rica				
inward .	13.9	24.4	25.3	30.2
outward	0.1	0.7	0.8	0.7
Cuba				
inward .	••	••	••	
outward		••	••	
Dominica			40.0	50.5
inward	••	5.7	40.0	78.5
outward	••	••	••	••
Dominican Republic	2.6	5.0	0.1	11.0
inward	3.6	5.2	8.1	11.8
<i>outward</i> El Salvador		••	••	0.1
	4.3	2.2	4.0	3.1
inward		3.2		
<i>outward</i> Grenada	••	••	••	
inward	1.7	11.0	35.1	62.8
outward				
Guatemala	••	••		••
inward	8.9	9.4	22.5	14.8
outward				
Haiti	••	••	••	••
inward	5.7	5.6	5.3	5.7
outward				
Honduras	••	••	••	
inward	3.6	4.7	12.6	15.0
outward				
Jamaica	••	••	••	••
inward	18.7	22.7	16.2	31.3
outward	0.2	0.2	0.1	0.1
Mexico				
inward	4.2	10.2	13.2	25.6
outward	0.1	0.3	0.2	1.1
Netherlands Antilles				
inward	57.6	4.6	13.2	21.1
outward	1.0	1.0	1.5	1.7

ion/economy	1980	1985	1990	1995
Nicaragua				
inward	5.1	4.1	4.7	14.1
outward				
Panama			••	
inward	10.8	10.8	11.6	20.1
outward	22.6	44.5	77.7	60.5
Saint Kitts and Nevis	22.0	11.5	,,.,	00.5
inward	2.1	40.5	100.3	117.4
outward	2.1			
Saint Lucia		••	••	••
inward	95.4	105.5	94.4	101.0
outward				
Saint Vincent and the Grenadines		••	••	••
inward	2.0	7.5	24.8	79.2
outward				
Trinidad and Tobago		••	••	
inward	15.7	23.3	41.3	75.1
inwara outward		0.2	0.4	0.7
Virgin Islands	••	0.2	0.4	0.7
inward				
	••	••	••	••
outward	••	••	••	••
Developing Europe				
inward	0.3	1.1	31.2	10.3
outward				0.1
outwara	••	••	••	0.1
Bosnia and Herzegovina				
inward				
outward	••		••	
Croatia				
inward				
outward				
Malta			••	
inward	13.8	28.2	20.1	34.9
outward				0.4
Slovenia		••	••	0.4
inward				3.8
outward	 	••		5.0
TFYR Macedonia	••	••	••	
inward				
outward	••	••	••	••
Former Yugoslavia		••	••	••
inward	0.2	0.4		
inwara outward			••	
ouiwara		••	••	
Asia				
inward	3.5	7.3	7.3	14.2
outward	0.6	0.8	1.9	6.0
ower www	0.0	0.0	1.,/	0.0
West Asia				
inward	2.9	9.1	5.0	9.6
outward	0.3	0.4	0.6	1.7
Bahrain		0.4	1.50	
inward		8.4	15.9	11.5
outward	••	0.1	1.1	0.4

(Annex table B.6, cont'd)

egion/economy	1980	1985	1990	1995
Cyprus				
inward	21.4	32.6	20.6	18.9
outward		-	0.2	0.7
Iran, Islamic Republic of				
inward	1.2	0.5	_	
outward				••
Iraq				
inward			••	
outward	••	••	••	-
Jordan				
inward	4.0	9.6	15.3	9.9
outward	0.6	0.5	0.4	-1.2
Kuwait				
inward	0.1	0.2	0.1	0.4
outward	3.3	6.1	21.9	28.7
Lebanon				
inward	0.5	2.2	2.1	1.9
outward	-	2.6	-0.6	-0.6
Oman				
inward	8.0	12.0	16.3	19.4
outward	-	0.4	0.1	
Qatar				
inward	1.1	1.2	0.7	3.3
outward				
Saudi Arabia				
inward	6.6	44.1	39.4	34.3
outward	0.1	0.5	1.7	1.4
Syrian Arab Republic				
inward		0.2	1.6	2.0
outward				
Turkey				
inward	0.2	0.7	0.9	3.9
outward			-	0.2
United Arab Emirates				
inward	1.4	1.8	2.2	3.6
outward	0.0	0.1	0.3	0.1
Yemen				
inward	2.4	3.7	0.8	16.2
outward		0.1	0.1	-
Central Asia				
inward				
inwara outward	••	••	••	••
	••	••	••	••
Armenia				
inward			••	
outward	••		••	
Azerbaijan				
inward			••	
outward			••	
Georgia				
inward			••	
outward				
Kazakstan				
inward				
outward			••	

Region/economy	1980	1985	1990	1995
Kyrgyzstan				
inward				
outward				••
Tajikistan	••	••	••	••
inward				
outward	•••	••	••	••
Turkmenistan	•••	••	••	••
inward				
outward	••	••	••	••
Uzbekistan	••	••	••	••
inward				
	••	••	••	••
outward	••	••	••	••
South, East and South-East Asia				
inward	3.8	6.5	8.7	15.1
outward	0.8	1.1	2.7	7.0
Afghanistan				
inward	0.3	0.3	0.3	0.3
inwara outward				
Bangladesh	••	••	••	••
inward	0.4	0.7	0.7	0.6
outward				
Brunei Darussalam	••	••	••	••
inward	0.4	0.0	1.1	2.2
	0.4	0.9	1.1	2.2
outward	••	••	••	••
Cambodia				15.4
inward	••	••	••	15.4
outward	••	••	••	••
China		1.0	2.6	10.0
inward	-	1.2	3.6	18.2
outward	••	-	0.6	2.3
Hong Kong		10.7	10.5	22.7
inward .	6.3	10.5	18.7	22.7
outward	0.5	7.0	18.5	88.8
India				
inward _	0.7	0.5	0.5	1.9
outward	-	-	-	-
Indonesia				
inward	14.2	28.6	36.6	25.2
outward	-	0.1	-	0.3
Korea, Democratic People's Republic of	•			
inward				
outward				
Korea, Republic of				
inward	1.8	1.9	2.3	2.3
outward	0.2	0.6	0.9	2.2
Lao People's Democratic Republic				
inward		0.1	1.6	11.9
outward				
Macau				
inward				
outward				••
Malaysia				
inward	24.8	27.2	33.0	52.1
outward	1.7	2.4	5.3	12.6

(Annex table B.6, cont'd)

on/economy	1980	1985	1990	1995
Maldives				
inward	11.4	3.8	24.8	15.5
outward				
Mongolia				
inward			••	2.3
outward		••	••	
Myanmar				
inward	0.1	0.1	0.7	0.9
outward			••	
Nepal				
inward	0.1	0.1	0.3	0.7
outward			••	
Pakistan				
inward	2.4	3.3	4.8	62.7
outward	0.1	0.4	0.6	0.5
Philippines				
inward	3.8	4.2	4.7	9.2
outward	0.5	0.6	0.4	1.6
Singapore				
inward	52.9	73.6	76.3	67.4
outward	47.7	35.3	25.8	38.4
Sri Lanka				
inward	5.7	8.6	8.5	9.9
outward		-	0.1	0.3
Taiwan Province of China				
inward	5.8	4.7	6.2	7.3
outward	0.2	0.3	8.2	11.2
Thailand				
inward	3.0	5.1	9.3	10.3
outward	-	-	0.5	1.4
Viet Nam				
inward	••	0.2	3.7	31.9
outward				
The Pacific				
inward	26.4	31.2	40.4	46.4
outward	0.5	1.2	1.8	1.4
Fiji				
inward	29.8	34.4	28.2	32.9
outward	0.8	2.0	6.2	5.4
Kiribati	0.0	2.0	0.2	5.4
inward			3.5	5.6
outward	••	••		0.1
New Caledonia	••	••	••	0.1
inward				
outward	••	••	••	
Papua New Guinea	••	••	••	
inward	27.1	31.1	46.8	48.2
outward	0.4	1.0	0.2	0.1
Solomon Islands	0.4	1.0	0.2	0.1
inward	19.2	19.9	32.8	55.7
outward				
Tonga	••		••	••
inward		0.2	0.6	4.4
outward	••	0.2	0.0	7.7

gion/economy	1980	1985	1990	1995
Vanuatu				
inward	29.0	60.0	71.8	137.3
outward				
Western Samoa				
inward	0.4	0.8	5.4	14.3
outward				
Central and Eastern Europe				
inward	••	0.1	1.3	4.9
outward	••	••	0.1	0.3
Albania				
inward				15.3
outward				3.7
Belarus				
inward				0.4
outward			••	
Bulgaria				
inward			-	0.8
outward				-
Czech Republic	••			
inward				8.7
outward				0.5
Czechoslovakia (former)	••	••	•••	0.5
inward			1.0	
outward			-	
Estonia	••	••		••
inward				17.6
outward	••	••	••	1.4
Hungary	••	••	••	1.4
inward	_		6.3	31.5
inwara outward		-		1.2
Latvia	••	••	••	1.2
inward				10.5
	••	••	••	
outward	••	••	••	3.1
Lithuania				2.4
inward	•••	••	••	2.4
outward	••	••	••	-
Moldova, Republic of				
inward	••		••	••
outward	••			••
Poland			-	
inward .	0.1	0.2	0.5	7.2
outward	0.1	0.1	0.3	0.2
Romania				
inward		••	••	3.2
outward			-	0.1
Russian Federation				
inward				1.1
outward				0.2
Slovakia				
inward			••	3.4
outward				0.5
Ukraine				
inward				7.1
outward	••		••	0.2

(Annex table B.6, cont'd)

Region/economy	1980	1985	1990	1995
Memorandum:				
Least developed countries ^a				
Total				
inward	1.8	3.4	3.9	5.2
outward	0.1	0.4	0.4	0.4
Africa				
inward	2.1	4.7	5.7	9.8
outward	0.1	0.7	0.6	1.2
Latin America and the Caribbean				
inward	5.7	5.6	5.3	5.7
outward		••	••	
Asia				
inward	0.5	0.8	0.7	2.3
outward	-	-	-	-
West Asia				
inward	2.4	3.7	0.8	16.2
outward	-	0.1	-	-
South, East and South-East Asia				
inward	0.3	0.4	0.7	1.2
outward			••	••
The Pacific				
inward	15.4	27.0	34.4	66.6
outward				-
Oil-exporting countries ^b				
Total				
inward	4.4	10.2	9.9	18.0
outward	0.2	0.8	1.2	2.7
Africa				
inward	3.6	6.8	11.6	16.1
outward	0.2	2.4	4.7	5.2
North Africa				
inward	4.0	6.4	8.7	11.9
outward	0.3	0.3	0.5	0.7
Other Africa	2.2	7. ž	10.7	24.1
inward .	3.3	7.5	19.5	24.1
outward	0.1	5.3	16.0	13.9
Latin America and the Caribbean	2.0		0.0	
inward	2.9	6.7	8.0	15.6
outward	0.1	0.3	0.2	1.1
South America	2.7	2.0	0.2	11.7
inward	3.7	3.9	9.3	11.7
outward	-	0.2	1.9	3.0

Region/economy	1980	1985	1990	1995
Other Latin America and the Caribbean				
inward	4.5	10.7	13.7	26.5
outward	0.1	0.3	0.2	1.1
Asia				
inward	6.0	14.7	10.5	20.6
outward	0.3	0.5	0.9	2.9
West Asia				
inward	3.3	10.7	5.8	12.3
outward	0.3	0.5	0.8	2.5
South, East and South-East Asia				
inward	16.1	27.5	34.9	31.8
outward	0.4	0.7	1.5	3.5
All developing countries minus China				
inward	4.8	9.0	9.2	15.0
outward	0.5	1.1	2.0	4.9

Source: UNCTAD, FDI/TNC database.

