World Investment Report 2001
Promoting Linkages

Chapter I

United Nations
PART ONE

THE GEOGRAPHY OF INTERNATIONAL PRODUCTION
**INTRODUCTION**

International production – activity under the aegis of transnational corporations (TNCs) – continues to grow strongly. The main agent of international production, foreign direct investment (FDI), does not flow evenly across countries. This unevenness persists, and in some cases increases, over time. While this has long been a feature of the international economy, there are significant elements of change (WIR98). The growth of FDI in the past two decades or so has been accompanied by changes in its geographical pattern, indicating shifts in the investment climate in host countries and in the economic factors driving the location of international production. New locations are becoming attractive relative to old ones. The activities relocated across countries by direct investment are changing. Within TNCs, the specific corporate functions undertaken by parent firms and foreign affiliates (ranging from marketing to research and development (R&D)) are changing in scope and depth. Sources of FDI are also increasing and shifting.

These changes have important implications for host (as well as home) countries. The intangible assets that FDI offers (knowledge, technology, skills, management know-how and market access) are becoming increasingly important for economic growth and development as complements to domestic resources in host countries. In the emerging global setting (reviewed below), FDI is becoming an essential link between national economies, as well as a catalyst for the growth of domestic investment and enterprise competitiveness. As determinants of location are changing, countries can change their ability to receive FDI and to alter its contributions. Policy makers need to know the trends: how FDI compares in its locational patterns with other means of transferring productive assets, where it comes from, where it goes, which activities it affects and which functions it transfers. More importantly, they need to understand why the patterns of FDI are evolving – to help them formulate FDI policies efficiently and realistically.

Part One aims to contribute to answers to these questions by documenting the growth of FDI during the past year and introducing a new index that seeks to capture the attractiveness of host countries for FDI (chapter I). It then proceeds to a “mapping” of FDI inflows and outflows in the aggregate and, to the extent possible, at the industrial and functional levels (chapter II); and to a discussion of the largest TNCs of the world, the developing countries and Central and Eastern Europe (chapter III). Such a mapping shows the origin, destination and concentration of FDI flows and thereby indicates how the tangible and intangible assets that constitute investment flows are spread. Mapping FDI, including over time, highlights the following:

- On the recipient side, the mapping shows the extent to which various regions, countries and locations within countries, attract FDI. At the level of aggregate FDI, this indicates whether locations have suitable investment environments and provide the immobile assets and other advantages needed to complement the mobile assets deployed by TNCs. At the industry or functional level, the mapping shows the specific locational advantages of recipients: low wages for semi-skilled labour for simple labour-intensive operations; primary resources for extraction; advanced skills, supplier networks and institutions for advanced technology-intensive activities, and so on. Everything else being equal, this mapping also indicates, indirectly,
the distribution of benefits associated with FDI among recipient regions, countries and sub-national localities, the extent of a host location’s integration with the global economy and its ability to cope with the new technologies driving globalization. Mapping FDI patterns over time can show if local assets are being upgraded to attract continuing inward FDI.

• On the investing side, the mapping shows the extent to which firms from various regions, countries and sub-national locations make direct investments abroad. It shows the interplay of three factors: competitive advantages of enterprises; location advantages of host countries; and the extent of reliance by firms on transnationalization when exploiting their advantages abroad. Thus, a rise in a country’s outward FDI can indicate an increasing competitive advantage on the part of national firms, or that firms, given their competitive advantages, find it strategically necessary to locate their activities abroad. The reasons for their choice of location not only need to reflect the cost of operating at home. They may also embrace strategic considerations like matching moves made by their main competitors, investing in the home markets of their rivals, switching from exports to producing locally, diversifying sources of supply or seeking to tap new sources of competitive advantage (like innovation). At a disaggregated level, the mapping shows the industrial activities and functions in which this interplay of competitive and location advantages is taking place. Mapping FDI patterns in aggregate terms reveals which countries’ firms control the allocation of productive assets within TNC production systems across the globalizing world economy.

In sum, mapping FDI throws light on several significant features of the global economy. It can illuminate the geography of investment flows and of the accompanying intangible asset flows that increasingly drive technology-based growth and competitiveness. It can show which countries lead the internationalization process: the main home countries of the TNCs that exercise a powerful influence on economic life today, controlling the production taking place within their international production systems and partaking of its resulting fruits. It can also show, on the receiving side, where the flows concentrate and so, at least ostensibly, where the benefits of international production accrue. The conclusions then address briefly what the concentration of FDI at the sub-national level means for investment promotion and, most notably, for the third generation of investment promotion strategies.
CHAPTER I.
THE GLOBAL PICTURE

A. The geographical dynamics of FDI: the setting

From the perspective of developing countries, the most important aspect of a mapping of international production concerns inward FDI. There are several influences that have been, and always will be, important to FDI inflows. The most basic ones are political and economic stability and a welcoming environment for FDI (and for private enterprise in general). Other important factors are ease of entry and exit, appropriate standards of treatment and dispute settlement, and a predictable and transparent regulatory framework. A typical FDI regime today, for example, has few restrictions on entry and operations, provides general standards of treatment (including guarantees in such areas as the transfer of funds, expropriation and dispute settlement) and ensures a competitive market framework.

The attractiveness of the regime also, increasingly, depends on the effectiveness of FDI promotion. With rising competition for FDI and more discriminating investors, host countries and regions (like individual states in the United States) recognize the need to undertake proactive investment promotion efforts. While many countries promote FDI, the most successful ones do this in a business-like manner, with effective image building, low transaction costs for investors, careful targeting, direct interaction with investors and good support and follow-up services.

These general requirements of investment attraction are taken for granted here in order to focus on the economic factors driving FDI. The main traditional factors in FDI location are large domestic markets (historically often reinforced by import tariff protection), the possession of natural resources and the presence of cheap (unskilled or semi-skilled) labour. While these remain relevant, they are of diminishing importance, particularly for the most dynamic end of international production. Large markets remain attractive to investors where local presence is important for competitive advantage, but as trade barriers are removed, the level of protection is declining. Moreover, as trade blocs and regional links grow, the significance of national markets as such diminishes. Primary resources will always draw some FDI, but with new contractual extraction and marketing arrangements led by national firms (WIR98), and given the diminishing role of primary products in industrial activity, it is unlikely to be a dynamic draw. The role of cheap “raw” labour is similar: it will attract a small number of investors, but even in simple labour-intensive activities the need to use new technologies and skills for production suited to sophisticated and demanding markets will reduce the draw of low wages.

The new determinants of location reflect three developments: policy liberalization, rapid technical progress (particularly in transport, communications and information) and new management and organizational techniques (WIR99). These are briefly taken up in turn.

Policy liberalization alters many parameters of international location. Trade liberalization reduces the need for FDI to jump tariff barriers and intensifies competition in existing activities. It also increases the size of accessible markets, including for export activities. Both can lead to changes in the factors determining location. All enterprises have to raise technical efficiency and be more responsive to market forces to stay in business, not just in tradable activities but also in services and infrastructure. TNCs have to restructure their activities and deploy their assets to achieve “best practice” levels, reducing their presence where competitiveness is difficult to achieve and raising it where it is possible. This involves shifting production and marketing sites in line with costs, logistics and reliability factors. It also involves relocating such functions as R&D, financial management, procurement and strategic decision-making between countries so as to maximize corporate efficiency.

Trade liberalization can have centripetal effects (making for greater centralization) or centrifugal ones (making for greater dispersion),
depending on the industry and corporate function. Take the automobile industry. Its R&D, which relies on advanced skills and has various linkage needs, tends to be located in a few advanced economies (including some newly industrializing economies) that have the necessary trained personnel, related suppliers and technology services. Its production processes, involving large scale economies, are located in a larger number of facilities serving regional or global markets; however, these are now far fewer than during the heyday of import substitution when most countries had some assembly or manufacturing activity. Its marketing and servicing facilities are more widely dispersed to meet customer needs. In other industries, with different configurations of technical, skill and market needs, the tendencies may be quite different. The mapping exercise shows this in chapter II below.

The liberalization of FDI regimes and the strengthening of international standards for the treatment of foreign investors (box I.1) allow firms greater freedom in making international location decisions and in choosing the mode for serving each market and meeting functional needs. TNCs can increasingly fine-tune and differentiate their combinations of internationalization modes (trade, majority- or wholly owned subsidiaries, joint ventures, non-equity alliances, licensing and so on) to suit each activity and location. In conjunction with privatization, this opens up new areas of international production, allowing new activities to “go transnational” in ways inconceivable a few years ago: the emergence of previously home-bound infrastructure providers as international investors is a recent example. The spread of FDI in services, in turn, encourages manufacturing firms to cluster in locations in which service TNCs have set up facilities.

Box I.1. FDI regimes in 2000

FDI liberalization continues. Between 1991 and 2000, a total of 1,185 regulatory changes were introduced in national FDI regimes, of which 1,121 were in the direction of creating a more favourable environment for FDI (box table I.1.1). During 2000 alone, a total of 150 regulatory changes were made by 69 countries. Of these, 147 (98 per cent) were more favourable to foreign investors (box figure I.1.1). At the international level, treaty making continues, complementing and reinforcing trends at the national level. The number of bilateral investment treaties (BITs) quintupled during the 1990s and, by end-2000, had reached a total of 1,941. During 2000 alone, 78 countries concluded 84 BITs. The single greatest number of the new treaties was between developing countries (36), 43 per cent of the total (box figure I.1.2). The number of bilateral treaties for the avoidance of
The increased freedom for factors and functions to move within the international production systems of TNCs does not, as already noted, necessarily mean that international production spreads equally to all locations. Mobile factors only go to and “stick” in those places where efficient complementary factors exist. One increasingly important factor is the presence of other firms (TNCs and local firms) providing inputs, information and services in clusters – concentrations of firms in one or a few industries – benefiting from synergies created by a dense network of competitors, buyers and suppliers. To the extent that TNCs are able to provide leading edge inputs and services, the geography of international production comes to reflect the cumulative effects of past FDI location.

Intensifying competition also forces firms to specialize in their core competencies. This induces TNCs to forge closer external links at various points along the value chain (from design and innovation to marketing and servicing) and allows other firms (including TNCs) to undertake different functions. Linkages can be established with suppliers, buyers and even competitors, and they can reach across the world. They can involve other foreign affiliates or local (i.e. domestically owned) firms. This growing network surrounds and supports international production proper (under the direct control of TNCs). These networking possibilities can affect FDI location in different ways. On the one hand, they can induce TNCs to set up operations in close proximity to (competent) clusters of related firms and so increase FDI. On the other hand, they can allow TNCs to concentrate their facilities in established locations where their needs are met efficiently, while relating to networks over long distances. This can lead to a reduction in FDI by those firms.

The trend towards greater networking can have important implications for firms in developing countries. It can open up new avenues for competent developing country firms to link up with global production systems as TNCs scan the globe for efficient and reliable suppliers and subcontractors. Backward linkages from foreign affiliates to local firms, in particular, can become important channels through which intangible and tangible assets can be passed on from the former to the latter, contributing to an upgrading of the local enterprise population and “embedding” and “grounding” foreign affiliates more in their host economies. Given the role that backward linkages can play in these respects (chapters IV and V of this report address the question of how more backward linkages by foreign affiliates can be created, and existing ones deepened), competent local firms can eventually even “leverage” their linkages with TNCs to become global suppliers and sometimes competitors. However, the new international regulatory framework restricts the use of some double taxation (DTTs) also increased, reaching a total of 2,118 at the end of 2000 (box figure I.1.3). During 2000, 57 DTTs were concluded by 59 countries (box figure I.1.4). At the regional and interregional levels, the number of investment-related instruments continues to grow, especially in the form of free trade and investment agreements (annex table A.I.1).
of the tools used by governments in the past to strengthen the positions of local firms as suppliers. The Agreement on Trade-related Investment Measures (TRIMs), for example, prohibits the use of local content requirements. The stricter application of intellectual property rights under the Agreement on Trade-related Aspects of Intellectual Property Rights (TRIPS) may make it more difficult and expensive for local firms to access foreign technology. At the same time, competition for FDI has increased considerably (WIR98), creating additional parameters as to what host countries can or cannot do to attract FDI and benefit from it.

**Technical change** affects the geography of FDI in many ways. In fact, the dynamics of international production today largely reflect the nature, speed and pervasiveness of technical progress. Rapid innovation provides the advantages that propel firms into international production; thus, innovation-intensive industries especially tend to be increasingly transnational, and TNCs have to be more innovative to maintain their competitiveness. Innovation also leads to changes in the structure of trade and production, with R&D-intensive activities growing faster than less technology-based activities (WIR99). The move up the technology scale furthermore reduces the importance of primary and simple low-technology activities in FDI, while raising that of skill-intensive activities. The growing role of skills means that low wages per se are increasingly insufficient as a determinant of FDI.

New transport, communication and information technologies intensify competition while allowing firms to spread and manage international operations more efficiently. The rising cost of innovation leads firms (among other options, including strategic alliances) to internalize their technological advantages rather than sell them at arm’s length, raising the role of FDI in technology transfer. These trends are manifested most clearly in globally integrated production systems, in which different steps in the production process are located (under TNC control) in different places to optimize cost-efficiencies and logistics. High-technology activities previously beyond the reach of developing countries can now be placed there because labour-intensive processes can be economically separated and managed over long distances. Many activities in integrated production systems are technology-intensive and dynamic; their location in developing countries can rapidly transform the prevailing FDI and competitive landscape.4

It is not just the emergence of high-technology integrated production systems that alters the geography of FDI. The pervasiveness of technical change means that all TNC activities have to use new technologies effectively. The speed of change means, moreover, that TNCs continuously have to upgrade technologies to retain competitiveness, and the increasingly information-based nature of technology means that new sets of skills and infrastructure are needed to utilize new technologies. Thus, location decisions have to be based on the ability of host countries to provide the complementary skills, infrastructure, suppliers and institutions to operate technologies efficiently and flexibly. Technological progress, in other words, forces firms involved in international production increasingly to differentiate between the “haves” and “have-nots” in new FDI-complementing factors when deciding on where to undertake different activities.

One FDI-complementing factor of growing significance is the presence of **geographical clusters** of economic activity, technical and skilled inputs, specialized suppliers and demanding buyers, support institutions, finance and so on. Such an agglomeration of resources and capabilities attracts “efficiency-seeking” FDI (and more and more FDI is of this type) in all economies. It also helps to attract “asset-seeking” FDI (Dunning, 1993, 2000) to the more advanced host countries. In their inexorable search for new competitive advantages, TNCs seek “created assets” like technology across the globe. Clusters of innovative activity (as in Silicon Valley in California, Silicon Fen in Cambridge (England), Wireless Valley in Stockholm or Zhong Guancum, a suburb of Beijing) have a distinct advantage in attracting such high level FDI.

**Managerial and organizational factors** strengthen the new locational determinants of FDI. A greater focus on core competencies, with flatter hierarchies and stronger emphasis on networking, steers investments towards locations with advanced factors and institutions and, where relevant, distinct clusters. New organizational techniques (aided by new technologies) stimulate a more
efficient management of global operations, encouraging a greater relocation of functions. “Complex” integration strategies of international production (WIR93) can succeed only if firms are able to adopt these new techniques efficiently.

In sum, the changing geography of international production reflects the dynamic interaction of many economic, organizational and policy factors. While many of these factors have long been relevant, their combination today reflects new forces influencing TNC location decisions. To cope successfully with globalization and benefit from FDI, developing countries must understand these forces. They set the parameters within which policy makers have to act to attract FDI, and to extract the greatest benefits from it in terms of technology, skills and market access, striking backward linkages and leveraging foreign assets to reach competitive positions in global markets. The following brief review of the growth of FDI in 2000 and especially the subsequent mapping of international production and the discussion of the patterns it shows is an attempt to help in this understanding. It indicates emerging as well as declining opportunities by location. It points to new sources of FDI, in developing as well as developed countries, and to small firms as to large ones as international investors.5

B. The growth of FDI in 2000

FDI inflows continued their strong recent growth to reach $1.3 trillion in 2000, though the pace was slightly slower than in the previous two years (table I.1). In 2001, they are expected to decline.6 By all measures (assets, sales, trade and employment of foreign affiliates), FDI rose more rapidly in 1999 and 2000 than such other aggregates as gross domestic product (GDP), domestic investment, licensing payments and trade. It is noteworthy, in particular, that TNC activities have risen rapidly in 1999 (as well as during the preceding three years) when world trade was stagnant, testifying to the growing role of FDI as the main force in international economic integration. The ratio of foreign affiliates’ sales to global GDP was almost 50 per cent, with the sales value being over twice as high as the value of world exports of goods and services. Over 60,000 TNCs now own more than 820,000 affiliates abroad, with some 55 countries hosting more than 1,000 foreign affiliates (figure I.1 and annex table A.I.2), and with a value of FDI stock of over $6 trillion.

Looking at the recent past, as many as 65 countries experienced an annual average growth rate of 30 per cent or more between 1986 and 2000 (table I.2); another 29 countries had FDI growth rates of 20-29 per cent. In terms of broad country groups, the developed world continued to attract over three-quarters of global FDI inflows in the past two years. Its share has risen in recent years largely because of intense cross-border M&A activity. In 1999, the share of developing countries fell by 6 percentage points, to 21 per cent; in 2000 it declined yet further to 19 per cent. This was the lowest share since 1990, and it was well below the 1990s peak of 41 per cent in 1994. It was also lower than the shares of developing countries in world exports as well as imports, and total world domestic investment. The 49 least developed countries (LDCs) as a group remained marginal in attracting FDI; however, FDI flows into that group are on the rise, as is the role of FDI in their economies. Central and Eastern Europe maintained its share of about 2 per cent in 2000 in terms of world inflows.

1. Developed countries

The “Triad” – Japan, the European Union (EU) and the United States – has long accounted for the bulk of international production, providing and receiving most of global FDI. During 1998-2000, the Triad accounted for three-quarters of global FDI inflows and 85 per cent of outflows, and for 59 per cent of inward and 78 per cent of outward FDI stocks. By the late 1990s it was home to nearly 50,000 TNCs and host to nearly 100,000 foreign affiliates (figure I.1 and annex table A.I.2).7 Compared with the mid-1980s, the Triad’s share in world inward FDI stock has risen, while that in outward FDI stock has decreased (figure I.2). The EU’s shares of stocks and flows, inward as well as outward, increased.8 Those of the United States and Japan have declined, with those of Japan remaining relatively small. The rise in EU shares is largely due to cross-border M&As. The structure of FDI within the Triad has also changed. Largely as a result of its prolonged economic slowdown, and later the Asian financial crisis, Japan has become somewhat more important as a destination for FDI and
### Table I.1. Selected indicators of FDI and international production, 1982-2000

<table>
<thead>
<tr>
<th>Item</th>
<th>Value at current prices (Billions of dollars)</th>
<th>Annual growth rate (Per cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDI outflows</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FDI inward stock</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FDI outward stock</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cross border M&amp;As</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales of foreign affiliates</td>
<td>2 465  5 467  15 680  c</td>
<td>15.6  10.5  10.4  18.2  17.2  d  18.0  c</td>
</tr>
<tr>
<td>Gross product of foreign affiliates</td>
<td>565  1 420  3 167  d</td>
<td>16.4  7.2  11.0  3.2  7.2  d  16.5  d</td>
</tr>
<tr>
<td>Total assets of foreign affiliates</td>
<td>1 888  5 744  21 102  e</td>
<td>18.2  13.9  15.9  23.4  14.8  e  19.8  e</td>
</tr>
<tr>
<td>Export of foreign affiliates</td>
<td>637  1 166  3 572  f</td>
<td>13.2  14.0  11.0  11.8  16.1  f  17.9  f</td>
</tr>
<tr>
<td>Employment of foreign affiliates (thousands)</td>
<td>17 454  23 721  45 587  g</td>
<td>5.7  5.3  7.3  16.8  5.3  g  12.7  g</td>
</tr>
<tr>
<td>GDP at factor cost</td>
<td>10 612  21 475  31 895</td>
<td>11.7  6.3  0.7  -0.9  3.4  6.1</td>
</tr>
<tr>
<td>Gross fixed capital formation</td>
<td>2 236  4 501  6 466  h</td>
<td>12.2  6.6  0.6  -0.6  4.3  h  ..</td>
</tr>
<tr>
<td>Royalties and Licence fees receipts</td>
<td>9  27  66  h</td>
<td>22.1  14.1  4.0  6.1  1.1  h  ..</td>
</tr>
<tr>
<td>Export of goods and non-factor services</td>
<td>2 124  4 381  7 036  h</td>
<td>15.4  8.6  1.9  -1.5  3.9  h  ..</td>
</tr>
</tbody>
</table>

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

Note: Data are available only from 1987 onward. 

Note: Data are available only from 1987 onward.

Based on the following regression result of sales against FDI inward stock for the period 1982-1998: Sales=967+2.482*FDI inward stock.

Based on the following regression result of gross product against FDI inward stock for the period 1982-1998: Gross product=412+0.461*FDI inward stock.

Based on the following regression result of employment against FDI inward stock for the period 1982-1998: Employment=13 925+5.298*FDI inward stock.

Based on the following regression result of assets against FDI inward stock for the period 1982-1998: Assets= -376+3.594*FDI inward stock.

Based on the following regression result of gross product against FDI inward stock for the period 1982-1998: Gross product=412+0.461*FDI inward stock.

Based on the following regression result of sales against FDI inward stock for the period 1982-1998: Sales=967+2.482*FDI inward stock.

Based on the following regression result of assets against FDI inward stock for the period 1982-1998: Assets= -376+3.594*FDI inward stock.

Based on the following regression result of gross product against FDI inward stock for the period 1982-1998: Gross product=412+0.461*FDI inward stock.

Based on the following regression result of sales against FDI inward stock for the period 1982-1998: Sales=967+2.482*FDI inward stock.

Based on the following regression result of assets against FDI inward stock for the period 1982-1998: Assets= -376+3.594*FDI inward stock.

Based on the following regression result of gross product against FDI inward stock for the period 1982-1998: Gross product=412+0.461*FDI inward stock.

Based on the following regression result of sales against FDI inward stock for the period 1982-1998: Sales=967+2.482*FDI inward stock.

Based on the following regression result of assets against FDI inward stock for the period 1982-1998: Assets= -376+3.594*FDI inward stock.

Based on the following regression result of gross product against FDI inward stock for the period 1982-1998: Gross product=412+0.461*FDI inward stock.

Based on the following regression result of sales against FDI inward stock for the period 1982-1998: Sales=967+2.482*FDI inward stock.

Based on the following regression result of assets against FDI inward stock for the period 1982-1998: Assets= -376+3.594*FDI inward stock.

Based on the following regression result of gross product against FDI inward stock for the period 1982-1998: Gross product=412+0.461*FDI inward stock.

Note: Data are only available from 1987 onward.

Note: Data are only available from 1987 onward.