^a Includes Afghanistan, Angola, Bangladesh, Benin, Burkina Faso, Burundi, Cambodia, Cape Verde, Central African Republic, Chad, Comoros, Djibouti, Equatorial Guinea, 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, Uganda, United Republic of Tanzania, Vanuatu, Yemen, Zaire and Zambia.

^b Includes Algeria, Angola, Bahrain, 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 B.7. Cross-border merger and acquisition sales, 1989-1996 (Millions of dollars)

'	1989	,	1990		1771	1,	7661	1	6661	0	1774	į	2773	55	1770	2
Region/economy	Majority Total	Total	Majority '	Total	Majority	Total	Majority	Total	Majority	Total	Majority	Total	Majority	Total	Majority	Total
World	123 645	:	115 637 1	59 959	49 062	85 279	73 769	121 894	66 812	162 344	109 356	196 367	140 813	237 184	162 686	274 611
Developed countries	121 445	:	107 128 1	32 762		71 439		83 712	54 956		699 96	129 123	127 880	168 420	142 292	186 411
Western Europe	50 531	:	48 395 65 688	889 59	25 266	39 753	44 379	59 248	28 531	52 420	41 290	60 932	53 787	76 295		81 822
European Union	49 681	:	43 294	60 320		38 678	42 637	26 906			38 885	58 368		74 812	56 195	76 772
Austria	222	:	15	204	317	355	34	549	223	242	249	728	595	1 287	606	949
Belgium and																
Luxembourg	1 384	:	722	1 095	1 189	1 882	270	1 246	375	3 823	868	2 154	1 616	5 313	1 800	2 068
Denmark	182	:	_	719	94	130	245	258	599	732	1 860		260	260	257	417
Finland	24	:	129	129	489	526	160	179	436	551	35	203	256	340	1 090	1 151
France	5 432	:	4 494	6 268	2 618	4 965	9 6 6 7 8	8 772	3 756	5 042	8 859	12 491	10 208	12 751	5 673	11 414
Germany	4 667	:	5 995	7 920	2 666	4 992	5 269	7 651		5 930	5 987	9 871	5 336	6 212	5 408	6 550
Greece	306	:	100	120	40	40	739	739	•	34	1	96	153	555	47	49
Ireland	173	:	460	537	144	264	230	230	1 431	1 588	73	275	522	1 154	260	587
Italy	1 861	:	3 727	4 731	1 227	1 971	3 146	4 635	2 802	3 212	3 259	5 311		3 441	2 871	5 206
Netherlands	2 254	:	1 416	2 029	1 331	2 462	5 129	5 994	4 253	10 813	1 242	2 346	2 381		2 970	3 647
Portugal	404	:	279	3 581	66	232	519	833	196	414	243	856	408	551	683	748
Spain	1 986	:	3 970	6 241	3 362	6 371	3 575	4 390		2 775	2 854	5 153	1 340	1 996	823	1 786
Sweden	954	:	1 102	1 509	1 026	1 499	1 566		3 388		2 331	2 468	1 600	2 074	1 558	2 63(
United Kingdom	27 266	:	20 216	25 005	8 987	12 057	15 078	18 747		12 029	10 901	14 460	25 439	36 337	31 502	39 226
Unspecified	7	:		232	933	933	1	1	783	783	94	94	•	1	344	344
Other Western Europe	850		5 101	5 368	744	1 075	1 742	2 341	620	089	2 404	2 564	1 193	1 483	4 026	5 05(
Gibraltar	æ	:	1	1	•	6	1	1	1	1	1	•	1	1	1	
Iceland	•	:	ı	Т	•	1	1	1	1	'	1	'	'	'	33	(.,
Monaco	•	:	1	75	•	•	1	•	•	•	10	=======================================	1	•	•	
Norway	91	:	984	1 049	65	358	1 622	1 931	144	182	422	422	349	458	480	493
Switzerland	756	:	4 117	4 243	629	707	120	411	454	475	1 973	2 131	844	1 025	3 375	4 386
Unspecified	•	:	1	٠	•	•	•	•	22	22	1	•	•	•	167	167
North America	67 847		53 215	60 042	19 604	26 092	14 023	19 183	23 103	40 277	52 165	998 79	60 625	74 019	70 465	81 358
Canada	11 412	:	5 417	5 746	1 753	2 277	3 561	5 246	3 311	5 550	5 609	6 494	089 6	11 115		10 437
United States	56 435	:		54 297		23 815	10 463	13 938	19 792	34 727	46 556	56 372	50 944	62 903	60 953	70 921
Other developed																
countries	3 067	:	5 517	7 033	1 673	5 595	3 209	5 281	3 322	5 135	3 216	5 325		18 106	11 605	23 231
Australia	1 567	:	2 137	3 499	1 003	2 921	1 016	2 098	2 026	3 182	1 462	2 628	10 304	12 349	3 935	10 043
Israel	123	:	1	27	•	•	40	257	6	101	9	85	381	1 321		1 711
Japan	134	:	24	102	84	1 399	309	775	81	279	1 302	1 690	681	1 573		4 780
New Zealand	1 019	:	3 357	3 388	577	1 265	1 844	2 141	1 183	1 459	322	969	1 404	1 821	1 527	3 519
South Africa	225	:	1	17	6	6	-	10	23	115	70	226	279	622	2 604	3 179
I I I I I I I I I I I I I I I I I I I																

(Annex table B.7, cont'd)

	1989	6	1990	06	1991	1	1992	~7	1993	3	1994	4	1995	95	1996	9
Region/economy	Majority Total	Total	Majority Total	Total	Majority Total	Total	Majority	Total	Majority	Total	Majority	Total	Majority	Total	Majority	Total
Developing countries	1 879	:	7 785	18 177	1 425	10 659	8 460	32 174	9 648	48 670	9 297	60 983	9 166	52 746	18 443	83 396
Africa	20	:	244		73	129	290	422	701	1 446	4	2 014	75	2 475	543	2 784
North Africa	20	:	٠	٠	•	26	221	298	185	239	398	1 926	18	1 937	154	1 926
Algeria	1	:	1	•	1	•	1	99	1	23	1	1 300	ı	1 750	•	254
Egypt	1	:	1	•	1	99	125	133	180	211	6	124	18	162	84	1 288
Morocco	1	:	1	1	•	•	1	2	S	5	390	502	ı	25	70	84
Sudan	1	:	1	•	1	•	8	∞	1	٠	1	'	1	•	1	300
Tunisia	20	:	1	•	1	٠	88	88	1	•	•	•	1	•	٠	•
Other Africa	٠	:	244	254	73	7	69	125	516	1 207	49	88	28	537	389	858
Angola	•	:	1	10	1	•	1	•	•	•	•	6	•	1	•	•
Bostwana	1	:	1	•	1	•	∞	∞	1	٠	5	S	1	•	1	1
Central African																
Republic	1	:	1	1	1	1	1	•	4	4	1	'	1	'	1	1
Congo	1	:	1	•	1	•	1	•	1	٠	1	•	1	•	14	14
Côte d'Ivoire	1	:	1	•	1	•	21	21	1	•	1	•	1	_	2	2
Gabon	1	:	1	1	ı	•	1	•	1	•	1	•	1	139	1	1
Ghana	1	:	1	•	1	•	1	4	1	•	1	30	1	•	•	47
Guinea	1	:	1	1	ı	•	1	•	1	•	1	•	ı	39	1	1
Kenya	1	:	1	•	73	73	∞	∞	1	٠	1	•	1	•	1	25
Lesotho	1	:	1	•	1	•	1	•	1	٠	5	S	1	•	1	1
Madagascar	1	:	1	•	1	•	1	•	1	•	1	•	1	•	58	28
Mali	1	:	1	1	1	1	1	•	1	160	1	'	1	'	53	53
Mozambique	1	:	1	•	1	•	1	•	1	_	20	20	14	14	2	7
Namibia	1	:	1	•	1	•	1	•	1	٠	5	S	1	•	1	4
Nigeria	1	:	1	1	1	1	1	4	1	285	•	•	ı	95	•	252
Senegal	1	:	1	•	1	•	1	3	1	•	1	'	ı	•	1	137
Sierra Leone	1	:	1	•	1	•	1	•	34	34	∞	∞	ı	•	1	1
Swaziland	1	:	1	•	1	•	1	•	1	•	S	5	ı	136	1	1
Uganda	1	:	1	1	1	1	∞	53	1	1	1	1	1	1	•	•
United Republic																
of Tanzania	1	:	1	1	•	1	1	1	1	•	2	2	1	99	13	13
Zaire	1	:	1	1	•	1	∞	∞	1	•	1	'	1	1	247	247
Zambia	1	:	1	1	1	1	∞	∞	1	34	1	'	1	15	1	1
Zimbabwe	1	:	1	•	1	•	∞	∞	1	212	1	•	43	43	_	4
Unspecified	1	:	244	244	•	•	1	•	477	477	1	•	1	•	1	1
Latin America and																
the Caribbean	148	:	6 838	8 426	953	3 898	6 146	10 372	3 806	13 659	3 126	14 831	6 034	11 374	11 162	22 257
South America	13	:	5 774	6 156	646	2 850	4 648	8 238		8 419	2 452	10 648	4 877	7 894	8666	18 359
Argentina	1	:	5 267	5 541	110	280	3 917	4 843		2 050	669	2 177	1 505	2 346	2 399	3 907
Bolivia	1	:	7	7	1	•	1	14	1	9	1	2 551	704	802	1	571
Brazil	,	:	57	57	29	89	392	470	1 084	1 226	×		1 458	2.557	3 112	4 675