### Table I.2. Annual average FDI growth rate, 1986-2000

<table>
<thead>
<tr>
<th>Growth rate</th>
<th>Economy</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than 30%</td>
<td>Afghanistan; Armenia; Azerbaijan; Bahamas; Bahrain; Bangladesh; Belarus; Bermuda; Bhutan; Bolivia; Brazil; Bulgaria; Cameroon; Cape Verde; Cayman Islands; China; Comoros; Croatia; Cuba; Czech Republic; Denmark; Djibouti; Eritrea; Ethiopia; Finland; Georgia; Germany; Guyana; Hungary; India; Ireland; Japan; Jordan; Kuwait; Lao People’s Democratic Republic; Latvia; Lesotho; Lithuania; Macau; China; Malawi; Mongolia; Morocco; Mozambique; Myanmar; Netherlands Antilles; Nicaragua; Norway; Paraguay; Poland; Qatar; Romania; Samoa; São Tomé and Príncipe; Senegal; Slovenia; South Africa; Sweden; TURK Macau; Tonga; Tuvalu; Uganda; United Republic of Tanzania; Venezuela; Viet Nam; and Virgin Islands</td>
</tr>
<tr>
<td>20-29.9%</td>
<td>Angola; Argentina; Austria; Belgium and Luxembourg; Benin; Chad; Chile; Dominican Republic; Gabon; Ghana; Hong Kong, China; Islamic Republic of Iran; Israel; Kazakhstan; Republic of Korea; Lebanon; Malta; Republic of Moldova; Nepal; Netherlands; Panama; Peru; Russian Federation; Saint Vincent and the Grenadines; Slovakia; Sudan; Togo; Trinidad and Tobago; and Ukraine</td>
</tr>
<tr>
<td>10-19.9%</td>
<td>Angola; Burkina Faso; Cambodia; Canada; Colombia; Democratic Republic of Congo; Costa Rica; Côte d’Ivoire; Ecuador; Equatorial Guinea; Estonia; France; Gambia; Guinea; Guinea-Bissau; Honduras; Iceland; Jamaica; Kiribati; Malaysia; Maldives; Mali; Mauritius; Mexico; New Caledonia; Pakistan; Philippines; Portugal; Saint Lucia; Saudi Arabia; Seychelles; Somalia; Sri Lanka; Switzerland; Tajikistan; Thailand; Tunisia; Turkey; United Kingdom; United States; Uruguay; Uzbekistan; Vanuatu; Yemen; Zambia; and Zimbabwe</td>
</tr>
<tr>
<td>0-9.9%</td>
<td>Albania; Algeria; Antigua and Barbuda; Aruba; Australia; Barbados; Belize; Botswana; Dominica; Egypt; El Salvador; Greece; Guatemala; Italy; Kenya; Kyrgyzstan; Madagascar; Namibia; New Zealand; Nigeria; Papua New Guinea; Saint Kitts and Nevis; Sierra Leone; Singapore; Solomon Islands; Spain; Swaziland; Syrian Arab Republic; and Taiwan Province of China</td>
</tr>
<tr>
<td>Decline</td>
<td>Brunei Darussalam; Burundi; Central African Republic; Congo; Cyprus; Fiji; Gibraltar; Haiti; Indonesia; Iraq; Democratic People’s Republic of Korea; Liberia; Libyan Arab Jamahiriya; Mauritania; Montserrat; Niger; Oman; Rwanda; Turkmenistan; United Arab Emirates; and Yugoslavia</td>
</tr>
</tbody>
</table>

Source: UNCTAD, FDI/TNC database.
**Figure I.1.** Geographical distribution of foreign affiliates, 1999  
(Number)

Source: Annex table A.1.2 in this report.

**Figure I.2.** The share of the Triad in world FDI flows and stocks, 1985 and 2000

Source: UNCTAD, FDI/TNC database.
less important as a source, although the country’s significance as an outward investor is still much greater than that as a FDI recipient. The United States continues to be the single largest host country for FDI, while its role as largest outward investor has been taken over by the United Kingdom since 1999 and, also, France for the first time in 2000. The EU as a group remains dominant as both investor and recipient. As a result, intra-Triad stocks account for the bulk of the Triad’s FDI stocks. Flows between the Triad members are rising, with 40 per cent of total outward FDI stock being located in other Triad members in 1999, as compared to one-third in 1985 (figure I.3). The number of host countries in which the Triad dominates increased for Japan and the EU, but decreased for the United States between 1985 and 1999 (figure I.3).

More specifically, this is how the individual members of the Triad fared in 2000:

**a. United States**

Although slightly below the 1999 record high, FDI in 2000 both from and to the United States reached high levels ($139 billion in outflows and $281 billion in inflows), mainly as a result of several large acquisitions that took place in particular by and of firms based in the EU. The country was the third largest outward investor in 2000 (figure I.4).

United States FDI outflows in 2000 continued to be driven by cross-border M&As involving companies based in EU. Overall, the EU as a destination for United States outward FDI accounted for nearly half of the total (figure I.5). Almost half of the country’s outward stock is located in EU countries. As a result, the economic impact of United States investment is substantial in some EU countries. For example, United States affiliates accounted for more than half of the total of employment and value added in Ireland in 1997 (Eurostat, 2000a). United States investment in the Asia-Pacific region picked up recently and returned to levels close to those prior to the financial crisis, with particularly strong growth in electronics. Overall, the share of services in United States outward FDI increased, mainly due to large acquisitions undertaken by financial institutions. The shares of the automobile and electronics equipment industries picked up too, while chemicals and pharmaceuticals – mainly boosted in 1999 by large acquisitions linked to the need for global consolidation in the industry and undertaken with a view to gain access to production technologies and R&D – lost dynamics. While the share of United States FDI going to developing countries slightly decreased from 27 per cent in 1999 to 25 per cent in 2000, it might revive again in response to regulatory changes already undertaken or currently under discussion. For example, the African Growth and Opportunity Act improves market access for African exports at favourable terms; and negotiations with Chile are under way concerning that country’s membership in NAFTA.

Inflows into the United States in 2000 were much more concentrated by source than were outflows by destination. Traditionally, the United Kingdom continues to be the most important home country for the United States, followed by France; however, the share of FDI from the EU declined from 80 per cent in 1999 to 72 per cent in 2000. Inflows took place overwhelmingly through acquisitions rather than greenfield investments, undertaken by already established foreign affiliates and increasingly financed through reinvested earnings (Howenstine, 2001). Although in recent years the United States had experienced net FDI inflows, in 2000 inflows were more than twice the amount of outflows, mainly due to increases in equity investments and intra-company loans (figure I.6). The industries with the largest increases in 2000 were petroleum, computers and electronics, as well as telecommunications and financial services. The United States is a large host and home country in absolute terms, but in terms of FDI flows as a share of domestic investment (gross fixed capital formation), this country ranks almost in the middle among all developed countries (figure I.7).

**b. European Union**

Within Western Europe, the European Union (EU) accounts for more than 90 per cent of both inward and outward FDI stocks. While record inflows into the EU were stimulated by progress in regional integration, extra-EU flows were dominated by the United States. Rising FDI flows between EU and European Free Trade Association (EFTA) were the main stimulus for FDI into other Western European countries, reflecting also closer relationships on other levels of international relations.
CHAPTER I     THE GLOBAL PICTURE

Figure I.3. FDI stocks among the Triad and economies in which FDI from the Triad dominates, 1985 and 1999
(Billions of dollars)

Source: UNCTAD, FDI/TNC database.

Figure I.4. Developed countries: FDI outflows, 1999 and 2000a
(Billions of dollars)

Source: UNCTAD, FDI/TNC database.

a Ranked on the basis of the magnitude of 2000 FDI outflows.
FDI inflows into the EU also reached record levels in 2000 ($617 billion). As in the recent past, cross-border M&As explain this growth. Deepened regional integration during the 1990s, in addition to political stability, market size and good infrastructure, are principal drawing assets; further integration, as well as the introduction of the Euro, are expected to accentuate this trend. Within the EU, the United Kingdom was the largest outward investor in 2000 and, at the same time, the largest investor worldwide for a second consecutive year (figure I.4), mainly due to major cross-border M&As: the largest deal in 2000 (indeed, the largest deal ever worldwide), the acquisition of Mannesmann by VodafoneAirTouch, also drove up FDI flows into the target country – Germany. As a result, Germany became the most important FDI recipient in the region (figure I.6). In a similar vein, FDI flows to Belgium were significantly influenced by post-merger restructuring activities, which took place during the fourth quarter of 1999 and had led to retroactive adjustments of both inward and outward flows; inflows into Belgium in 2000 were considerably lower but continued the upward trend that had been observed up to 1998 (annex tables B.1 and B.2).

Cross-border M&As were particularly important in the area of telecommunications, as well as in the automobile industry. Although a tendency towards consolidation and concentration can also be observed in the banking industry, it seems that Western European banks seek profits rather by expansion into emerging markets (ECB, 2000). However, the formation of regional financial groups also took place, such as the creation of Nordea, the result of mergers between Merita Bank (Finland), Nordbanken (Sweden), Unidanmark (Denmark) and Christiania Bank og Kreditkasse. With few exceptions, about half of the EU countries’ FDI took place within the region. One exception is Austria, where FDI flows were remarkably dynamic and reached record levels in 2000, with more than two-thirds of the outflows directed towards the neighbouring countries of Central and Eastern Europe. Inflows into Austria were dominated by the merger of Bank Austria with HypoVereinsbank, and Germany therefore accounted for about four-fifths of total inflows. FDI flows into Greece reached unprecedented levels in 2000, and the country’s accession to the EMU in 2001 is expected to further assure investors’ confidence. Swedish outward

Figure I.5. Destination and sources of United States FDI flows, 2000
(Percentage)


Notes: Africa includes South Africa. LAC stands for Latin America and the Caribbean.
Figure I.6. Developed countries: FDI inflows, 1999 and 2000
(Billions of dollars)

Source: UNCTAD, FDI/TNC database.

a Ranked on the basis of the magnitude of 2000 FDI inflows.
Figure I.7. Developed countries: FDI flows as a percentage of gross fixed capital formation, 1997-1999\textsuperscript{a} (Percentage)

Source: UNCTAD, FDI/TNC database.

\textsuperscript{a} Ranked on the basis of the magnitude of 1997-1999 FDI inflows as a percentage of gross fixed capital formation.
investment almost doubled, mainly due to investments in EU markets; inflows decreased over the previous year (when FDI was significantly influenced by the merger between Astra and Zeneca), but were still considerably above their 1998 level. Similarly, the increase in outflows from France was largely attributed to the acquisition of Orange Plc by France Telecom in 2000, becoming the second largest outward investor worldwide.

Inflows from outside the EU are dominated by the United States but were of less importance in 1999 than before. They were outperformed by intra-EU flows (figure I.8).

**Outward** FDI of the EU is increasingly directed towards countries in Central and Eastern Europe, in pursuit of favourable business opportunities in the EU candidate countries, and driven by privatization.

Other Western European countries experienced increasing FDI outflows in 2000, with Switzerland being the most important player in both directions. While Swiss firms continue to direct about half of their investment to the EU (flows to EU countries in 1999 doubled), an increasing share goes to Central and Eastern Europe, the United States and Latin America. Already in 1997, Switzerland was among the five most important foreign investors in the EU (Eurostat, 2000b). FDI inflows to this country slightly declined to $9.3 billion from the record level in 1999 ($11 billion). Norway’s outward FDI flows continued their steep upward trend, with more than half of them directed to EU markets, while inflows in 2000 did not reach the record level of the previous year, when inflows were significantly boosted by reinvested earnings. While inflows into Iceland were about the same level as in 1998, outflows in 2000 almost doubled, due to several large acquisitions, in particular, by Ossur, which became the second largest manufacturer of prosthetics worldwide, as well as in the financial sector (i.e., by Landsbanki and Islandsbanki).

c. Japan

While Japan’s economy continued to be sluggish, FDI outflows from the country rebounded after two consecutive years of decline, reaching in 2000 their highest level in 10 years ($33 billion), driven by cross-border M&As in telecommunications. FDI inflows into Japan, on the other hand, dropped by 36 per cent to $8.2 billion, from the 1999 record high, reflecting a decline in FDI in the manufacturing sector, although the trend of attracting relatively high FDI inflows is likely to continue, prompted by both internal and external factors.

Cross-border M&As played a role in the interaction of these factors. The global consolidation through cross-border M&As between United States and European

![Figure I.8. Intra- and extra-EU FDI flows, 1995-1999 (Percentage)](image-url)
companies extends now to Japan in some industries (e.g. automobiles), fuelling increased FDI into Japan. In addition, the structural changes in leading Japanese industries (e.g. banking) stimulate FDI inflows into Japan, which, in turn, accelerate the speed of the country’s structural changes, and so on (WIRO00, chapter II). Thus – and in spite of declining FDI inflows in 2000 – the general FDI trend has been upward during the past few years, driven by cross-border M&As in the finance, machinery and telecommunications industries. Greenfield investments in the retail, service and software industries are also rising (JETRO, 2001).

d. Other developed countries

In other developed countries, cross-border M&As with partners based in Europe and the United States explain the surge in Canadian FDI, which reached unprecedented levels in both directions ($44 billion in outflows and $63 billion in inflows in 2000). Recent inflows into Australia and New Zealand were closely linked to developments in the Asia-Pacific region, and further constrained by unfavourable exchange rate developments. Being largely commodity-based economies and partly linked to economic developments in Japan, Australia and New Zealand have not experienced significant FDI inflows in the 1990s. Inflows in Australia in 2001 might be significantly influenced by the planned merger between Billiton of the United Kingdom and BHP of Australia, which (if it should take place) would create the second largest mining group in the world. Outflows from Australia in 2000 were $5 billion, a turnaround compared to the previous year and significantly above the average inflows during the period of 1990-1999. The services sector above accounted for more than half of the outflow.

Record FDI inflows into Canada in 2000 (two and a half times greater than in the previous year) mainly reflected one large acquisition. At the same time, outward FDI, increasing by more than twice, was also significantly stimulated by cross-border M&As. For FDI in both directions, the most important partners were the United States and European countries. The most important industries were food processing, machinery and transport equipment (inflows) and electrical and electronic equipment, energy and metals (outflows).

2. Developing countries

Each region of the developing world experienced different FDI developments during 2000.

a. Africa

FDI inflows into Africa (including South Africa) declined from $10.5 billion in 1999 to $9.1 billion in 2000, after an increase of $2 billion during the previous year (figure I.9). Consequently, the share of Africa in world FDI inflows – already low – became even smaller, falling below 1 per cent in 2000. Inflows to major recipients such as Angola, Morocco and South Africa halved. However, FDI flows into these countries – as well as to Africa as a whole – are still much higher than those at the beginning of the 1990s, mainly due to the sustained efforts of many governments to create a more business-friendly environment after

---

**Figure I.9.** FDI inflows and their share in gross fixed capital formation in Africa,\(^a\) 1990-2000

![Image](image_url)

*Source:* UNCTAD, FDI/TNC database.\(^a\) Including South Africa.
turbulent and (in some countries) lost decades in the 1970s and 1980s. However, a number of African countries continue to rank high when FDI inflows are placed in relation to their gross fixed capital formation (figure I.10). FDI outflows from African countries continued to be marginal, except for those from South Africa.

On a subregional basis, the year 2000 saw some changes as compared to the year before as far as inflows were concerned:

- FDI flows to North Africa remained almost at the same level as in the previous year ($2.6 billion). Flows declined into Morocco – where FDI inflows have been particularly volatile over the past few years – and Algeria. FDI flows to Sudan (where FDI is concentrated in petroleum exploration activities) increased somewhat from $370 million to $392 million (figure I.11). Egypt remained the most important recipient of FDI flows in North Africa, with slightly increasing inflows ($1.2 billion compared to $1 billion in 1999).

- FDI flows to sub-Saharan Africa decreased from $8 billion in 1999 to $6.5 billion in 2000. Although 22 countries experienced lower inflows in 2000 as compared to 1999, most of the reductions were rather small. The overall decline in FDI inflows into sub-Saharan Africa was caused by a sharp drop of inflows into two countries: Angola and South Africa. In Angola, inflows to the country’s petroleum industry took a pause from the dynamic development in previous years, while in South Africa reduced M&A activity played a role in the downturn of inflows. The list of major recipients in sub-Sahara remained largely unchanged, with oil-producers such as Angola, Egypt and Nigeria topping the list, followed by South Africa.

- Due to the decline in Angola, FDI flows into the 34 LDCs in Africa dropped from $4.8 billion in 1999 to $3.9 billion in 2000. Leaving Angola aside, however, the group maintained almost the same level as in the previous year. FDI inflows to the United Republic of Tanzania were almost unchanged from $183 million to $193 million. When classified by regions, the group of African LDCs was, in fact, the only regional grouping of LDCs that managed to increase inflows over recent years. The share of African LDCs in total FDI inflows into all LDCs stood at 90 per cent in 1999-2000, increasing from 70 per cent as the average for the period 1990-1998.

Within sub-Saharan Africa, the Southern Africa Development Community (SADC) has shown (in absolute as well as in relative terms) the most significant increases since the early 1990s. While FDI inflows into this grouping – due to the developments in Angola and South Africa – dropped from $5.3 billion in 1999 to $3.9 billion in 2000, this is still substantially above the average level of FDI inflows of approximately $3.0 billion that today’s SADC members received during 1994-1998. While countries such as Lesotho and Mauritius showed strong increases, FDI flows to other SADC countries declined: for example, Zimbabwe experienced a significant drop in inflows from $444 million in 1998 to $59 million in 1999 and only $30 million in 2000.

The overall outlook for FDI into Africa has not changed much as compared to last year when a joint UNCTAD/ICC survey among almost 300 TNCs yielded the result that 43 per cent of the responding companies saw the investment conditions in Africa improving in the period 2000-2003, while 46 per cent saw the investment climate stay unchanged and only 11 per cent expected a deterioration. As in the past, much will depend on sustained efforts on the part of African governments to improve further the prospects of political stability and economic growth.

On the FDI outflow side, South Africa accounted for 40 per cent of the region’s total of $1.3 billion FDI outflows in 2000 (figure I.12); this made South Africa by far the continent’s most important source of FDI. The country has seen a major restructuring of its industry long dominated under the apartheid regime by quasi-monopolistic conglomerates with interests in a wide range of industries and little investments abroad (Goldstein, 2000). For big South African companies, the end of apartheid also meant the beginning of a new era of intensified competition, forcing them to concentrate on core businesses and to divest from fringe activities. At the same time, companies such as South African Breweries or Sappi in the paper industry realized that an internationalization strategy including acquisitions of companies abroad (table I.3)
Figure I.10. Africa: FDI flows as a percentage of gross fixed capital formation, top 20 countries, 1997-1999

(Percentage)

Source: UNCTAD, FDI/TNC database.

* Ranked on the basis of the magnitude of 1997-1999 FDI inflows as a percentage of gross fixed capital formation.
Figure I.11. Africa: FDI inflows, top 10 countries, 1999 and 2000\(^a\)
(Billions of dollars)

Source: UNCTAD, FDI/TNC database.

\(^a\) Ranked on the basis of the magnitude of 2000 FDI inflows.

Figure I.12. Africa: FDI outflows, top 10 countries, 1999 and 2000\(^a\)
(Millions of dollars)

Source: UNCTAD, FDI/TNC database.

\(^a\) Ranked on the basis of the magnitude of 2000 FDI outflows.
to explore new markets, and listing on foreign stock exchanges (most notably in London) to tap into foreign capital sources, was essential for survival in the new climate of global competition.\textsuperscript{13}

\textbf{b. Developing Asia}

\textit{FDI inflows} into developing Asia reached a record level of $143 billion in 2000 (figure I.13). The 44 per cent increase over 1999 was primarily due to an unprecedented FDI boom in Hong Kong, China (box I.2). The wave of M&As in the financial-crisis-hit countries has now tapered off, reflecting both a slow-down in the rate of asset disposals and reduced pressure for further corporate restructuring. FDI flows into China, $41 billion in 2000, remained at a level similar to that of the previous year (box I.3). Overall, the role of FDI in Asian economies, as measured by its share in total investment, varies greatly from country to country (figure I.14).

The 2000 Asia FDI boom (figure I.13) masks considerable sub-regional variations:

- \textit{North-East Asia} has become the brightest spot for FDI in the developing world. Inflows to the three economies (Hong Kong, China; the Republic of Korea; and Taiwan Province of China) reached $80 billion in 2000. Their share of total FDI in developing Asia increased from an annual average of 16 per cent during the first half of the 1990s to over 55 per cent in 2000. With $64 billion of inflows, Hong Kong, China (box I.2) overtook China as the single largest FDI recipient in Asia (figure I.15).

- FDI inflows into \textit{China} rose by 12 per cent during the first four months of 2001 ($11 billion), compared to the corresponding period in 2000. It is noteworthy that tax contributions by foreign affiliates accounted for 18 per cent of the country’s total corporate tax revenues in 2000 ($27 billion) harvesting some of the benefits created by some $15 billion of annual average FDI inflows during the first half of the 1990s. It is also noteworthy that the portfolio of FDI in China has been broadening over the past years (box I.3). In its effort to become a member of WTO, China is considering to adopt a number of new policy measures relating to FDI. China is also in the process of formulating policies to encourage cross-border M&As.

- Inflows into \textit{South-East Asia} (ASEAN-10) remained below the pre-crisis level. The subregion’s share in total FDI in developing Asia continued to shrink, from over 30 per cent in the mid-1990s to 10 per cent in 2000. This was largely due to significant divestments in Indonesia since the onset of the financial crisis.

- Inflows into \textit{South Asia} remained almost the same in 2000, still below the 1997 peak level. India, the largest recipient in the subcontinent, received $2.3 billion.

- Inflows into the \textit{least developed countries} of the region, which traditionally depend

\begin{table}[h]
\centering
\begin{tabular}{|l|l|l|l|}
\hline
\textbf{Company} & \textbf{Year} & \textbf{Acquired company} & \textbf{Country} & \textbf{Value in million dollars} \\
\hline
Anglo American Corp of SA Ltd. & 1999 & Minorco SA & Luxembourg & 2 137 \\
Institutional Investors & 1994 & SD Warren(Scott Paper Co.) & United States & 1 600 \\
Old Mutual PLC & 2000 & United Asset Management Corp. & United States & 1 456 \\
Dimension Data Holdings PLC & 2000 & Comparex-Eur Networking Ops & Germany & 1 347 \\
Sappi Ltd. & 1997 & KNP Leykam(KNP BT) & Austria & 1 313 \\
Gencor & 1994 & Cerro Matoso SA(Royal Dutch) & Colombia & 1 200 \\
Gencor & 1994 & Billiton Int-Certain Assets & Australia & 1 144 \\
Shareholders\textsuperscript{a} & 1999 & Liberty International PLC & United Kingdom & 920 \\
Old Mutual PLC & 2000 & Gerrard Group PLC & United Kingdom & 855 \\
Shareholders\textsuperscript{a} & 1999 & Liberty International Holdings & United Kingdom & 831 \\
\hline
\end{tabular}
\caption{The ten largest cross-border M&A purchases by South African firms, 1987-2000}
\end{table}

\textsuperscript{a} A group of shareholders residing in South Africa who purchased this company.

\textsuperscript{Source: UNCTAD, cross-border M&A database.}
heavily on FDI from their neighbours, remained at a very low level.

**Outward FDI** from the region doubled in 2000, to a record level of $85 billion. Hong Kong (China), with $63 billion outflows, continued to be the single largest investor of the region (box I.2). But FDI from China and India is also rising.

A new pattern of flows in terms of source and destination countries is emerging. TNCs from Hong Kong (China), Singapore and Taiwan Province of China have been very active over the last two years, but with their investments mainly focused on North-East Asia. Other Asian TNCs, particularly those based in the Republic of Korea and Malaysia, are gradually resuming their overseas business operations. In the meantime, outward investment from China and India is gaining momentum. Faced with growing protection against its exports and excess productive capacity in low value-added but export competitive industries (box I.3), Chinese TNCs engaged in “barrier-hopping” outward investment, usually in the form of “investment in kind”.14 Furthermore, the deepening economic integration of Hong Kong (China) and Mainland China led to a significant increase of outward investment from the Mainland to Hong Kong over the past two years, accounting for about 20 per cent of the total FDI inflows to Hong Kong.15 Most recently, Indian TNCs began asset-seeking investment via cross-border M&As, particularly in the software industry in countries such as the United Kingdom and the United States.