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	1909	6														
Region/economy	Majority Total	. Total	Majority Total	Total	Majority Total	Total	Majority	Total	Majority	Total	Majority	Total	Majority	Total	Majority	Total
Chile	13		397	467	131	283	10	2 295	2	275	817	1 377	183	1.036	1 116	2 135
Colombia	'	:	7	22	22	22	') ' 	-	-	23	85	50	152	1 672	1 672
Ecnador	'		, '	¦ '	¦ '	¦ '	1	'	'	, '	i &	80	22	9	'	
Giivana	'	:	17	1	•		,	45	•	•	3 ') '	¦ ') '	,	•
Peru	'	:	. '	,	•		324	324	584	903	445	2.628	899	688	1 042	1 225
Umenav	'	:	28	28	1		. I	, '			55		20	20	4	41
Venezuela	'	:	9	45	192	2 197	,	747	, 1	3 953	325	344	120	23.4	635	4 161
Trenonified		:	0	f	301	171	v	È 1	250	557	C4 C	<u> </u>	120		000	- -
Unspecified	'	:	•		C71	•	n		358		•	1	14/		_	
Other Latin America	125		1 063	0,770	702	1 040	1 400	122	101	070	763	103	157	7 400	1 164	2 000
and the Caribbean	CCI	:	1 003	777	207	1 040	1 499	21.0	105	0 240	1 /0	Co 1 t	/cr 1	2 400	† 01 1	0.000
Banamas E : :	'	:	41	4	1		616	616	CCI	717	ı	90	1	' (2 7	? ;
Barbados		:	1		1		1		4	4	1	•	1	×	40	40
Belize	•	:	1	1	1 (' (1 i	' (•	' (' [' (' ;	' 6	•	' [
Bermuda	•	:	546	554	10	10	55	180	1	139	47	52	241	1 028	1	447
Cayman Islands	•	:	1	•	1	•	1	•	•	•	1	•	10	10	•	100
Costa Rica	'	:	1	1	1	'	ı	1	'	1	16	16	75	93	22	89
Cuba	1	:	İ	1	1	1	1	1	1	20	•	1 100	10	15	40	43
Dominican Republic	1	:	1	1	1	1	1	1	'	1	1	9	1	'	47	62
El Salvador	'	:	1	1	•	•	1	1	•	•	•	1	40	40	•	
Grenada	1	:	1	•	1	1	İ	•	•	•	1	1	1	•	1	
Guatemala	'	:	ı	1	1	1	1	1	1	•	•	1	2	2	26	26
Guyana	•	:	1	17	1	100	1	•	•	•	1	•	1	•	•	
Jamaica	42	:	1	1	1	1	1	1	63	63	22	196	1	'	9	12
Martinique	'	:	1	4	1	•	1	•	•	•	1	•	1	•	•	
Mexico	93	:	503	1 681	297	813	529	797	183	3 947	295	2 326	503	1 435	791	2 847
Netherlands Antilles	'	:	1	1	•	•	1	1	1	•	216	216	•	1	•	'
Nicaragua	'	:	1	•	1	•	1	•	-	-	9	9	1	•	18	18
Panama	'	:	ı	•	•	•	1	•	•	•	71	71	259	260	•	•
Saint Kitts and Nevis	•	:	1	•	•	•	1	1	•	•	•	•	•	•	78	78
Trinidad and Tobago	•	:	1	•	•	•	ı	238	175	475	•	112	•	125	•	
Virgin Islands	'	:	ı	•	•	•	1	•	•	•	•	•	17	17	2	57
Unspecified	'	:	1	•	•	125	1	S	20	378	1	П	•	447	•	7
Developing Europe	•		22	108	20	158	127	127	1	_	6	9	88	227	•	•
Croatia	'	:	1	•	1	•	1	•	•	•	1	09	55	187	1	
Slovenia	•	:	1	•	•	•	127	127	1	1	6	6	34	34	•	
Former Yugoslavia	'	:	22	108	20	158	1	1	1	•	•	1	•	9	•	'
Asia	1 711	:	681	9 386	321	6 437	1 879	21 235	5 136	33 542	5 657	44 011	2 958	$38\ 610$	3 921	55 538
West Asia	318	:	31	208	18	198	184	4 251	29	1 289	•	1 395	273	2 400	31	5 528
Cyprus	•	:	•	•	•	•	1	1	•	•	1	1	1	•	31	1 431
Iran Islamic Remiblic of	J-C															

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(Annex table B.7, cont'd)

,	1989	6	1990	00	1991		1992	27	1993	3	1994	4	1995	5	1996	9
Region/economy	Majority Total	Total	Majority Total	Total	Majority Total	Total	Majority	Total	Majority	Total	Majority	Total	Majority	Total	Majority	Total
Jordan	'	:	,	•	•	'	1	216	'	'	,	'	'	'	•	152
Kuwait	•	:	•	•	•	51	•		•	•	•	1 100	•	•	•	42
Lebanon	'	:	'	1	•	ı	5	5	1	1	•	'	1	1	,	1
Oman	•	:	1	•	•	•	1	3 019	1	15	1		1	-	•	1 875
Qatar	1	:	1	•	1	1	1	1	1	300	1	281	1	1	1	1
Saudi Arabia	1	:	•	1	•	100	24	24	ı	∞	•	1	8	34	•	1 100
Turkey	318	:	31	208	18	47	93	402	29	961	•	13	265	265	•	542
United Arab Emirates	1	:	1	1	•	1	1	-	1	1	1	'	1	1	•	207
Yemen	•	:	•	1	1	1	•	1	•	1	•		•	2 100	•	1
Unspecified	•	:	1	•	1	•	63	63	1	•	1		1	•	•	•
Central Asia	•	:	•	•	٠	40	•	45	510	1 547	300	685	450	829	512	7 051
Azerbaijan	•	:	1	•	1	1	1	30	1	713	1	300	1	•	•	5 330
Kazakhstan	'	:	'	•	1	40	•	'	510	510	100	185	450	859	512	1 551
Turkmenistan	'	:	1	•	1	•	1	'	1	70	1	'	1	•	•	20
Uzbekistan	•	:	•	•	1	•	•	15	•	254	200	200	•	•	•	120
South, East and																
South- East Asia	1 392		650	9 178	304	6 198	1 695	16 939	4 598	30 707	5 357	41 932	2 234	35 352	3 378	42 959
Bangladesh	'	:	'	1	1	1	•	'	'	1	•	1	1	17	'	1
Brunei Darussalam	•	:	•	-	•	•	1	•	1	•	1	•	1	•	1	•
Cambodia	1	:	1	1	•	1	1	1	1	1	1	30	25	299	ı	63
China	11	:	1	1 938	16	2 988	8	5 197	639	13 458	916	20 126	989	11 993	602	15 533
Hong Kong	772	:	191	1 856	06	371	1 252	3 225	2 882	7 372	891	1 769	458	880	637	2 886
India	•	:	1	S	52	213	13	262	105	1 854	327	2 880	148	3 311	45	3 768
Indonesia	•	:	1	792	13	275	42	2 287	286	1 421	199	6 507	126	4 125	118	2 654
Korea, Democratic																
People's Republic of	1	:	1	223	1	712	31	1	34	1	1	'	102	1	122	1
Korea, Republic of	9	:	•	1	14	1	•	122	1	59	•	827	1	270	•	716
Lao People's																
Democratic Republic	•	:	•	•	•	•	1	•	10	10	1	'	1	•	1	7
Macau	•	:	1	9	•	•	1	•	1	•	1	38	1	•	1	•
Malaysia	203	:	72	842	57	1 004	14	1 197	139	541	215	393	16	821	40	4 497
Mongolia	1	:	1	1	1	1	1	•	ı	1	1	1	1	5	ı	1
Myanmar	1	:	1	2	1	5	ı	1	10	15	10	104	ı	632	•	134
Nepal	•	:	1	•	1	1	1	1	1	1	1	•	1	12	1	•
Pakistan	•	:	1	22	1	•	ı	8	5	5	1 730	2 146	ı	15	151	2 501
Philippines	325	:	1	2 576	55	123	68	276	30	629	577	1 824	177	2 966	926	2 708
Singapore	49	:	386	633	4	127	149	450	403	2 071	306	1 145	323	297	629	1 692
Sri Lanka	1	:	•	1	ī	1	•	1	12	24	59	61	43	2 873	19	19
Taiwan Province																
of China	13	:		93	4	145	•	822	22	165	32	581	•	860	21	2 410

(Annex table B.7, cont'd)

	1989	68	19	1990	1991	_	1992	2	1993	8	1994	4	1995	55	1996	9
Region/economy	Majority Total	Total	Majority Total	Total	Majority	Total	Majority	Total	Majority	Total	Majority	Total	Majority	Total	Majority	Total
Thailand	14	:	'	116	1	152	1	2 556	20	330	36	605	171	2 963	S	2 063
Viet Nam	'	:	•	10	'	49	11	227	1	2 329	'	2 894	10	1 975	S	1 300
Unspecified	'	:	'	•	1	33	ı	7	'	374	•	'	•	371	٠	13
The Pacific	•		'	æ	28	37	18	18	4	22	28	28	10	99	2 817	2 817
Borneo	'	:	1	,	ı	10	1	1	•	1	ı	1	1	1	1	,
Fiji	'	:	'	3	1	'	ı	•	'	'	•	'	•	•	٠	٠
Papua New Guinea	'	:	•	'	28	28	18	18	2	20	28	58	10	09	117	117
Solomon Islands	1	:	•	•	1	1	1	1	2	2	•	1	1	1	•	•
Unspecified	1	:	•	1	•	1	•	1	1	•	•	1	1	•	2 700	2 700
Central and	,				;			,		:	,					!
Eastern Europe	169		99	8 355	949	3 038	3 692	900	1 850	15 843	2 045	4 4 4	3 459	16 018	1 579	4 147
Albania	'	:	1	•	1	•	1	•	1	•	1	70	1	•	1	27
Belarus		:	1	•	•	•	•	•	1	7	1	•	1	•	1	10
Bulgaria	1	:	•	•	1	2	1	25	18	38	194	272	18	18	203	203
Czech Republic	'	:	'	,	387	1	•	1	21	160	740	1 009	112	2 330	19	157
Czechoslovakia (former)	r) -	:	•	5 159	1	696	750	1 222	•	•	•	•	•	•	•	•
Estonia	•	:	1	1	ı	•	1	42	1	10	6	6	41	41	1	13
Hungary	169	:	09	260	147	534	369	905	299	1 509	54	247	1 578	1 770	448	209
Latvia	•	:	1	1	ı	1	2	2	25	25	2	162	1	25	1	10
Lithuania	'	:	'	1	1	1	1	2	99	99	'	2	1	2	•	•
Macedonia, Republic of	- J	:	•	•	1	1	1	1	1	1	•	1	1	1	2	2
Moldova, Republic of	•	:	1	1	ı	•	1	•	1	•	ı	1	1	10	1	٠
Poland	1	:	•	522	398	748	2 545	3 017	728	1 112	851	1 167	1 518	2 037	788	1 167
Romania	1	:	•	-	14	51	1	53	650	720	21	209	24	98	18	117
Russian Federation	•	:	1	٠	1	-	1	272	50	12 155	174	1 698	140	9 480	1	1 686
Slovakia	1	:	1	•	1	1	1	•	B	27	1	39	æ	62	59	59
Former Soviet Union	1	:	•	2 114	8	733	26	452	1	1	•	1	1	1	•	•
Ukraine	'	:	'	1	1	1	1	18	1	23	'	20	25	157	•	88
Dual nationality	152	:	999	999	8	3	1	1	1	1	•	1	1	1	1	-
Multinational	•	:	•	•	140	140	•	•	•	•	•	•	•	•	248	545
Unknown country	1	:	1	•	•	1	•	1	358	1	1 344	1 357	308	•	124	959

Source: UNCTAD, based on data provided by KPMG.