The longer-term investment prospects for developing Asia remain bright. In addition to the quality of the underlying determinants for FDI, the intensified efforts of further economic integration in various dimensions is likely to boost FDI in the region.

---

**Box I.2. FDI boom in Hong Kong, China: what’s behind the numbers?**

Hong Kong (China) has enjoyed an unprecedented FDI boom over the past two years. Inflows in 2000 skyrocketed to $64 billion, four times the inflows to ASEAN and well above those into mainland China – traditionally the single largest FDI recipient in the developing world. The territory’s share of total Asia FDI rose from an annual average of 11 per cent during the first half of 1990s to 45 per cent in 2000 (box figure I.2.1). The boom in inflows was accompanied by a tripling of FDI outflows ($63 billion).

**Box figure I.2.1. Trends of FDI inflows into Hong Kong, China, 1994-2000**

*Source: UNCTAD.*
The upsurge in inflows by $40 billion over 1999 was underpinned in part by a general improvement in the local business environment following the strong recovery of the economy over the past two years. A marked growth in reinvested earnings was related to the improved profit position of foreign affiliates in the economy. The advantageous geographical location, sound infrastructure and a low tax regime continue to position Hong Kong (China) as a bright spot for high value-added FDI and as a business hub in the region.

China’s imminent accession to WTO has been another driving force for attracting FDI into Hong Kong (China). TNCs planning to invest on the mainland have been “parking” funds there (e.g. can be in the form of long-term loans to their affiliates in Hong Kong – one type of FDI), in anticipation of emerging business opportunities in the mainland. This was indirectly confirmed by the findings of a recent survey of over 3,000 foreign TNCs’ regional headquarters and representative offices in Hong Kong (Hong Kong, China, Census and Statistics Department, 2001a): 45 per cent of the surveyed firms planned to increase their investment in the mainland, and 93 per cent considered the investment climate in China to be favourable or very favourable over the next five years.

The dramatic increase in FDI flows was also boosted by a prominent cross-border M&A deal in the telecommunication sector. According to public announcements, China Mobile (Hong Kong) Ltd. acquired in November 2000 seven mobile networks in the mainland, with a deal value of $33 billion. As the deal was partly financed by capital raised through new shares issued to its parent company in the British Virgin Islands, FDI inflows of $23 billion into China Mobile (Hong Kong) was recorded in parallel. This acquisition alone accounted for over one-third of the territory’s total FDI inflows and more than half of total outflows in 2000. Independently of this deal, both FDI inflows and outflows relating to Hong Kong (China) still surged by 68 per cent ($17 billion) and 57 per cent ($11 billion), respectively.

The above cases demonstrate Hong Kong’s predominant role as a funding hub for business in the region. Indeed, a considerable part of the investment flows into and out of Hong Kong (China) is related to business ventures in other parts of the region, particularly in the mainland. The issue is further complicated by the “round-tripping” phenomenon, i.e. capital inflows and outflows relating to Hong Kong (China) in the form of FDI via tax haven economies. Statistics shows that tax haven economies were both one of the largest recipients and sources of FDI related to Hong Kong (China) during 1998-2000. For example, more than half of the territory’s outward FDI is routed to such offshore financial centres as the British Virgin Islands, the Cayman Islands and Bermuda. However, the actual destination of the majority of these funds is elsewhere. Some of the funds are channelled to mainland China; others to elsewhere in the world; and a sizeable portion even goes back to Hong Kong (China) or through the territory to the mainland. Perhaps as much as 40 per cent of total FDI inflows to Hong Kong (China) in 1998 was “Hong Kong-tax haven routing”. Indeed, the British Virgin Islands became the fourth largest source of FDI in China during 1999-2000, whereas Hong Kong’s outward FDI directly to the mainland decreased since 1998. The “Hong Kong-tax haven routing” is now interwoven with the “mainland-Hong Kong round-tripping” (Zhan, 1995), sometimes involving fund-raising in the Hong Kong stock market. Such a phenomenon, which can be better termed as “transit FDI” (Zhan, 2001), has manifested the dynamics of corporate finance in the region’s financial centre.

It should be mentioned that FDI statistics of Hong Kong (China) are compiled in accordance with international standards stipulated in the Balance of Payments Manual published by the IMF and the Benchmark Definition of FDI published by the OECD. Nevertheless, like other aggregates, FDI data hardly reflect the complexity of corporate finance.

Source: UNCTAD, partly based on Hong Kong, China, Census and Statistics Department 2001a and 2001b.

This acquisition was, however, not recorded by the Government of China as an FDI inflow into China.
The portfolio of FDI in China has been evolving over the past two decades. Inflows used to concentrate in labour-intensive industries during the 1980s and then moved towards capital-intensive ones during the early 1990s. In recent years, technology-intensive industries have been attracting more and more FDI. The old image of the so-called “flying-geese formation”, with China at the low level of the value-chain (i.e. mainly spillover from newly industrializing economies to China), is giving way to that of a rising competitive location for technology-intensive activities for TNCs.

Today, nearly 400 of the Fortune 500 firms have invested in over 2,000 projects in China. The world’s leading manufacturers of computers, electronics, telecommunication equipment, pharmaceuticals, petrochemicals, and power-generating equipment have extended their production networks to that country.

Most recently, even R&D activities have emerged as a bright spot for FDI, with over 100 R&D centres established by TNCs. Microsoft, Motorola, GM, GE, JVC, Lucent-Bell, Samsung, Nortel, IBM, Intel, Du Pont, P&G, Ericsson, Nokia, Panasonic, Mitsubishi, AT&T, Siemens, to name a few, all have R&D facilities in China. Motorola, for example, has established R&D centres in the area of electronics, based on $200 million in investment and 650 research personnel. Microsoft invested $80 million in a Chinese research institute and has announced the investment of a further $50 million to create a Microsoft Asian Technology Center in Shanghai. The need for the adaptation of technology to the huge local market has been one of the push factors for TNCs to locate some of their R&D activities in the country. The availability of extensive hard and soft R&D infrastructure (particularly well-educated and hardworking researchers at low costs, including many graduates returned from abroad) is the main pull factor. Furthermore, the Government has introduced policy measures to reform the nationwide science and technology system, promoting self-sustained and market-oriented research institutions. As a result, Chinese R&D institutions are becoming proactive in seeking partnerships with TNCs.

The prominence of FDI in technology-intensive industries is also manifested in China’s foreign trade. Exports of high and new technology products by foreign affiliates increased from $4.5 billion in 1996 to $29.8 billion in 2000 (box table I.3.1). They accounted for one-fourth of the total exports by foreign affiliates, and 81 per cent of the country’s total exports in high-technology products. Since the second half of the 1990s, China has significantly reduced its imports of complete sets of advanced equipment and is now relying more and more on FDI to acquire foreign technology. In fact, FDI has become the engine of growth of China’s high-technology exports and an essential means of inward technology transfer.

### Box table I.3.1. Exports of high-technology products from China by ownership of production, 1996-2000

<table>
<thead>
<tr>
<th>Year</th>
<th>Total (Million dollars)</th>
<th>State-owned enterprises (Per cent)</th>
<th>Foreign affiliates (Per cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>7 681</td>
<td>39</td>
<td>59</td>
</tr>
<tr>
<td>1997</td>
<td>16 310</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>1998</td>
<td>20 251</td>
<td>25</td>
<td>74</td>
</tr>
<tr>
<td>1999</td>
<td>24 704</td>
<td>23</td>
<td>76</td>
</tr>
<tr>
<td>2000</td>
<td>37 040</td>
<td>18</td>
<td>81</td>
</tr>
</tbody>
</table>

*Source: UNCTAD, based on China, Ministry of Science and Technology.*

In parallel with the above trends, the share of FDI flows into those industries in which FDI traditionally concentrated (e.g. footwear and travel goods, toys, bicycles and electrical appliances) has been declining. Moreover, driven by the excess productive capacity in the country and encouraged by their increased competitiveness in exports, Chinese firms in those industries are now expanding to set up processing or assembly plants overseas. The Government promotes those outward investments by providing such incentives as loans at preferential terms and tax rebates. Special guarantees and financial support through official development assistance are also granted to the investments in those countries that are identified as high-risk locations.
Figure I.14. FDI flows as a percentage of gross fixed capital formation in developing Asia and the Pacific, 1990-1999\textsuperscript{a} (Percentage)

Source: UNCTAD, FDI/TNC database.

\textsuperscript{a} Ranked on the basis of the magnitude of 1997-1999 FDI inflows as a percentage of gross fixed capital formation.
Figure I.15. Developing Asia and the Pacific: FDI inflows, top 20 economies, 1999-2000
(Billions of dollars)

Source: UNCTAD, FDI/TNC database.

a Ranked on the basis of the magnitude of 2000 FDI inflows.
c. Latin America and the Caribbean

After tripling during the second half of the 1990s, annual FDI inflows into Latin America and the Caribbean fell during the first year of the new century (figure I.17). The $86 billion in inflows represent a decline of 22 per cent over the previous year. However, this decline does not signal a shifting trend as it reflects an adjustment to the particularly large flows in 1999 due to the acquisition of three large Latin American firms by foreign ones that had taken place that year. Moreover, patterns differ by subregion. Although the current volume of FDI represents an amount unthinkable only a decade ago, there are differences by country in the industries in which TNCs invest, as well as FDI prospects.

More specifically, with inward FDI flows of $34 billion (figure I.18), Brazil continued to be the region’s largest host country in 2000, with most FDI going into the services sector. The pace of privatization slowed, but remained important, accounting perhaps for up to 22 per cent of total inflows, down from 28 per cent in 1999. The single largest privatization deal was the sale of the controlling stake of the bank Banespa to the Spanish BSCH for $3.6 billion. Mexico, with $13 billion, was the second largest recipient, a 10 per cent increase...
from the previous year. The manufacturing sector continued to attract half of the inflows, but the share of financial services jumped to 31 per cent of total inflows from a 10 per cent average in the previous five years. This was the result of take-overs by Spanish banks that were triggered (with some lag) by the lifting of the remaining restrictions on foreign ownership of banks in 1999. BSCH acquired Serfin for $1.6 billion; its rival BBVA merged with Bancomer with a capital injection of $1.9 billion. The trend continued into 2001 with the acquisition of Banamex by Citicorp in May for $12.5 billion, the biggest M&A deal in Mexican history.

Argentina and Chile suffered significant declines in their FDI inflows, partly because 1999 had seen three major M&As (Repsol’s purchase of YPF in Argentina; and Endesa España’s purchase of Endesa and Enersis in Chile). Inflows into some Andean countries, such as Colombia and Peru, were lower than those in the previous years, reflecting recent political and economic instability, while inflows into Venezuela rose, due to significant purchases in the services sector. These changes are also reflected in FDI inflows in relation to the size of domestic investment (figure I.19).

M&As continued to be important in 2000, and were mainly directed to the services sector. The largest transactions included the so-called Operación Verónica, during which Telefónica de España increased its stakes in its affiliates in Argentina, Brazil and Peru to almost 100 per cent, and acquisitions by Spanish banks in Mexico and Brazil. In the electrical industry, there were important purchases by the AES Corporation (United States) in Brazil, Chile and Venezuela, amounting to $3.6 billion.

The data show that FDI, and the importance of FDI, in the world’s 49 poorest countries is on the rise:

- FDI to LDCs increased from $0.6 billion in 1990 to $4.4 billion in 2000. This growth was broadly based: 24 LDCs experienced an average annual growth rate of more than 20 per cent and another 15 of them between 10 and 20 per cent during 1986-2000 (annex table A.I.3). Among these, African countries were particularly successful in recent years, as noted above.

- Although the LDCs’ share of global FDI is a mere 0.5 per cent, this amount is important for them: as a percentage of total investment in these countries, FDI rose from 4 per cent in 1988-1990 to 7 per cent in 1997-1999. More than 90 per cent of these flows was through greenfield investment, rather than cross-border M&As. Privatizations involving FDI
Figure I.18. Latin America and the Caribbean: FDI inflows, top 20 economies, 1999 and 2000\(^a\)
(Billions of dollars)

Source: UNCTAD, FDI/TNC database.

\(^a\) Ranked on the basis of the magnitude of 2000 FDI inflows.
Figure I.19. Latin America and the Caribbean: FDI flows as a percentage of gross fixed capital formation, top 20 economies, 1997-1999\(^a\)
(Percentage)

Source: UNCTAD, FDI/TNC database.

\(^a\) Ranked on the basis of the magnitude of 1997-1999 FDI inflows as a percentage of gross fixed capital formation.

\(^b\) Latin America and the Caribbean.
accounted for only 2 per cent of all FDI in the LDCs in the 1990s. But privatizations involving foreign investments can be important for individual LDCs, as the case of the privatization of copper mines in Zambia shows.

- There is a growing need to complement ODA with private finance. ODA to LDCs declined from $16.7 billion in 1990 to $11.6 billion in 1999. Bilateral ODA also declined, from $9.9 billion to $7.2 billion (annex figure A.I.1). In fact, 29 LDCs simultaneously experienced increases in FDI and decreases in bilateral ODA during the 1990s (annex figure A.I.2).

The geographical origin of FDI in LDCs is quite varied. France and the United Kingdom are the principal sources of FDI in African LDCs, where Europe for a long time has played a more important role than the United States. Most (three-quarters) of Japan’s FDI in African LDCs consists of flag-of-convenience investments in Liberia. In Asian LDCs, intraregional FDI is substantial, and firms from Malaysia, Singapore and Thailand are major investors.

Despite the obvious constraints of limited purchasing power and scarce technological and human resources, investment opportunities do exist in many areas. Investment in the LDCs takes place in many industries. One of the challenges is therefore to ensure that existing opportunities are adequately communicated to the business community. In fact, as of 1999, 44 of the Fortune 500 firms had responded to such opportunities and had invested in 31 LDCs (UNCTAD, 2001a). Major efforts have been undertaken by LDCs to improve their investment climates. At the national level, legislation in most LDCs now offers a wide range of guarantees, nondiscrimination between foreign and domestic investors, protection against expropriation, and permission for foreign affiliates to repatriate profits. Moreover, some leading industries have been liberalized and are now open to foreign investors.

The LDCs themselves have also been actively promoting their countries to foreign investors; investment promotion agencies have been established in 37 LDCs, 25 of which have joined the World Association of Investment Promotion Agencies (WAIPA, 2001).

At the bilateral level, as of 1 January 2001 the 49 LDCs had concluded a total of 241 BITs, more than 52 per cent of them during the 1990s alone. Other important measures include the conclusion of 133 DTTs. Finally, a growing number of LDCs are now signatories of relevant multilateral agreements. For example, as of April 2001, 18 LDCs had acceded to the Convention on the Recognition and Enforcement of Foreign Arbitral Awards; 33 had ratified the Convention on the Settlement of Investment Disputes between States and Nationals of other States; 40 were members of the Multilateral Investment Guarantee Agency; and 32 were members of the World Trade Organization.

As this discussion shows, LDCs are not unattractive to TNCs, and they have made substantial efforts for this purpose. Although FDI inflows have responded, however, much more needs to be done to advance the development of this group of countries.
3. **Central and Eastern Europe**

FDI inflows into Central and Eastern Europe increased in 2000 to a new record level of $27 billion (figure I.21). Continuing the pattern of previous years, Western European countries dominated these inflows, with member countries of the EU accounting for the bulk of the flows (annex table A.I.5). But inflows continued to be uneven, with three countries (Poland, Czech Republic and Russian Federation, in that order) absorbing two-thirds of the region’s total inflows.

The overall surge of inflows into Central and Eastern Europe in 2000 masks diverging trends in individual countries. In Poland and Hungary, FDI rose (in the latter slightly), while in the Russian Federation and the Czech Republic it declined, in the latter despite a continued increase of greenfield investment (figure I.22). The most dramatic surge in FDI inflows

---

**Figure I.21.** FDI inflows and their share in gross fixed capital formation in Central and Eastern Europe, \(^a\) 1990-2000

[Graph showing FDI inflows and their share in gross fixed capital formation]

*Source:* UNCTAD, FDI/TNC database.

\(^a\) Composed of countries in Central and Eastern Europe and developing Europe excluding Malta.

**Figure I.22.** Central and Eastern Europe: FDI inflows, 1999 and 2000\(^a\)

*(Billions of dollars)*

[Bar chart showing FDI inflows for different countries]

*Source:* UNCTAD, FDI/TNC database.

\(^a\) Ranked on the basis of the magnitude of 2000 FDI inflows.
– a sixfold increase – was registered by Slovakia where the volume of inflows in 2000 ($2.1 billion) was almost as high as the cumulative inflows of the preceding nine years, reflecting a series of major FDI deals realized in 2000. For the first time, inflows into Yugoslavia (which had not been reported in previous years) are included in the FDI statistics; they showed inflows of $29 million in 2000 (box I.4). The three Baltic countries (Latvia, Estonia and Lithuania, in that order) ranked high in terms of FDI inflows as a percentage of gross fixed capital formation (figure I.23).

Privatization-related FDI transactions were a key determinant of FDI inflows, with the exception of Hungary, where the privatization process has by and large been completed, and the Commonwealth of Independent States,

Box I.4. FDI in Yugoslavia

Since 1992, the National Bank of Yugoslavia has registered FDI inflows in the balance of payments of Yugoslavia in two years: 1997 ($740 million) and 1998 ($113 million). Additionally, the Federal Ministry for Foreign Economic Relations has reported the value of foreign investment contracts concluded and registered under the Law on Foreign Investments since 1992. The latter has included the domestic part of the mixed-company and joint venture projects, which – except in 1997 – has accounted for one-third to one-half of those figures. Taking 50 per cent of those values registered by the Federal Ministry for Foreign Economic Relations as an indication of FDI inflows, the following estimates can be established for the period 1992 to 1999 (box table I.4.1).

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>FDI contracts registered (dollars)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estimated FDI inflows (dollars)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FDI inflows/GFCF (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FDI stock/GDP (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: UNCTAD FDI/TNC database, based on information provided by the Federal Ministry for Foreign Economic Relations and the Yugoslav Chamber of Commerce and Industry.

Including the domestic part of the mixed-company and joint venture projects.

In 1996-2000, the Netherlands, Greece and Luxembourg were the most important source countries for FDI inflows (box table I.4.2).

In terms of the number of FDI contracts registered, trade, transport services and food production were the three main target industries of FDI in 1995-1998 (box table I.4.3). In terms of value, Telecom Italia (through its affiliate Stet International Netherlands N.V.) and the Hellenic Telecommunications Organization (OTE) were the top two investors in Yugoslavia.

Box table I.4.2. Countries of origin of FDI inflows into Yugoslavia, 1996-2000

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Netherlands</td>
<td>560</td>
</tr>
<tr>
<td>Greece</td>
<td>481</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>102</td>
</tr>
<tr>
<td>Cyprus</td>
<td>82</td>
</tr>
<tr>
<td>Bahamas</td>
<td>14</td>
</tr>
</tbody>
</table>

Source: UNCTAD, based on data provided by the Federal Ministry for Foreign Economic Relations.

Approval basis.

Box table I.4.3. Number of FDI projects in Yugoslavia, by industry, 1995-2000

<table>
<thead>
<tr>
<th>Industry</th>
<th>Number of projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade</td>
<td>2,156</td>
</tr>
<tr>
<td>Transport</td>
<td>758</td>
</tr>
<tr>
<td>Engineering</td>
<td>427</td>
</tr>
<tr>
<td>Textile</td>
<td>225</td>
</tr>
<tr>
<td>Road transport</td>
<td>208</td>
</tr>
<tr>
<td>Tourism</td>
<td>151</td>
</tr>
<tr>
<td>Other services</td>
<td>132</td>
</tr>
</tbody>
</table>

Source: UNCTAD, based on information provided by the Federal Ministry for Foreign Economic Relations and the Yugoslav Chamber of Commerce and Industry.

Figure I.23. Central and Eastern Europe: FDI flows as a percentage of gross fixed capital formation, 1997-1999<sup>a</sup> (Percentage)

Source: UNCTAD, FDI/TNC database.

<sup>a</sup> Ranked on the basis of the magnitude of 1997-1999 FDI inflows as a percentage of gross fixed capital formation.

<sup>b</sup> Central and Eastern Europe.
where large-scale privatizations involving foreign investors have not yet begun. The purchase of a majority share in Telekomunikacja Polska (Poland) by France Telecom for $4 billion carried out in 2000 was the region’s largest privatization and largest FDI transaction to date.

In the immediate future, privatization will continue to lead FDI inflows into the region. After 2002, however, most of the privatization process is expected to be completed in some economies that are far advanced in the transition process (especially the Czech Republic and Poland), and FDI patterns there may well come to resemble the picture in Hungary now, where FDI inflows are driven by additional greenfield investments and, increasingly, by private cross-border M&As (annex table A.1.6).

FDI outflows from the region grew even faster than FDI inflows in 2000 in spite of the fact that some of the transactions carried out by firms in the Russian Federation with the intention of establishing control over companies abroad go unreported, or are reported under other elements of the balance of payments. If these outflows are estimated, the Russian Federation probably becomes a major capital exporter. In Hungary, the second largest outward investor in the region (figure I.24), the Government provides assistance to the country’s outward investors (box I.5). The bulk of these flows take place within the region (annex table A.1.7).

Box I.5. Government support for investors from Hungary

Government-owned Corvinus International Investment Ltd., established in 1997, provides both finance (participation in share capital, loans and guarantees) and advisory services to potential outward investors. The typical clients of Corvinus are medium-sized Hungarian manufacturing enterprises, although the scheme is open, in principle, to all firms and industries. Corvinus has undertaken its largest equity investments into a Romanian bakery, a Romanian electrical engines and spare-parts production plant, a Slovakian dairy factory, a Chinese fruit processing plant, a Slovakian timber firm, and a Romanian timber firm. (Heti Világgazdaság, 27 February 1999, No. 8, p. 12; 13 May 2000, No. 19, p. 14; and 24 March 2001, No. 12, p. 12).

Source: UNCTAD, based on information provided by Corvinus International Investment Ltd.

Figure I.24. Central and Eastern Europe: FDI outflows, 1999 and 2000

(Millions of dollars)

Source: UNCTAD, FDI/TNC database.

Ranked on the basis of the magnitude of 2000 FDI outflows.
The above review shows that FDI – and international production – has grown faster than domestic investment and production. However, trends in FDI flows and the growth of international production differs by region and country. Thus, the relative significance of FDI in an economy varies among host countries. This is measured by the transnationality index of host countries, which is calculated as the average of the following four shares: FDI inflows as a percentage of gross fixed capital formation; FDI inward stock as a percentage of GDP; value added of foreign affiliates as a percentage of GDP; and employment of foreign affiliates as a percentage of total employment. For the 30 developing countries for which this index is estimated, it ranges between 3 and 54 in 1998 (figure I.25).

**Figure I.25. Transnationality index\(^a\) of host economies\(^b\)**

(Percentage)

Source: UNCTAD estimates.

\(^a\) Average of the four shares: FDI inflows as a percentage of gross fixed capital formation for the past three years (1996-1998 and 1997-1999 for CEE); FDI inward stocks as a percentage of GDP in 1998 (1999 for CEE); value added of foreign affiliates as a percentage of GDP in 1998 (1999 for CEE); and employment of foreign affiliates as a percentage of total employment in 1998 (1999 for CEE).