Note: Majority refers to business combinations of which the investor acquires at least 50 per cent voting securities of the resulting business.

Annex table B.8. Cross-border merger and acquisition purchases, 1989-1996

(Millions of dollars)

Region/economy 1				0//1						,			CCCT			
	Majority Total	lotal	Majority	Total	Majority	Total	Majority	Total	Majority	Total	Majority	Total	Majority	Total	Majority	Total
World	123 645		115 637 150	50 050	49 062	85 279	73 769	121 894	66.812	162, 344	109 356	196 367	140 813	237 184	162,686	274 611
Developed countries	116 365	:	111 195 152	52, 201		20 000	58 824	99 168	59 292	134 895	100 223		132, 344	212,084	152 224	
Western Furone	895 29	: :	71 132	97 436	34 071	53 820	35 089		36.584	77 047	898 59	92	70 235	108 130	81 688	
European Union	61 720	: :		296 06	31 577	50 537	30 960	50 017	35 531	74 770	51 879	75 333	64 161	98 725		114 316
Austria	21	: :		509	128	198				94						
Belgium and																
Luxembourg	2 011	:	1 067	1 425	1 061	1 572	1 387	1 794	1 899	2 626	1 754	1 929	4 297	8 720	725	1 430
Denmark	477	: :	541	642	354	1 090	797	1 064	429		221	706			3 405	3 846
Finland	1 363	:	1 131	1 460	349	700	19	287	348	572	476	496	1 133	1 419		
France	18 767	:	16 842	22 312	11 174	15 904	8 858	14 204	6 818	10 684	6 140	11 497	8 079	13 318	7 921	11 514
Germany	7 587	:	7 038	15 975	4 680	7 501	4 106	905 9	3 264	6 731	8 523	13 191	15 536	22 616	12 111	27 380
Greece	100	:	1	٠	•	S	7	7	661	629	19	89	'	•	2	12
Ireland	1 024	:	774	861	484	602	427	527	576	591	2 311	2 431	1 189	1 695	3 682	3 869
Italy	1 789	:	3 673		2 119	4 799		7 642	571	5 902	1 184		2 983	3 805		3 046
Netherlands	3 707	:	2 287	4 166	3 754	6 672	1 397	6 038	4 696	12 004	2 484		5 970	9 620	16 113	19 987
Portugal	16	:	•	-	165	165	309	309	11	162	218	242	227	247	180	222
Spain	271	:	2 178		354	069	9/9	1 159	247	1 392	455	2 346	1 298	1 944	3 283	6 273
Sweden	1 837	:	9 434		840	2 310	691	1 091	1 703	3 385	1 033	2 067	3 020	6 6 1 9	626	1 455
United Kingdom	22 322	:	20 103	25 566	5 901	8 087	6 085	9 183	14 258	29 146	27 013	33 355	19 816	26 958	22 415	34 822
Unspecified	428	:	1	٠	215	240	1	6	33	189	•	•	•	53	•	6
Other Western Europe	5 848	:	5 901	6 470	2 494	3 283	4 130	5 180	1 053	2 277	13 489	17 311	6 074	9 404	9 349	15 531
Liechtenstein	161	:	•	15	53	53	•	•	•	1	•	14	2	82	317	317
Norway	571	:	1 234	1 473	85	228	320	1 140	214	377	482	1 026	1 431		3 044	4 937
Switzerland	5 116	:	4 667	4 981	2 356	3 002	3 810	4 040	839	1 900	13 007	16 271	4 641	5 788	5 988	10 277
North America	27 051	:	19 971	26 234	8 446	15 690	16 065	26 361	19 763	44 655	28 921	52 042	52 223	$80 \ 386$	296 09	87 496
Canada	4 323	:	3 956		1 349	2 498	1 680	3 562	4 465	6 849	4 185	8 570	12 652			22 150
United States	22 729	:	16 015	21 691	2 096	13 192	14 385	22 798	15 298	37 806	24 736	43 472	39 571	65 580	42 210	65 346
Other developed																
countries	21 745	:	$20 \ 092$		4 835	$10 \ 390$	7 670		2 946	13 194	5 934	18 324	6 887	23 568	695 6	21 797
Australia	6 490	:	1 842	2 084	819	1 039	1 595	2 733	1 171	2 966	1 400	3 856	4 870	5 569		5 437
Israel	٠	:	32	41	4	24	35	35	357	357	127	141	85	102	376	1 236
Japan	14 653	:	17 342	25 133	3 675	8 959	4 188	12 525	437	7 194	1 143	10 467	4 113	16 963	4 096	12 573
New Zealand	593	:	664	974	128	141	429	603	329	808	•	78	440	481	232	1 060
South Africa	6	:	211	298	208	226	1 423	1 713	652	1 870	3 264	3 783	378	453	575	1 491
Unspecified	•	:	•	•	1	-	•	•	•	•	•	•	•	•	•	•
Developing countries	4 799	:	4 442	7 548	1 605	5 199	14 546	22 319	7 378	26 858	9 183	32 365	8 463	24 464	10 264	32 827
Africa	4	:	140	140	104	156	1	306	41	26	74	74	1	78	708	708

(Annex table B.8, cont'd)

	1989		1220		1//1	1		,	2777	c	1777	-	2//1	,	0//1	2
Region/economy	Majority Total	Total	Majority Total	Fotal	Majority Total	Total	Majority	Total	Majority	Total	Majority	Total	Majority	Total	Majority	Total
North Africa	4	:	140	140	٠	52	ı	306	41	26	49	49	1	•	645	645
Egypt	•	:	ı	1	•	51	•	•	•	•	•		•		•	•
Libyan Arab																
Jamahiriya	40	:	1	140	•	_	•	306	5	5	•	1	1	1	•	'
Morocco	1	:	140	•	1	1	1	•	36	51	1	•	1	1	1	'
Other Africa	ı	:	ı	٠	104	104	•	•	•	•	25	25	•	78	63	63
Cameroon	ı	:	ı	•	1	1	•	•	•	•	25	25	•		•	
Central African																
Republic	1	:	1	•	1	1	•	•	•	•	•		•		63	63
Gabon	٠	:	ı	•	٠	104	•	•	•	•	•		•		•	
Gambia	•	:	1	1	104	'	'	'	'	'	'	'	1	78	•	'
Ghana	1	:	1	1	1	1	•	1	•	•	•	1	•	•	519	519
Latin America and																
the Caribbean	1 601	:	e	383	129	728	4 542	5 092	2 222	3 380	2 495	8 538	2 113	2 794	4 200	5 204
South America	720	:	ı	•	17	187	184	533	1 105	1 345	585	5 001	1 720	2 111	2 849	3 126
Argentina	•	:	ı	٠	•	'	'	'	57	57	42	96	837	902	404	414
Bolovia	1	:	1	٠	1	•	1	•	•	•	1	1 200	1		1	
Brazil	45	:	ı	٠	17	17	2	30	433	447	105	3 032	167	275	14	14
Chile	1	:	1	٠	1	170	182	435	609	609	16	249	929	763	2 172	2 210
Colombia	•	:	1	•	•	'	•	•	•	•	•	•	53	83	•	100
Peru	ı	:	1	1	1	ı	'	1	'	'	'	'	5	5	•	'
Suriname	1	:	1	1	1	1	1	1	1	4	1	1	1	•	1	•
Uruguay	ı	:	1	1	1	ı	'	1	'	'	'	4	'	∞	•	'
Venezuela	675	:	1	1	1	1	•	89	5	229	420	420	•	75	259	388
Other Latin America																
and the Caribbean	881	:	3	383	112	541	4 358	4 559	1 117	2 035	1 913	3 538	393	683	1351	2 078
Bahamas	1	:	3	3	1	1	•	1	•	1	•	'	•	31		701
Barbados	İ	:	1	1	1	1	•	1	1	1	•	∞	1	1	•	'
Belize	1	:	1	•	1	1	1	•	1	•	14	14	ı	18	1	'
Bermuda	1	:	1	•	107	107	1 500	1 500	269	922	9	182	299	414	424	434
Cayman Islands	1	:	1	٠	1	•	1	•	31	52	1	140	1	'	1	'
Dominican Republic	•	:	1	•	•	•	•	•	•	•	100	100	•	•	•	•
Grenada	1	:	1	•	1	1	1	1	•	1	1	4	1	•	1	
Mexico	881	:	1	1	1	79	2 828	2 999	357	587	1 784	3 063	94	169	717	733
Netherlands Antilles	ı	:	ı	9	1	1	•	30	32	474		14	•		•	
Panama	ı	:	ı	373	5	355	30	30	•	•	•	•	•	•	14	14
Saint Kitts and Nevis	•	:	1	•	•	1	•	•	•	•	'	2	•	'	•	'
Trinidad and Tobago	1	:	1	•	1	1	1	•	•	1	1	3	1	1	1	'
Vincin Inlanda																

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(Annex table B.8, cont'd)

	1989	89	19	1990	1991	1	1992	2	1993	3	1994	4	1995	35	1996	9
Region/economy N	Majority Total	7 Total	Majority Total	Total	Majority Total	Total	Majority	Total	Majority	Total	Majority	Total	Majority	Total	Majority	Total
Developing Europe	'	:	i	•	1	1	1	1	w	w	1	1	1	'	1	1
Malta	•	:	1	•	ı	•	1	•	5	5	1	•	1	•	•	٠
Asia	3159	:	4 299	7 024	1 372	4 315	10 003	16 921	5 110	23 417	6 614	23 753	6 350	21 591	5 356	26 915
West Asia	501	:	2 122	2 230	563	1 832	509	853	942	2 814	1 897	3 781	825	2 114	1096	4 729
Bahrain	450	:	1 500	1 500	ı	•	403	403	746	746	585	585	ı	1	347	347
Cyprus	'	:	1	•	34	34	1	13	•	10	1	_	1	•	•	٠
Iran, Islamic Republic of	- J	:	1	1	1	•	1	•	1	•	1	629	ı	•	ı	2 750
Kuwait	51	:	300	350	500	549	•	•	•	1	•	'	200	515	162	162
Lebanon	1	:	1	•	1	1	1	1	20	20	•	•	1	1	•	•
Oman	1	:	1	•	1	1	1	•	•	1	1	•	1	1	•	105
Saudi Arabia	'	:	311	311	1	1 190	32	32	177	1 321	1 258	2 056	325	1 535	175	585
Turkey	1	:	8	18	29	58	75	181	•	719	1	•	1	7	262	622
United Arab Emirates	'	:	т	51	1	1	1	225	•	1	54	479	1	56	151	158
Central Asia	•	:	•	•	1	•	•	٠	•	715	•	•	•	9	•	285
Azerbaijan	'	:	1	•	1	•	1	•	•	700	1	•	1	•	•	٠
Kazakhstan	'	:	1	•	1	•	1	•	•	9	1	•	1	•	•	285
Kyrgyzstan		:	1	•	ı	•	1	•	•	•	1	•	1	33	•	٠
Uzbekistan		:	•	٠	1	•	1	٠	1	6	•	•	1	æ	1	•
South, East and																
South- East Asia	2 658	:	2176	4 794	808	2 484	9 494	16 068	4 168	19 887	4 717	19 972	5 525	19 471	4 260	21 901
Bangladesh	'	:	1	•	ı	•	1	٠	•	•	1	•	ı	12	•	•
Brunei Darussalam	'	:	1	•	1	4	1	•	202	202	1	1	09	82	28	182
Cambodia	'	:	1	•	ı	•	1	٠	•	•	1	∞	ı	•	•	•
China	100	:	1	1 336	1	103	786	1 688	1 083	5 450	183	1 636	53	200	332	1 416
Hong Kong	1 137	:	756	1 132	427	852	7 885	9 559	2 023	8 388	719	3 414	1 255	3 921	1 062	3 642
India	'	:	1	•	270	270	1	422	•	•	16	619	159	201	•	•
Indonesia	'	:	•	187	58	28	32	106	173	247	390	519	141	615	504	614
Korea, Democratic																
People's Republic of	1	:	1	•	1	•	1	•	1	•	1	'	1	•	1	1
Korea, Republic of	423	:	9/	475	14	375	156	779	47	847	909	3 555	2 095	6 012	186	3 158
Macau	'	:	1	•	1	٠	1	٠	1	•	1	10	ı	•	1	ı
Malaysia	182	:	139	160	1	235	74	143	301	1 220	1 737	7 021	391	1 253	1 128	5 413
Myanmar	1	:	1	•	1	1	1	•	•	1	1	•	1	1	'	-
Nepal		:	•	•	1	•	1	•	1	•	1	•	1	•	1	3
Pakistan	1	:	1	•	1	1	1	107	1	•	1	•	1	•	1	1
Philippines		:	•	٠	12	18	44	51	1	•	•	433	1	11	1	2
Singapore	120	:	44	243	29	417	203	554	230	2 117	820	1 811	717	2 765	290	4 006
Sri Lanka	'	:	1	•	1	•	1	1 001	1	882	1	760	ı	821	ı	2 116
Taiwan Province of China		:	1 062	1 259	•	137	234	1 638	•	533	169	181	211	3 577	289	1 346
Thailand	269	:	•	•	•	15	80	20	110	•	<i>LLL</i>	5	182	2	12	2

(Annex table B.8, cont'd)

	1989	1990	1991		1992		1993		1994	_	1995	ıo	1996	
Region/economy	Majority Total	Majority Total Majority Total	Majority Total	Fotal	Majority Total	Total	Majority Total	Total	Majority Total	Total	Majority	Total	Majority	Total
Central and Eastern														
Europe	:			53	207	207	31	297	1	916	w	551	30	1 579
Czech Republic	:			1	•	•	•	1	•	1	•	1	1	700
Hungary	:	•			1	1	,	•	1	'	1	99	1	43
Latvia	:	•		1	1	1	18	18	1	1	1	1	1	'
Romania	:	•		1	1	1	•	266	•	916	1	435	1	836
Rusian Federation	:			53	1	•	•	14	1	'	5	1	30	•
Slovakia	:			1	•	•	14	1	•	1	•	1	1	•
Former Soviet Union	:	•		1	207	207	•	1	•	1	1	1	1	1
Ukraine	:			1	•	1	•	1	•	'	•	50	1	'
Dual nationality	2 461	- 210	0 105	105	•	•	1	•	1	•	1	•	06	06
Multinational Unknown	20	ı	1	22	192	200	110	294	ı	76	1	85	78	926

Source: UNCTAD, based on data provided by KPMG.

Note: Majority refers to business combinations of which the investor acquires at least 50 per cent voting securities of the resulting business.

Annex table B.9. Cross-border mergers and acquisitions, by industry, 1989-1996

(Millions of dollars)

	1989	_	1990	<u> </u>	199	1	7661	7	1993	3	1994	4	1995	5	1990	20
Sector/industry N	Majority Total	Total	Majority Total	Total	Majority	Total	Majority	Total	Majority	Total	Majority	Total	Majority	Total	Majority	Total
	123 645	:	115 637 159		49 062		73 769	121 894		162 344	109 356 196 367	196 367	140 813	237 184	162 686	274 611
Primary sector	4 507	:	5 826	9 555	1 628	2 994	803	3 246	1 568	24 308	3 762	9 588	3 477	22 215	6 577	23 408
Agriculture, forestry	-				ţ	ć	,	,		6	1	-	017	C	700	į
and fishing Agriculture and	CII	:	1 493	1 504	4	202	/0	997	213	787	1 906	1 920	410	190	390	4/1
horticulture	86	:	114	125	•	_	26	26	83	109	1 742	1 756	372	522	283	358
Forestry) '	:	1 379	1 379	47	301	3 =	166	130	185	164	2	i ') 0 0	113	113
Fishing	27	: :			: '	, '	'	4	, '			. 1	38	266	'	'
Mining and Petroleum	4 394	:	4 334	8 050	1 581	2 692	736	2 981	1 355	24 014	1 856	7 668	3 067	21 419	6 181	22 937
Extraction of mineral																
oil and natural gas	4 242	:	3 791	7 493	1 169	2 267	582	2 763	1 239	23 763	1 760	7 525	2 339	20 413	5 317	22 064
not elsewhere specified	152		543	557	412	425	154	218	116	251	96	143	728	1 006	864	873
Secondary sector	74 395	: :	57 651	84 843	29 813	47 011	43 766	64 026	36 739	63 758	299 99	66 667 109 164	68 465	105 664	59 515	96 128
Food, beverages and																
tobacco	11 098	:	9 874	13 528	3 626	5 157	12 358	13 561	6 552	9 548	11 376	16 092	13 865	16 363	6 505	10 151
Textile, leather and																
clothing	881	:	867	1 023	1 817	2 091	510	612	901	1 410	983	1 748	570	1 141	326	486
Textile industry	280	:	164	195	277	717	179	193	573	674	289	944	315	289	74	156
Manufacture of leather																
and leather goods	10	:	4	22	128	128	3	3	187	205	164	165	4	84	146	166
Footwear and																
clothing industries	591	:	669	908	1 112	1 246	328	416	141	531	530	639	251	468	106	164
Timber and wooden																
furniture industries	954	:	392	446	43	248	461	477	54	449	715	1 215	366	434	537	999
Manufacture of paper and																
paper products; printing																
and publishing	11 322	:	7 813	9 048	2 981	6 227	2 366	4 185	1 893	3 480	7 610	10 861	7 548	8 603	8 100	11 272
Coke, petroleum																
products and nuclear fuel	5 135	:	1 886	4 843	1 044	2 880	912		1 888	5 048	2 381		217	1 212	754	5 015
Mineral oil processing	4 605	:	628	3 420	1 044	4 898	747	3 872	70	1 862	1 744	8 554	21	1 013	289	4 783
Coal extraction and																
manufacture of solid fuel	530	:	1 258	1 423	•	985	165	315	1 818	3 186	637	637	196	199	29	232
Chemicals and	000		000				0		-	5	000	,	1			
chemical products	12 992	:	13 002	15 524	5 942	7 561	288	7 700	11 619	21 240	18 282	23 631	17 655	26 388	16 705	281 12
Chemical mousiny Production of	12 390	:	700 CI		934		7 704 107 C				10 139	72 404	17 303	/61 07	10 /93	774 07
man made fibres	206			,	•	,			,		,	,	6			ľ

(Annex table B.9, cont'd)

Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contributions Processing contribu		1989	6	1990	0	1991	1	1992	2	1993	3	1994	4	1995	5	1996	90
tropher 3 0.93 8.45 1 249 1 306 1 403 655 888 599 816 2 203 3 226 2 470 3 059 2 303 ucts 3 597 4 967 5 557 967 1 453 5 613 6 393 912 2 251 2 224 9 258 2 470 3 059 2 300 2 623 3 719 4 641 2 683 3 719 4 641 2 683 3 719 4 641 2 683 3 719 6 928 5 681 10711 11 91 1 4 328 4 568 of meaning 1 578 1 101 1 259 1 24 1 88 3 09 2 284 3 518 1 14 2 284 3 518 1 14 1 22 2 88 7 38 2 284 3 518 1 14 1 22 3 38 7 38 3 284 3 88 7 44 2 88 3 50 9 60 1 14 3 88 2 284 3 50 9 20 1 14 1 14 2 14 1 14 2 14 1 14 2 14 1 14		fajority	Total	Majority	Total	Majority	Total	Majority	Total	Majority	Total	Majority		Majority	Total	Majority	
10 10 10 10 10 10 10 10	Processing of rubber																
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4 708 2 091 2 832 526 1 005 1 908 3166 2 224 8 181 2 350 4 596 3 250 6 438 9 035 11 1 851 1 87 335 481 566 194 296 1 611 1 621 825 834 181 190 1130 1 4 388 2 343 3 054 1 973 3 353 1 341 1 677 2 454 3 927 4 895 11 268 13 185 12 131 14 4 360 2 335 3 044 1 973 3 349 1 231 1 802 1 677 2 415 3 905 4 673 10 867 12 627 11 433 14 2 8 8 10 - - 4 106 112 - 39 22 222 401 558 698 3 51 4 4 401 539 664 304 1177 253 308 22 222 441 23 22 242 392 442 <td>Owning and dealing in</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Owning and dealing in																
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es 4360 2335 3.044 1973 3.349 1231 1802 1677 2415 3905 4673 10.867 12.627 11433 14	Business services	4 388	:	2 343	3 054	1 973		1 337	1 914	1 677				11 268	13 185		14 914
28 8 10 - 4 106 112 - 39 22 222 401 558 698 361 242 295 344 401 539 664 304 1177 253 306 233 242 392 392 351 238 291 311 368 119 189 290 1162 253 283 14 23 222 170 4 4 33 33 420 475 14 15 - 13 - 170 170 170	Business services	4 360	:	2 335	3 044	1 973		1 231	1 802	1 677		3 905			12 627		14 112
28 8 10 - 4 106 112 - 39 22 222 401 558 698 698 361 242 295 344 401 539 664 304 1177 253 306 233 242 392 392 351 238 291 311 368 119 189 290 1162 253 283 14 23 222 170 4 4 33 33 420 475 14 15 - 13 - 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170	Research and																
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351 238 291 311 368 119 189 290 1162 253 283 14 23 222 10 4 4 4 33 33 420 475 14 15 - 13 - 170 1170 4 170 219 219	Public Administration	361	:	242	295	344	401	539	664	304	1 177	253	306	233	242	392	396
10 4 4 33 33 420 475 14 15 - 13 - 170 initistration, lefence subsory urity 170 219 219 -	Sanitary services	351	:	238	291	311	368	119	189	290	1 162	253	283	14	23	222	222
	Education	10	:	4	4	33	33	420	475	14	15	1	13	1	•	170	174
ce ry	Public administration,																
ry - 10 219	national defence																
	and compulsory																
	social security	•	:	1	•	1	•	1	•	•	•	1	10	219	219	1	•

(Annex table B.9, cont'd)

	1989		1990	0	1991	1	1992		1993	3	1994	4	1995	5	1996	9
Sector/industry	Majority '	Total	Majority Total Majority Tota	Total	Majority Total	Total	Majority	Total	Majority Total	Total	Majority	Total	Majority	Total	Majority	Total
Medical and other health																
services: veterinary																
services	474	:	296	312	92	92	14	16	173	173	09	261	884	1 188	1 092	5 083
Other services	4100	:	9456	6116	086	2300	1960	3069	1817	3279	1371	5167	8273	13560	6221	8586
Recreational services																
and other cultural																
services	4 045	:	9 341	6	797	2 106	1 803	2 889	1 708	3 163	1 020	4 724	7 577	12 766	5 808	8 104
Personal services	33	:	101	101	146	157	16	29	66	66	326	349	684	989	122	171
Commission agents	•	:	•	•	•	•	•	•	•	•	•	1	•	12	263	264
Repair of consumer																
goods and vehicles	21	:	14	14	10	10	1	•	1	7	∞	6	7	7	3	∞
Dealing in scrap and																
waste materials	•	:	•	29	27	27	91	101	10	10	17	82	5	68	25	29
Other services provided																
to the general public	1	:	•	•	•	1	50	50	•	•	•	33	•	•	•	10

Source: UNCTAD, based on data provided by KPMG.