\(^b\) Data cover selected economies. Data on value added are available only for Finland, Italy (1997), Norway, Portugal (1996), United States (1997), China (1997), India (1995) and Malaysia (1995). For other economies, data were estimated by applying the ratio of value added of United States affiliates to United States outward FDI stock to total inward FDI stock of the country. Data on employment are available only for Austria, Denmark (1996), Finland, Germany, Ireland, Italy (1997), Portugal (1996), United States (1997), Hong Kong (China) (1997) and Indonesia (1996). For other countries, data were estimated by applying the ratio of employment of Finnish, German, Swiss and United States affiliates to Finnish, German, Swiss and United States outward FDI stock to total inward FDI stock of the economy. For Albania, Belarus, Bosnia and Herzegovina, Croatia, Estonia, Lithuania, the Republic of Moldova, Poland, Ukraine and Yugoslavia, the employment impact of foreign owned affiliates was estimated on the basis of their per capita inward FDI stocks. For the benchmark data, see annex table A.I.5. With the exception of the Czech Republic, Hungary and Slovenia, the value added of foreign owned firms was estimated on the basis of the per capita inward FDI stocks. For the benchmark data, see annex table A.I.6.
The most transnationalized host country economy was Hong Kong, China, replacing Trinidad and Tobago. In the developed world, New Zealand held that position. There are seven countries (two developed and five developing countries) whose index value exceeds 30 per cent. In general, the transnationality is higher in developing countries than in developed countries. In Central and Eastern Europe the transnationality index – prepared for the first time – surpassed 10 per cent on average, although it was still lower than the averages for both developed or developing countries (figure I.25). In Estonia and Hungary, the ratio was close to 25 per cent, and in the Czech Republic and Latvia it exceeded 15 per cent, indicating a high degree of internationalization. On the other hand, it was below 5 per cent in one-third of the countries covered.

C. The Inward FDI Index

The absolute FDI data used in the preceding sections show a substantial concentration of FDI flows. This, in turn, reflects the distribution of world economic activity and international transactions more generally (see chapter II). For instance, exports, domestic investments and technology payments are also highly concentrated: the shares of the top 10, 30 or 50 countries in these aggregates are not very different from their shares in FDI (table I.4). This is to be expected. As a market-driven activity, FDI is similar in its pattern to the patterns of trade, investment, technology and industrial production among countries.

Richer, more competitive and more advanced economies naturally receive and make more international direct investment than other economies. The marginalization of poor countries from FDI flows is a part of their marginalization in economic activity generally, particularly in the modern industries in which most TNCs tend to operate.

This does not mean, however, that the distribution of FDI inflows to countries or regions exactly match that of other economic aggregates. Clearly they do not – a number of location factors not directly related to economic conditions influence FDI. Such things as political risk, government policy, international perceptions and the regional “image” can affect FDI differently from – sometimes more intensely than – other aggregates. Thus, there can be significant variations in national abilities to attract inward FDI, given such factors as economic size or international exposure.

It is interesting, therefore, to examine the relative performance of countries in terms of attracting FDI, taking into account their relative economic strengths or positions in the global economy. Policy makers, in particular, are interested in comparing how well their countries are doing in attracting FDI relative to others. For this purpose, this report introduces a new index to facilitate such comparisons at the national and regional levels. The Inward FDI Index is the unweighted average of three ratios reflecting the propensity to attract FDI after adjusting for the relative economic size and strength of a host economy in the world.

<table>
<thead>
<tr>
<th>Table I.4. Concentration ratios of FDI, trade, domestic investment and technology payments, 1985 and 2000 (Percentages)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>top 10 countries</td>
</tr>
<tr>
<td>1985</td>
</tr>
<tr>
<td>2000</td>
</tr>
<tr>
<td>top 30 countries</td>
</tr>
<tr>
<td>1985</td>
</tr>
<tr>
<td>2000</td>
</tr>
<tr>
<td>top 50 countries</td>
</tr>
<tr>
<td>1985</td>
</tr>
<tr>
<td>2000</td>
</tr>
</tbody>
</table>

Source: UNCTAD, FDI/TNC database.

d Due to negative flows for some countries, the share is more than 100 per cent.
The three ratios take a country’s share in world FDI inflows and divide it by its share in each of three global aggregates: GDP, employment and exports. This provides a benchmark of a country’s international position as a destination for FDI. The Index simply indicates relative performance in attracting FDI; it does not measure the factors that account for such performance.

Higher GDP indicates larger markets, always a magnet for market-seeking FDI; it may also reflect a larger resource base, again a magnet for certain forms of FDI. Employment is very similar, indicating the size of the labour force and potential market size. Higher exports indicate greater openness to international markets and greater competitiveness in trade. Thus, ceteris paribus, a country with higher shares of these global aggregates may be expected to have larger shares of FDI inflows. Countries that receive more FDI than predicted by these aggregates – for whom the Index takes a value greater than one – can be presumed to have certain other advantages.

For instance, in comparison with similar countries, they may offer a more conducive regime for international investors (or they may be tax havens). They may have highly skilled labour, strong domestic research capabilities or excellent infrastructure. They may have strong local firms that can become efficient suppliers to TNCs. Or they may, in the perception of the international investment community, face good growth prospects. Similarly, countries with Index values of below one may restrict FDI inflows, have competitive weaknesses or poor growth prospects.

In a world where the determinants of FDI are changing (see above), the Index indicates – in a preliminary form – whether or not host countries have some of the essential ingredients for attracting new investment flows. It is, in other words, a measure of “revealed competitive advantage” in attracting FDI after discounting for size factors and export activity.

The Index covers 112 countries in 1988-1990 and 137 in 1998-2000, with all the values taken as averages for three years to avoid year-by-year variations. The results are interesting. There is a large dispersion around unity (figure I.26 and annex table A.I.10): clearly, countries vary greatly in their attractiveness to TNCs after taking account of their size and export activity.

For 1998-2000, the value of the Index ranges from 17.3 for the highest ranked economy, Belgium and Luxembourg to –0.8 for Yemen. Moreover, the rankings have changed significantly over time. For example, Singapore has slipped from first position at the end of the 1980s to thirteenth position a decade later. This reflects relatively slow inward FDI growth between the two periods, together with a rapid increase (more than doubling) of both GDP and exports. (The relatively slow growth of FDI may reflect the indirect effects of the Asian financial crisis.) The index for Brazil, by contrast, rose from 0.5 to 2.0 (annex table A.I.10), mainly as a result of a rise in the FDI share relative to the export share, reflecting the domestic market orientation of a good part of recent FDI inflows (into privatized infrastructure).

In 1998-2000, there were five countries with an Inward FDI Index of one, with their shares of FDI inflows exactly matching their average shares of world GDP, employment and exports (annex table A.I.10). These “balanced” countries include Costa Rica, El Salvador, Hungary, Malaysia and Slovakia. In ten more countries, the index was close to one (between 0.9 and 1.1). This group comprised only one developed country (Australia), six developing countries (including China) and three Central and Eastern European countries. There are 53 countries with a ratio higher than one and 79 with ratios lower than one. The last group, which “under-performs” in terms of attracting FDI, includes advanced economies like Japan, Italy and Greece, newly industrializing economies like the Republic of Korea, Taiwan Province of China and Turkey, oil rich economies like Saudi Arabia and a number of low-income countries. FDI recipients with high values of the Index (the “over-performers”) include the majority of the developed countries, Hong Kong (China), Singapore, and some Central and Eastern European countries.

Interpreting the Index calls for care and the use of evidence on other economic and policy variables. A high value of the Index, for instance, need not always be a good economic sign. For instance, it may reflect transitory factors (like large one-off transactions, say large M&As). It may also
Figure I.26. The Inward FDI Index, by host economy: the top 30 and the bottom 20, 1988-1990 and 1998-2000

Source: UNCTAD, FDI/TNC database.
reflect a relative decline in a deflator of the index, i.e. in GDP, employment or international competitiveness, to which FDI inflows have not responded (in the period considered). Similarly, a country’s Index may fall because a temporary crisis affects its FDI inflows differently from its effects on other economic aggregates.

Nonetheless, the Inward FDI Index can provide a starting point for benchmarking the extent to which countries succeed in attracting FDI. In general, countries with relatively strong and open economies are at the top of the ranking by the Index. These countries are leveraging their economic strength through policies to attract more than their “normal” share of FDI. There are also a few countries with weak economies but strong natural resource endowments that occupy places at the top of the Index ranking. These include LDCs like Angola and Mozambique. A number of countries at the bottom of the Index ranking are weak economies in which the influence of other economic factors and policies apparently pulls inward FDI below levels that could be expected on the basis of the elements of economic strength embodied in the Index. There are also others ranked at the bottom of the Index (such as Japan and the Republic of Korea), that have strong economic positions overall but have chosen to restrict inward FDI (at least until fairly recently).

Many of the changes in the Index over time are in line with changes in economic performance and policy factors affecting FDI. Take, for example, Ireland, the most dynamic country in the developed world in terms of recent growth and competitive performance. Ireland has targeted and attracted FDI to upgrade its technological and export structure, in combination with enhancing its human resources. It has succeeded in transforming a backward low-productivity economy into a centre of technology-intensive manufacturing and software activity. Its Inward FDI Index shows that it has moved in its ranking from the forty-sixth position in 1988-1990 to third position in 1998-2000, gaining in all the three ratios making up the Index – the increase in the ratio with respect to employment share is particularly striking. Similarly, Sweden’s rise on the Index (from twenty-ninth to fourth position) reflects partly a deliberate policy change during the 1990s towards greater openness to inward FDI (WIR99). The increase in the number of EU member countries in the top 20 over the decade reflects, among other factors, the large and increasing influence of regional integration on FDI flows. Large countries with more stable economic performance and stable FDI-related policies have tended to retain approximately their same position: the United Kingdom and United States are good examples. An economically stable country that becomes more open or attractive for cross-border M&As can rapidly increase its attractiveness for FDI: Germany has moved from seventy-second place to the twentieth over the decade. And so on.

Now consider the Index at the regional level (table I.5). In both periods, the Index value for developed countries is about twice the world average, while the Index values for developing countries and Central and Eastern Europe are below the world average. However, in the latter group, the Index value increased rapidly between the two periods. The main difference between the three groups of countries arises, not surprisingly, from the employment variable. Both developed and developing countries attract FDI roughly in proportion to their shares in world GDP, but developed countries receive far larger shares of FDI than their shares of employment, while developing countries and economies in transition receive less.

Within the developing world, the Inward FDI Index for South America and Central Asia, as well as developing Europe exceeded unity in 1998-2000. In the other regions (and for South America in the other period), the Index value was below 1. West Asia, South Asia and North Africa show the lowest values for the Index; the reasons for this may have more to do with political factors than economic ones. “Other” (sub-Saharan) Africa receives FDI in line with its GDP share but very little in relation to its share in employment; over time its FDI index value has declined slightly. For the LDC group as a whole, the FDI index value doubled between the two periods, mostly due to increases in the FDI-per-exports and FDI-per-GDP ratios. In fact, in the second period, the Index value for African LDCs exceeded 1; their Index value is now almost twice as high as that for sub-Saharan Africa as a whole. The Index value for other LDCs has declined over the decade.
The Inward FDI Index suggests that Africa receives less FDI flows than the region’s relative economic size. The underlying economic reality is that sub-Saharan Africa has lost its share in both world FDI inflows and other economic aggregates (annex table A.I.11); African LDCs have, however, maintained their share of FDI but have fallen further behind in other economic aggregates.

In conclusion, the Inward FDI Index is a useful addition to the analytical database on FDI flows. Carefully used, it can help policymakers to benchmark their economies’ performance with respect to competitors and “role models”, and provide information for strategy formulation. The present Index is a first attempt, and will be refined over time.