Note: Majority refers to business combinations of which the investor acquires at least 50 per cent voting securities of the resulting business.

Annex table B.10. Bilateral investment treaties concluded as of 1 January 1997, by partner country/region

]	Develope	d counti			ng countries	Central and
Economy	Total	Western Europe	United States	Japan	Other developed countries	Within their region	Outside their region	Eastern European countries
Albania	24	10	1	_	1	1	5	6
Algeria	12	5	_	_	-	1	5	1
Antigua and	1	1	_	_	-	-	-	-
Barbuda								
Argentina	44	13	1	_	3	9	10	8
Armenia	16	4	1	_	-	-	7	4
Australia	15	-	_	_	-	-	10	5
Austria	26	-	_	_	1	1	12	12
Azerbaijan	7	2	_	_	_	-	2	3
Bahrain	1	1	_	_	_	-	-	-
Bangladesh	13	6	1	_	_	5	_	1
Barbados	7	4	_	_	1	2	_	- -
Belarus	19	8	1	_	-	1	4	5
Belgium and	40	-	-	_	_	1	28	11
Luxembourg	40					•	20	11
Belize	1	1	_	_	_	_	_	_
Benin	3	3	_	_	_	_	_	_
Bolivia	18	10	_	_	_	5	2	1
Bosnia and	3	-	_	_	<u>-</u>	1	2	1
Herzegovina	3	-	-	-	-	1	2	-
Brazil	11	0				2	1	
		8	1	-	- 1	2	1	- 11
Bulgaria	37	14	1	-	1	3	7	11
Burkina Faso	3	2	-	-	-	1	-	-
Burundi	3	3	-	-	-	-	-	-
Cambodia	3	1	-	-	-	2	-	-
Cameroon	7	5	1	-	-	-	-	1
Canada	17	-	-	-	1	-	9	7
Cape Verde	5	5	-	-	-	-	-	-
Central African Republic	3	3	-	-	-	-	-	-
Chad	4	4	-	-	-	-	-	-
Chile	36	13	-	-	1	13	5	4
China	80	16	-	1	3	21	18	21
Colombia	4	2	-	-	-	2	-	-
Congo	6	5	1	-	-	-	-	-
Costa Rica	5	4	-	-	-	1	-	-
Côte d'Ivoire	7	7	-	-	-	-	-	-
Croatia	17	3	1	-	-	2	5	6
Cuba	19	6	-	-	1	6	3	3
Cyprus	7	2	_	_	-	-	-	5
Czechoslovakia ^a	21	14	1	_	2	-	4	-
Czech Republic	30	2	-	-	1	2	12	13
Denmark	38	-	_	_	1	-	23	14
Dominica	2	2	_	_	_	-	_	-
Dominican	2	2	_	_	_	-	_	_
Republic	-	-						
Ecuador	17	5	1		1	6	2	2
Egypt	43	12	1	1	1	5	13	10
El Salvador	6	3	-	1	1	3	-	-

(Annex table B.10, cont'd)

			Develope	d counti			ng countries	Central and
Economy	Total	Western Europe	United States	Japan	Other developed countries	Within their region	Outside their region	Eastern European countries
Equatorial	1	1	_	_	-	_	_	-
Guinea								
Eritrea	1	1	_	_	_	-	_	-
Estonia	19	11	1	_	1	_	1	5
Ethiopia	3	2	-	_	-	_	1	_
Finland	30	-	_	_	_	_	15	15
France	74	_	_	_	2	2	52	18
Gabon	7	5	_	_	-	1	-	1
Gambia	1	1	_	_	_	-	-	-
Georgia	16	4	1	_	1	-	3	7
Germany	111	2	_	_	2	4	84	19
Ghana	9	5	_	_	-	-	2	2
Greece	22	1	_	_	_	-	9	12
Grenada	2	1	1	_	_	-	-	-
Guatemala	1	-	-	_	_	1	-	-
Guinea	6	3	_	_	_	1	2	_
Guinea-Bissau	1	1	_	_	_	_	-	-
Guyana	2	2	_	_	_	-	-	-
Haiti	4	3	1	_	_	-	_	_
Honduras	6	4	1	_	_	1	_	_
Hong Kong	11	9	-	_	2	-	_	_
Hungary	43	15	_	_	3	-	15	10
Iceland	1	-	_	_	-	-	1	-
India	14	5	_	_	1	2	-	6
Indonesia	35	13	_	_	1	9	4	8
Iran	15	1	_	_	-	4	1	9
(Islamic Republic of)	10	-				·	•	
Iraq	2	-	-	-	-	1	1	-
Israel	17	2	-	-	-	3	1	11
Italy	53	-	-	-	-	2	39	12
Jamaica	9	6	1	-	-	1	1	-
Japan	4	-	-	-	-	3	1	-
Jordan	13	5	-	-	-	4	3	1
Kazakhstan	24	7	1	-	1	-	8	7
Kenya	2	2	-	-	-	-	-	-
Kuwait	22	5	-	-	-	5	5	7
Kyrgyzstan	12	2	1	-	-	-	6	3
Lao People's	14	5	-	-	1	7	-	1
Democratic Republic								
Latvia	25	14	1	-	2	-	3	5
Lebanon	6	1	-	-	-	1	1	3
Lesotho	2	2	-	-	-	-	-	-
Liberia	4	4	-	-	-	-	-	-
Libyan Arab Jamahiriya	4	-	-	-	-	3	1	-
Lithuania	28	13	1	-	1	-	6	7
Madagascar	5	5	-	-	-	-	-	-
Malawi	2	1	-	-	-	-	1	-
Malaysia	40	13	-	-	-	11	8	8

/...

(Annex table B.10, cont'd)

			Develope	d count			g countries	Central and
		Western	United		Other developed	Within their	Outside	Eastern European
Economy	Total	Europe	States	Japan	countries	region	their region	countries
Mali	4	2	_	_	_	2	_	_
Malta	10	7	_	_	_	-	2	1
Mauritania	5	3	_	_	_	1	-	1
Mauritius	4	3	_	_	_	_	1	_
Mexico	3	2			_	1	1	
Mongolia	19	7	1	_	-	5	_	6
Morocco	28	13	1	_	-	4	5	5
Namibia	20	2	1	_	-	7	3	3
Nepal	3	3	_	_	-	_	_	_
Netherlands	58		-	-	- 1	3	40	14
		-	-	-	1			14
New Zealand	2	-	- 1	-	-	2	-	-
Nicaragua	7	4	1	-	-	1	1	-
Niger	3	2	-	-	-	1	-	-
Nigeria	3	3	-	-	-	-	_	-
Norway	15	-	-	-	-	-	7	8
Oman	9	6	-	-	-	1	2	-
Pakistan	20	7				7	1	5
Panama	8	4	1	-	1	2	-	-
Papua New Guinea	4	2	-	-	1	1	-	-
Paraguay	17	9	-	-	-	4	2	2
Peru	25	12	-	-	1	6	4	2
Philippines	16	6	-	-	2	5	1	2
Poland	58	16	1	-	3	4	19	15
Portugal	22	1	-	_	-	1	12	8
Qatar	5	2	-	_	-	_	2	1
Republic of Korea Republic of	49	14	-	-	1	13	10	11
Moldova	16	5	1	-	_	_	4	6
Romania Russian	82	20	1	-	3	3	40	15
Federation	21	5	1	_	-	1	7	7
Rwanda	3	3	_	_	_	_	_	<u>-</u>
Saint Lucia	2	2	_	_	_	_	_	_
Saint Vincent and the Grenadines	1	1	-	-	-	-	-	-
Saudi Arabia	4	2	-	_	-	1	1	_
Senegal	11	6	1	_	_	1	2	1
Sierra Leone	2	2	_	_	_	_	_	_
Singapore	15	6	_	_	_	7	_	2
Slovakia	15	1	_	_	_	3	1	10
Slovenia	11	5	_	_	_	1	1	4
Somalia	1	1	_	_	_	_	-	_
South Africa	10	7			1	_	2	
Spain	37	-	_	_	1	_	28	9
Sri Lanka	21	11	1	1	-	6	1	1
Sudan	6	4	1	1	-	1	1	1
Suriname	0 1	-	-	-	-	1	1	1
Swaziland	2	2	-	-		-	1	-
Swaziiand Sweden	35		-	-	-	-	-	11
		-	-	-	- 1	2	22	11
Switzerland	81	-	-	-	1	4	61	15

(Annex table B.10, cont'd)

]	Develope	d counti	ries	Developin	g countries	Central and
		Western	United		Other developed	Within their	Outside	Eastern European
Economy	Total	Europe	States	Japan	countries	region	their region	countries
Syrian Arab Republic	4	3	-	-	-	1	-	-
Taiwan Province of China	5	-	-	-	-	2	2	1
Tajikistan	11	_	1	_	-	-	8	2
Tanzania	4	4	-	_	_	_	-	_
Thailand	20	5	-	_	_	9	1	5
The former	7	2	-	_	_	3	1	1
Yugoslav Republic of Macedonia	:							
Togo Trinidad and	3	2	-	-	-	1	-	-
	4	2	1		1			
Tobago Tunisia	•	13	1	-	1	10	10	-
	38 42	10	1	1	- 1	10 7	10 4	4
Turkey Turkmenistan	42 14		1	1	1	•		18
	14 4	2 3	-	-	1	6 1	1	4
Uganda Ukraine	38		1	-	1	1	12	- 11
United Arab	38 14	12 4	1	-	1	3	13 3	11
Emirates		4	-	-	-	-		4
United Kingdom	87	-	-	-	1	2	63	21
United States	39	-	-	-	-	-	21	18
Uruguay	13	8	-	-	1	-	1	3
USSR^b	15	11	-	-	1	-	3	-
Uzbekistan	23	7	1	-	-	-	6	9
Venezuela	20	9	-	-	1	8	-	2
Viet Nam	32	10	-	-	1	8	2	11
Yemen	8	5	-	-	-	2	1	-
Yugoslavia	16	5	-	-	-	1	4	6
Zaire	7	5	1	-	-	-	1	-
Zambia	3	2	-	-	-	-	1	-
Zimbabwe	7	5	_	_	-	_	2	_

Source: UNCTAD, database on BITs.

Note: Western Europe: European Union countries, Iceland, Norway and Switzerland.

Other developed: Canada, Australia, Israel, New Zealand and South Africa.

Developing country regions: Africa, Latin America and the Caribbean, Asia (West Asia, South, East and South-East Asia and the Pacific) and developing Europe (Malta and countries of former Yugoslavia). Central and Eastern European countries include countries of the former Soviet Union.

^a The Czech Republic and the Slovak Republic have upheld all bilateral treaties for the promotion and protection of FDI concluded by Czechoslovakia.

^b All international obligations undertaken by the former Soviet Union have been assumed by the successor States.

Annex C. Major instruments of foreign portfolio equity investment

1. Venture capital funds

The rationale for venture capital is an imbalance created by an inadequate supply of capital on appropriate terms from existing financial institutions on the one hand, and a significant demand for funding for new or high risk ventures with prospects for high growth and profitability on the other. Venture capital financing provides early-stage financing, as well as financing for the expansion of established companies. Venture capitalists provide equity-type financing with a view towards participating in the high returns achieved by successful new ventures with high growth potential, particularly in the form of capital gains. The objective of investing only in ventures with high potential returns means that venture capital investors must screen closely investment proposals. An evaluation of venture capital investments typically focuses on whether entrepreneurs have credible business plans and whether they have the ability to implement them successfully.

Venture capital investing typically involves the participation of a venture capital institution in the investee company. This is motivated both by the need to protect the venture capital institution's investment against downside risks, particularly because investors cannot simply sell out their investments (in unlisted shares) if performance is poor, and by the aim of adding value to the investee company. The latter is accomplished by contributing the venture capital firm's experience and contacts to such areas as business strategy, management organization and processes, financial planning and control, and investor relations. In this respect, venture capital investment is very similar to FDI, with the difference, however, that venture capital investors have a predetermined objective, as well as (often) a time horizon, for divestment from the venture.

The venture capital industry has increasingly distinguished between the financing needs of companies at different stages of corporate development. These can be categorized as follows: early-stage financing; later-stage financing; and special situations.

(a) Early-stage financing

Venture capital, in its original concept, is intended to meet the needs of new ventures for seed capital and start-up financing. Seed capital is funding for the research and development of new products or production technologies before the setting up of commercial scale production. The amount of funds for this phase is generally very limited, but the investment lead-time is long, the risk (probability) of failure is very large, and later financing requirements, both for production and marketing, may be considerable. Start-up financing is funding for the setting-up of a new business, and involves investment in fixed assets and working capital, for which the entrepreneur does not have sufficient resources.

(b) Later-stage financing

Some characteristic types of development capital include expansion finance and replacement financing. Expansion finance provides working capital or fixed assets needed by unlisted companies to grow through entering new markets, developing new products or introducing improved technological processes. Replacement financing is funding for entrepreneurs to purchase shares of their associates in the venture who wish to realize all or part of their investment without a stock market listing.

(c) Special situations

Venture capital has also been directed to financing certain special needs of mature companies, often parts of large corporations, that can yield attractive returns. These include management buyouts and management buy-ins, which involve the financing of acquisition of ownership and control from an existing business by a new management team, either from within or from outside the company. Turnaround financing is also included in this category. This type of financing is provided by some venture capital institutions to assist companies that have a poor record of performance but which are basically sound and have clear opportunities for improvement.

The final and critical phase of the venture capital investment cycle is to manage the divestment or exit from the investee firm. Since realising a substantial capital gain is essential to achieve high investment returns, determining and achieving the timing and conditions of the sale of investments are key elements of the venture capital process. There are three basic exit routes:

- Flotation of the investee company through an initial public offering of shares to the public, either through a stock exchange or in the over-the-counter market.
- Secondary or "trade sale" of the venture capital investor's shares to another investor or company. This is probably the most commonly used route, although in larger, developed countries the transaction is often initiated by the acquiring investor who has identified the investee company as having a good strategic fit with its own operations.
- Repurchase of the venture capital institution's shares by the entrepreneur or the investee firm. The original contractual agreements between the investors may provide for this possibility, and define the conditions for the buy back of shares.

The successes and failures of venture-capital funds to date point to some important lessons for the wider use of this type of financing mechanism in the future. The key lessons are the following:

- Venture capital funds need to be able to identify a substantial number of firms offering high returns on investment (at least 25 per cent). The market for equity financing depends on several conditions, including positive macroeconomic conditions to stimulate investment in the setting up or expansion of new ventures and the existence of entrepreneurs with adequate management skills, business experience and understanding of the "equity culture" necessary for a partnership between promoter and outside investors. The latter means a willingness to provide financial information, to respect the contractual rights of all shareholders, and to allow some degree of external control over the business.
- The regulatory framework in the recipient country should provide investors with an
 attractive tax regime, allowing a substantial proportion of the appreciation in value of the
 investee firms to be transferred to investors, and legal transparency and freedom from
 exchange-control restrictions.
- The limited choice of "exit" options for divesting investments makes it difficult in many developing countries to realize the substantial capital gains needed to achieve high returns. Experience indicates that, where local stock markets are inactive (annual turnover of less than \$3 billion), stock prices are low (valued at less than 10 times their earnings per share), or are hindered by regulatory constraints, capital gains tend to be lower than in countries with an active and liquid capital market. While there has been a rapid development of stock markets in developing countries in recent years, it takes time before young stock exchanges have the depth and liquidity to absorb the flotation of new ventures. However, the flow of venture capital funding into Central and Eastern Europe shows that international investors have been prepared to invest in new ventures there in anticipation of the evolution of local stock markets into viable exit mechanisms.

The quality of management is critical for the success of venture capital institutions. Venture
capital managers play a key role in identifying and evaluating investment propositions,
structuring and negotiating deals and managing and divesting the portfolio of equity
holdings.

Venture capital funds are a form of private equity placements that do not necessarily require the existence of a stock exchange as an exit mechanism. As such, venture capital funds can channel risk capital to lower income countries provided that the ventures have a sufficiently high growth potential.

2. International equity investment funds

Investment funds can be managed or unmanaged. Managed funds actively trade their portfolio of securities, the composition of which will change over time. Unmanaged funds invest in a fixed portfolio of securities which does not change over the life of the fund. Among the various portfolio investment instruments, managed international investment funds have become the most popular vehicle for portfolio equity investment in emerging markets. Investment funds can also be divided into closed-end and open-end funds (commonly referred to as mutual funds in the United States or unit investment trusts in the United Kingdom). Closed-end funds are distinguished from open-end funds in that they issue a fixed number of shares at the time of their initial public offering. The number of shares offered by open-end funds is variable. New shares are issued when new investors wish to invest in the fund (or existing investors increase their investment) by subscribing for new shares, and shares are redeemed by the fund upon demand by the fund's investors.

In order to meet redemption requests, open-end funds can be forced to sell a portion of the portfolio of securities in which they have invested quickly. This can create downward pressure on securities prices in the market in which such sales take place and thereby contribute to equity price volatility in that market for purely external reasons. Open-end funds will therefore tend to invest more heavily in larger companies for which there would exist a relatively liquid market, and in more mature equity markets which can provide adequate liquidity.

Closed-end funds are not required to meet redemption requests (investors in these funds must find a buyer for the shares in the secondary market), and do not therefore need to be able to liquidate their investments upon short notice. Consequently, closed-end country funds can be expected to take a longer-term view, and they are able to invest in less liquid instruments and in less developed equity markets. They are also less likely to contribute to market volatility which can result from the large, sudden sales of securities which can occur with open-end funds. This explains the higher turnover ratios of open-end as opposed to closed-end funds, and why closed-end funds are, in general, more suited to investments in less developed (and therefore less liquid) equity markets. However, closed-end funds will, of course, actively adjust their portfolio of investments in such a way as to optimize the overall return on their portfolio in accordance with the fund's stated investment objectives (the fund may seek income growth, capital appreciation or balanced growth, and some will pursue higher returns more aggressively than others). There is, therefore, no guarantee that they will never contribute to security price volatility in the equity markets where they invest. Emerging market country funds are most often closed-end funds, while regional and global emerging market funds are often open-end funds.

Investment funds can be organized either as a corporation or a business trust. In most of Europe and Japan, the trust structure is more common, contrary to the United States where the corporate structure is more common. This is because the majority of investment companies in the United States were closed-end funds (which tend to adopt the corporate form) in 1940 when the

United States Investment Act was enacted. With the recent burgeoning in the number and total net assets of open-end funds in the United States, the trust form has become increasingly common.

Investment funds can be private or public. Public funds, which include most closed-end funds, are listed on one or more stock exchange (most often the exchanges in New York, London, Hong Kong or Ireland), while private funds are not listed and are not available to the general public. It can be advantageous for the fund to be publicly listed because some institutional investors are prohibited by home country prudential regulations from investing in unlisted companies. Closed-end funds can also be either diversified or non-diversified under the United States regulatory framework. Diversified funds face limits on the percentage of total assets which can be invested in a single security, whereas undiversified funds face no such restriction. This does not, however, preclude the undiversified fund from adopting such limits on a voluntary basis for prudential reasons. An undiversified fund will, nevertheless, tend to be relatively more risky because of the potentially higher degree of concentration in its investment portfolio.

From the investor's point of view, one disadvantage of closed-end funds is that their prices often do not reflect the value of the underlying portfolio of securities in which the fund invests. This is partly because their investment portfolio may concentrate relatively heavily in less liquid instruments in which trading activity is light. The price at which these securities are valued may not, therefore, reflect accurately the true value that would be realized should the securities be liquidated. A common finding is that country fund returns are somewhat correlated with returns on the market in which they are listed, and are less than perfectly correlated with the returns of their underlying assets. This diminishes diversification benefits.

From the perspective of the emerging markets, the fact that prices of shares of closed-end funds can vary independently of the prices of their underlying assets is an advantage. This offers an insulating property when the local market in which the fund is invested is illiquid. Country funds can also provide indirect benefits to emerging markets by applying pressure for improvement of disclosure and accounting standards, as well as greater transparency. They can also lend pressure for the upgrading of services, such as clearance, settlement and depository systems. In addition, they can spur the growth of local credit-rating agencies. Many institutional investors are limited to investing in high-quality securities and press for growth of local credit-rating agencies as well. Apart from this, more direct benefits can be reaped through the provision of training services by investment funds that are often willing to participate in local training programmes.

It does not appear that a country's stage of development plays a role in determining where country funds are established. However, emerging markets at an early stage of their development generally allow foreign investment through closed-end funds, which are more suitable for less liquid markets. American depositary receipts (ADRs) and global depositary receipts (GDRs) (discussed below), as well convertible bonds and bonds with equity warrants, are more sophisticated forms of investment and appear to be accessible only to a small number of well known companies in the more advanced emerging markets.