Table I.5. The Inward FDI Index, by region, 1988-1990 and 1998-2000

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FDI share GDP share</td>
<td>FDI share employment share</td>
<td>FDI share export share</td>
<td>Inward index</td>
<td>FDI share GDP share</td>
<td>FDI share employment share</td>
</tr>
<tr>
<td>World</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Developed economies</td>
<td>1.0</td>
<td>4.0</td>
<td>1.1</td>
<td>2.0</td>
<td>1.0</td>
<td>4.4</td>
</tr>
<tr>
<td>Western Europe</td>
<td>1.3</td>
<td>4.9</td>
<td>0.9</td>
<td>2.4</td>
<td>1.6</td>
<td>6.3</td>
</tr>
<tr>
<td>European Union</td>
<td>1.3</td>
<td>4.8</td>
<td>1.0</td>
<td>2.4</td>
<td>1.6</td>
<td>6.4</td>
</tr>
<tr>
<td>Other Western Europe</td>
<td>1.1</td>
<td>5.7</td>
<td>0.6</td>
<td>2.5</td>
<td>1.1</td>
<td>5.6</td>
</tr>
<tr>
<td>North America</td>
<td>1.1</td>
<td>4.7</td>
<td>2.0</td>
<td>2.6</td>
<td>0.9</td>
<td>4.4</td>
</tr>
<tr>
<td>Other developed economies</td>
<td>0.3</td>
<td>1.1</td>
<td>0.5</td>
<td>0.6</td>
<td>0.1</td>
<td>0.5</td>
</tr>
<tr>
<td>Developing economies</td>
<td>1.0</td>
<td>0.2</td>
<td>0.7</td>
<td>0.6</td>
<td>1.0</td>
<td>0.3</td>
</tr>
<tr>
<td>Africa</td>
<td>1.0</td>
<td>0.2</td>
<td>0.7</td>
<td>0.6</td>
<td>0.7</td>
<td>0.1</td>
</tr>
<tr>
<td>North Africa</td>
<td>0.8</td>
<td>0.4</td>
<td>0.7</td>
<td>0.6</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>Other Africa</td>
<td>1.2</td>
<td>0.2</td>
<td>0.8</td>
<td>0.7</td>
<td>1.0</td>
<td>0.1</td>
</tr>
<tr>
<td>Latin America and the Caribbean</td>
<td>0.8</td>
<td>0.6</td>
<td>1.0</td>
<td>0.8</td>
<td>1.1</td>
<td>1.0</td>
</tr>
<tr>
<td>South America</td>
<td>0.7</td>
<td>0.5</td>
<td>1.0</td>
<td>0.7</td>
<td>1.2</td>
<td>1.1</td>
</tr>
<tr>
<td>Other Latin America and the Caribbean</td>
<td>1.2</td>
<td>0.8</td>
<td>1.1</td>
<td>1.0</td>
<td>0.9</td>
<td>0.7</td>
</tr>
<tr>
<td>Asia and the Pacific</td>
<td>1.1</td>
<td>0.2</td>
<td>0.6</td>
<td>0.6</td>
<td>0.9</td>
<td>0.2</td>
</tr>
<tr>
<td>Asia</td>
<td>1.1</td>
<td>0.2</td>
<td>0.6</td>
<td>0.6</td>
<td>0.9</td>
<td>0.2</td>
</tr>
<tr>
<td>West Asia</td>
<td>0.3</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td>Central Asia</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>1.7</td>
<td>0.3</td>
</tr>
<tr>
<td>South, East and South-East Asia</td>
<td>1.3</td>
<td>0.2</td>
<td>0.7</td>
<td>0.7</td>
<td>1.1</td>
<td>0.2</td>
</tr>
<tr>
<td>South Asia</td>
<td>0.1</td>
<td>..</td>
<td>0.3</td>
<td>0.1</td>
<td>0.2</td>
<td>-</td>
</tr>
<tr>
<td>Pacific</td>
<td>4.5</td>
<td>1.6</td>
<td>1.9</td>
<td>2.7</td>
<td>1.2</td>
<td>0.3</td>
</tr>
<tr>
<td>Developing Europe</td>
<td>2.2</td>
<td>3.4</td>
<td>0.5</td>
<td>2.1</td>
<td>1.2</td>
<td>1.5</td>
</tr>
<tr>
<td>Central and Eastern Europe</td>
<td>0.2</td>
<td>0.1</td>
<td>0.2</td>
<td>0.1</td>
<td>0.9</td>
<td>0.4</td>
</tr>
</tbody>
</table>

Memorandum: least developed countries d

| LDCs: total                  | 0.3       | ..    | 0.6   | 0.3       | 0.6   | 0.1   | 1.0   | 0.6 |
| African LDCs                | 0.5       | 0.1   | 0.6   | 0.4       | 1.6   | 0.1   | 1.7   | 1.1 |
| Latin America and the Caribbean LDCs | 0.3 | ..    | 0.4   | 0.3       | 0.1   | ..    | 0.2   | 0.1 |
| Asian and Pacific LDCs      | 0.1       | ..    | 0.5   | 0.2       | 0.1   | ..    | 0.2   | 0.1 |
| Asian LDCs                  | 0.1       | ..    | 0.5   | 0.2       | 0.1   | ..    | 0.2   | 0.1 |
| West Asian LDCs             | ..        | ..    | ..    | ..        | -1.3  | -0.2  | -0.9  | -0.8 |
| South and South-East Asian LDCs | 0.1   | ..    | 0.5   | 0.2       | 0.2   | ..    | 0.5   | 0.2 |
| Pacific LDCs                | ..        | ..    | ..    | ..        | ..    | ..    | ..    | .. |

Source: UNCTAD.

a The ratio of the region’s share of world FDI inflows to the region’s share of world GDP.
b The ratio of the region’s share of world FDI inflows to the region’s share of world employment. The data are from the ILO’s LABSTa database and the World Bank’s World Development Indicators, 2001.
c The ratio of the region’s share of world FDI inflows to the region’s share of world exports of foods and non-factor services.
d LDCs as defined by the United Nations.

Note: The indexes for some regions are based on incomplete coverage of countries in the region, due to lack of data on one or more variables. Also, the indexes for Central Asia, Developing Europe and Central and Eastern Europe are not strictly comparable between the two periods because the number of countries included in each differed substantially between the two periods. The increase in the number of countries covered by the Index for developing economies in the second period (from 86 to 100) can cause a moderate upward bias in that grouping’s Index in the second period.
Notes

1. WIR98 reviewed the economic and policy determinants of inward FDI and analysed them statistically, drawing a distinction between traditional and new determinants of location. It found that traditional variables continue to exercise a significant impact on the geographical pattern of inward FDI; domestic market size and growth, in particular, were important in explaining FDI flows in developing countries – but new influences were also very important.

2. The presence of good infrastructure (e.g. telecommunications, business services, utilities) is also a precondition.

3. In fact, in some technology-intensive industries like electronics, some firms choose to specialize entirely in innovation and marketing, leaving the whole production chain to contract manufacturers. See Sturgeon, 1997.

4. The changing geography of world industry and the role of international production systems are explored in UNIDO, 2001.

5. The overwhelming majority of the 62,000 or so TNCs operating today are small and medium-sized enterprises (SMEs) (Fujita, 1998; UNCTAD, 1998a). SME TNCs tend to remain small even after going international, and many, as those from Japan, prefer to invest in neighbouring countries. They have a preference for joint ventures and greenfield investments. They also tend to have stronger backward linkages in host economies. However, SME investors face high information costs, and special efforts need to be made by host countries to attract them.

6. Cross-border M&As for the first six months of 2001 declined by 17 per cent, to $300 billion, compared with the corresponding period of the previous year. This amount accounts for only one-quarter of the total cross-border M&As in 2000. Therefore, considering the fact that M&As constitute a substantial share of FDI (chapter II), FDI flows are likely to decline in 2001.

7. The number of foreign affiliates is probably a substantial underestimation, among other reasons because governments have a cutoff point in assets, sales or net income (in the case of the United States, e.g. it is $3 million for either one) or in the equity share held by foreign firms (in the case of Japan, e.g. it is more than one-third), below which foreign affiliates are not recorded in official statistics.

8. Irrespective of years, “EU” refers to the current composition of the member states (15 countries) throughout this report.

9. According to a survey of the Deutscher Industrie- und Handelstag (DIHT), among 9,000 German manufacturing companies, more than half of the respondents intending to undertake FDI in 2001 (and about 40 per cent of all respondents planned to do so) are planning to invest in one or more of the candidate countries, mainly motivated by cost or market access considerations, as well as to establish sales representative offices. This suggests that German investors are already preparing for the enlargement of the EU (DIHT, 2000).

10. Three of the five mega cross-border M&As concluded by Japanese firms in 2000 involved the NTT Group (annex table A.I.4). The $9.8 billion acquisition of AT&T Wireless by NTT Docomo in 2000 (which is to be paid out in 2001) was the largest FDI ever made by a Japanese company.

11. Interestingly, on an ex post facto (or prior notice) basis, FDI trends in 2000 showed the complete opposite trend. While FDI outflows on this basis declined by 23 per cent in fiscal year 2000 to $50 billion, FDI inflows reached record levels of $29 billion with a growth rate of 38 per cent. This asymmetric picture of FDI flows in 2000 between actual flows (on a balance-of-payments basis) and notified flows (on an ex post facto basis) reveals well-known statistical problems (e.g. different timing of the recording of FDI, net basis recording for the former statistics, and inclusion of the cancellation of FDI projects in the latter statistics).


14. That is, Chinese investors use manufacturing equipment as equity to form joint ventures with local partners (who usually provide land and infrastructure) in other developing countries.

15. It should be noted that part of China's outward investment in Hong Kong (China) is round-tripping.

16. FDI inflows into Latin America during the 1990s can be divided into two different patterns. In Mexico and the Caribbean Basin, manufacturing TNCs (especially in automobiles, electronics and clothing) sought greater efficiency by integrating local production facilities into their regional systems, targeting the United States market. In South America, however, foreign investors focused on traditional activities based on natural resources and manufactured goods produced for local markets or services. As a result, FDI did not generate significant improvements in the international competitiveness of those countries. However, as significant amounts of FDI have flowed into services, the long-term overall competitiveness of these economies should...
be affected positively. See ECLAC, 2001 for a further discussion of these and related issues.

17 For details, see UNCTAD, 2001a.

18 For this purpose, UNCTAD and the International Chamber of Commerce prepare and publish investment guides for LDCs; see UNCTAD-ICC, 2000a, 2000b, 2001a, 2001b and forthcoming.

19 UNCTAD, upon the request of countries, undertakes in-depth Investment Policy Reviews for developing countries; for LDCs, see UNCTAD, 2000d and UNCTAD forthcoming c.

20 Central and Eastern Europe includes in this section Albania, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, the Former Yugoslav Republic of Macedonia, the Republic of Moldova, Poland, Romania, the Russian Federation, Slovakia, Slovenia, Ukraine, and the Federal Republic of Yugoslavia (Serbia including Kosovo and Montenegro).

21 According to CzechInvest, the value of greenfield projects mediated by the agency rose from $523 million in 1999 to $1.1 billion in 2000; see “CzechInvest in numbers”, http://www.czechinvest.org/.

22 FDI transactions in 2000 included Deutsche Telekom’s (Germany) investment into Slovak Telecommunications ($936 million), MOL’s (Hungary) share increase in the Slovnaft refinery ($160 million), Neusiedler’s (Austria) investment into SCP Ruzomberok (pulp and paper, $80 million) and U.S. Steel’s investment in VSZ Kosice ($60 million). Information provided by the Ministry of Economic Affairs of Slovakia.

23 In the Russian Federation, for example, foreign investors acquired not more than 3 per cent of potentially privatizable assets (until end-1998) (Kalotay and Hunya, 2000, p. 41).

24 Other economic aggregates also show similar patterns: the leading 10 countries accounted for 76 per cent of world manufacturing value added in 1998, 65 per cent of manufactured exports and 91 per cent of industry-financed R&D (UNIDO, 2001).

25 It may have been possible to use other indicators of relative economic size and strength, but the three used here have the broadest base and are the most comparable across countries.

26 On the other hand, the fall in, and the low level of the Index value for Greece indicates that the positive influence of regional integration is probably conditioned by other competitiveness-related factors.