3. American depositary receipts and global depositary receipts

An ADR is generally created by the deposit of the securities of a non-United States company with a custodian bank in the country of incorporation of the issuing company. The custodian bank informs the depositary in the United States that the ADRs can be issued. ADRs are United States dollar denominated and are traded in the same way as are the securities of United States companies. The ADR holder is entitled to the same rights and advantages as owners of the underlying securities in the home country. Several variations on ADRs have developed over time to meet more specialized

demands in different markets. One such variation is the GDR which are identical in structure to an ADR, the only difference being that they can be traded in more than one currency and within as well as outside the United States.

There are three types of ADRs:

- Unsponsored ADRs are issued without any formal agreement between the issuing company and the depositary, although the issuing company must consent to the creation of the ADR facility. With unsponsored ADRs, certain costs, including those associated with disbursement of dividends, are borne by the investor. For the issuing company, they provide a relatively inexpensive method of accessing the United States capital markets (especially because they are also exempt from most reporting requirements of the Securities and Exchange Commission).
- Sponsored ADRs are created by a single depositary which is appointed by the issuing company under rules provided in a deposit agreement. There are two broad types of sponsored ADRs -- those that are restricted with respect to the type of buyer which is allowed, and are therefore privately placed; and those that are unrestricted with respect to buyer and are publicly placed and traded. Restricted ADRs (RADRs) are allowed to be placed only among selected accredited investors and face restrictions on their resale. As these are not issued to the general public, they are exempt from reporting requirements of the Securities and Exchange Commission and are not even registered with it. Restricted ADR issues are sometimes issued by companies that seek to gain some visibility and perhaps experience in the United States capital markets before making an unrestricted issue.
- Unrestricted ADRs (URADRs) are issued to and traded by the general investing public in United States capital markets. There are three classes of URADR, each increasingly demanding in terms of reporting requirements to the Securities and Exchange Commission, but also increasingly attractive in terms of degree of visibility provided. Level I URADRs are exempt from the requirement that the issuing company conform their financial statistics to United States Generally Accepted Accounting Principles (GAAP), as well as from full reporting requirements of the Securities and Exchange Commission. They are also therefore relatively low cost. Level II URADRs are generally issued by companies that wish to be listed on one of the United States national exchanges. The issuing company must meet the Securities and Exchange Commission's full disclosure requirements, their financial statements must conform to United States GAAP and the company must meet the listing requirements of the relevant exchange. They are therefore more costly for the issuing company, but the public listing allows much higher visibility and makes the facility more attractive to potential investors. Level III URADRs are issued by companies which seek to raise capital in the United States securities markets by making a public offering of their securities. They must also make full Securities and Exchange Commission disclosure, conform to United States GAAP and meet relevant exchange requirements, and provide the highest degree of visibility of any ADR.

Companies that apply for either listing or public issue of securities on the national exchanges of the United States must meet exchange requirements. These include specific minimum requirements with respect to the size of total assets, earnings and/or shareholders equity. These requirements, along with the reporting requirements, serve to make it difficult for small capitalization companies of emerging markets to issue either Level II or Level III URADRs. A large number of ADRs are therefore offered through private placement, especially under Rule 144A, where activity is reported to be strong. Rule 144A, passed by the Securities and Exchange Commission in 1990, eased restrictions on the resale by qualified institutional buyers of private ADR issues amongst themselves once these

issues were made under this rule. Typical ADR issues appear to be relatively large. Emerging market ADR issuers tend to be large domestic companies with considerable financial resources and high international visibility. Relatively small ADR issues appear to measure in the range of between \$15 million and \$80 million, while many mid-sized issues fall within the range of \$100 million to \$300 million. Several exceptionally large issues have exceeded \$1 billion in size.

From the investor's point of view, ADRs lower the cost of trading non-United States companies' securities. Trades are settled in the United States within five working days (or less, given the increasingly heavy volume of trading in ADRs), whereas trades overseas can take a much longer time and raise significantly settlement risk. The depositary provides both settlement and clearance services. As the facilities are traded in the United States, there is a much lower information search cost, and the problems of unfamiliarity with foreign markets and foreign laws, regulations and trading practices are overcome. The difficulties associated with locating a broker and/or custodian in the foreign market and the fees charged for these services are also avoided, and so are the obstacles that foreign languages may present. A major advantage of ADRs for the investor is that dividends are paid promptly and in United States dollars. Furthermore, the facilities are registered in the United States so that some assurance is provided to the investor with respect to the protection of ownership rights. These instruments also obviate the need to transport physically securities between markets. Communication services are also provided by the depositary, including provision of periodic reports on the issuing company (in English) in a format familiar to United States investors. Important information pertinent to the issuing company is transmitted to the investor by the depositary. Together, these advantages provide an incentive for investors in the United States capital markets to invest in the equity of emerging markets via ADRs.

For the issuing company, the main costs of ADRs are the cost of meeting the partial or full reporting requirements of the Securities and Exchange Commission and the exchange fees (for relevant classes of ADRs). However, ADRs can be useful means for issuing companies of gaining access to United States capital markets. Thus, institutional investors that are precluded by their charter from holding foreign securities are able to invest in such securities via ADRs. They can also allow foreign investors to avoid constraints that may be placed on such investments in cases where emerging markets still maintain limits on direct investment by foreigners. In general, ADRs increase access to United States capital markets by lowering the costs of investing in the securities of non-United States companies and by providing the benefits of a convenient, familiar and well regulated trading environment. Issues of ADRs can increase the liquidity of an emerging market issuer's shares, and can potentially lower the future cost of raising equity capital by raising the company's visibility and international familiarity with the company's name, and by increasing the size of the potential investor base.

Emerging-market ADRs are in many instances issued by newly privatized companies. A small number of economies in transition (the Russian Federation in particular) have started to use depositary receipts as a way of attracting foreign investment, despite lingering difficulties associated with aspects of their market infrastructure, such as transparency of financial statements, long settlement periods and potentially unreliable registration practices. The limited development, or lack of, domestic debt and equity markets in these countries makes access to foreign capital markets critical. In other cases, issues have been created by large and well known companies from emerging markets that are active in the ADR market (such as Mexico, Brazil and India), or countries with relatively good international credit ratings and a relatively long history of accessing foreign investment (such as the Republic of Korea and Chile). There have been noticeably few issues from companies in low-income countries (apart from India, and to a lesser extent, China), and only a handful in least developed countries. The few issues made by the latter group of countries have been mainly by

companies involved in the minerals, oil, banking and utilities industries that can be expected to be able to attract foreign financing. The growth in the number of issues from transition economies between 1992 and 1996, however, is quite noticeable (especially from Russia and Hungary).²

One disadvantage of depositary-receipt issues for the foreign markets in which the issuing company is incorporated is the disincentive to the development of a local capital market. Companies in emerging markets may issue ADRs because the underlying share issues may represent a relatively large volume of weekly or monthly trading activity and the domestic stock market may be considered too small to absorb the issues. While individual companies may be able to attract additional financing, at the macroeconomic level, an increasing trend towards emerging market issue of ADRs can retard the development of domestic capital markets by denying domestic markets additional instruments in which to invest.

4. Convertible bonds and bonds with equity warrants

A convertible bond is a bond which gives its holder the right to exchange the bond for a specified number of the issuing company's shares at any time up to and including the maturity date of the bond. Many convertible bonds include a call option which gives the issuing company the right to call the bond for redemption before the bond's maturity date. Once the company exercises the call, the bond holder is usually allowed approximately thirty days in which to either convert the bond into shares or surrender the bond and receive in return the call price in cash. The issuer will usually be obliged to pay a premium above the bond's par value in the event that they exercise the call.

An equity warrant is a security which gives the holder the right to buy (in return for cash) a specified number of shares directly from the issuing company at a specified fixed price for a given period of time, which is known as the exercise period. The warrant can usually, but not always, be detached from the bond and sold as a separate security. This is not the case with convertible bonds, and represents one important difference between the two. Warrants are also sometimes issued by themselves as separate securities.

With bonds attaching equity warrants, the bond holder can utilize the exercise period to determine whether to exercise the warrant or not. The bond holder will exercise the warrant if the price of the shares exceeds the exercise price of the warrant, in which case they make a net gain. This will happen when the company's share price rises (that is, if the company prospers). Likewise, with convertible bonds, the holder will exercise the right to convert the bond into stock if the value of the shares for which the bond could be exchanged exceeds the value of the bond.

Finance theory has not yet developed any generally accepted explanations for why convertible debt instruments are issued, although several suggestions have been offered. Convertible bonds do not represent a relatively inexpensive form of debt. Any difference between rates of interest demanded by investors in straight bonds and convertible bonds actually represents the value of the conversion option. Also, viewing convertible debt as a form of future equity financing is not valid, because conversion into equity is not guaranteed. There have been issues of convertible bonds with mandatory conversion provisions, but this is not the norm.

The issuance of convertible debt securities has tended to be concentrated among relatively small, high growth and heavily leveraged companies (Mikkelson, 1981) which are therefore relatively risky. Investors might be positively disposed towards investing in convertible bonds because, if the market value of the company rises quickly, it will be possible to share in this growth by exercising

the conversion right. However, if growth is not very high, the investor can retain the bond, which will provide a stable, relatively safe income flow and provide a floor on the potential future value of the security. Additionally, as the interest payments on convertible bonds and bonds with equity warrants are lower than on straight bonds (because of the value of the right to convert and the value of the warrant, respectively), the company will be able to apply a larger amount of financing towards expansion of the company or towards general operating expenses. The special rights included in these securities are therefore sometimes regarded as "sweeteners" for growth companies to attract financing. There have also been explanations offered to explain the issue of convertible bonds invoking the argument that, by incorporating an equity-type component, they help overcome the divergent wishes of bond holders and equity holders with regard to the desirable risk profile of projects undertaken by the company (so-called agency costs).

It is interesting to note that issues of equity-related bonds have emanated overwhelmingly from a small number of emerging markets that are well known in international capital markets, and almost exclusively from the relatively large middle-income emerging markets that receive the bulk of FDI and foreign portfolio equity investment. The notable exceptions are China and India, which are perhaps special cases among the category of low-income countries in light of their unusually large size and potential for market growth. Pakistan is the only other low-income country for which issues of such securities have been recorded (there were \$92 million worth of convertible bond issues in 1993 and \$45 million in 1994).

The Organisation for Economic Co-operation and Development records only fifteen emerging markets as having floated equity-related bonds in the international markets (OECD, 1996e). This may indicate that access to these markets by emerging-market countries has so far been limited to those that are creditworthy or large with a relatively high visibility among foreign investors. Due to scarcity of information, however, it is not possible at this time to provide details on the characteristics of individual industries or companies in emerging markets that have participated in the market for these instruments.

Notes

- While the number and net asset value of closed-end funds investing in emerging markets has grown rapidly in the past five years, many of these funds trade at large price discounts from their net asset value. Portfolios of funds with large discounts subsequently generate excess risk-adjusted returns and abnormal profits can be earned by "raiders" who can buy out the funds and liquidate at the "right" value.
- A listing of 1,000 ADR issues as of end-1992 is provided by Duggan, 1995. An updated list was obtained from the Bank of New York.

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