
Part One

Trends

CHAPTER I

GLOBAL TRENDS

The growth of international production is an important part of the process of globalization. “International production” refers to that part of the production of goods and services of countries that is controlled and managed by firms headquartered in other countries. Firms can exercise control of production in countries (“host countries”) other than their own (“home country”) either through the ownership of a minimum share of equity – that is, a minimum share in the capital stock or assets – of the enterprises in which the production takes place, or through contractual (non-equity) arrangements that confer control upon them. Exercising control and having a voice in the management of an enterprise located abroad (“foreign affiliate”) – whether through capital investment or through contractual arrangement – leads to international production.

Firms that engage in international production – transnational corporations (TNCs) – establish, under the common governance of their headquarters, international production systems in which factors of production move, to a greater or lesser extent, among units located in different countries. These systems increasingly cover a variety of activities, ranging from research and development (R&D) to manufacturing to service functions such as accounting, advertising, marketing and training, dispersed over host-country locations and integrated to produce final goods or services. They are also increasingly being established, especially in developed countries, through mergers between existing firms from different countries or the acquisition of existing enterprises in countries by firms from others. Once internationally dispersed production units under common governance are established, mobile and location-bound factors of production to which a TNC has access in home and host countries (and sometimes even third countries) are combined in each unit in ways and for production that contribute the most to the firm’s economic and strategic objectives. From the perspective of factor use – as distinct from that of location as host or home country for enterprises engaged in international production – *all* of the production that takes place in these TNC production systems (in parent firms or home-country units as well as foreign affiliates or host-country units) constitutes international production. Viewed from the perspective of home and host countries, however, it is, respectively, the production in foreign locations by a country’s own firms, and the production by foreign firms in a country’s own locations, that constitute international production. It is this latter concept of production in foreign locations, or production by foreign affiliates, that is most commonly used and that is used in

this volume. It lends itself to measurement when attempting to understand the importance of international production.

The discussion in section A below examines recent trends in international production. It looks at the elements constituting the various parts of the phenomenon. These include the number and spread of the enterprises (or TNC parent firms) and their foreign affiliates that undertake international production, the capital and technology flows that take place within corporate systems between home and host countries, the assets accumulated to create the basis for international production, and the output, sales, trade and employment that international production generates. Section B focuses then on the geographical and industrial patterns of international production, as indicated by the distribution of FDI.

A. Trends

The extent and spread of international production activity may be gauged from the number of enterprises that are involved in it and their location. Over 500,000 foreign affiliates are in operation world-wide, established by about 60,000 parent companies (table I.1), spanning virtually every country in the world. To this, an (unknown) number of firms would have to be added that are linked to each other through non-equity relationships. While a number of these parent corporations fit the traditional notion of TNCs as big and dominant (chapter III), many are small- and medium-sized enterprises (SMEs).¹ To illustrate, in 1996, small- and medium-sized TNCs accounted for four-fifths of all Swedish TNCs, while in Italy they accounted for three-fifths (UNCTAD, forthcoming a); in the case of Japan, small- and medium-sized TNCs accounted for 55 per cent of new foreign affiliates by Japanese firms in 1996 (Fujita, 1998, p. 70). In today's globalizing world economy, the increasing competitive pressures faced by firms of all sizes impel more and more of them to establish an international portfolio of locational assets to remain competitive (UNCTAD, 1995). However small parent firms and their foreign affiliates may be, they are part of an increasing network of production linkages across borders.

The establishment of foreign affiliates involves costs – in cash or kind, tangible and intangible. Some of the funds required are made available by parent firms in the form of equity (often in a package comprising capital as well as other resources such as technology, organizational and managerial practices and marketing expertise), intra-company loans, and reinvested earnings (which accounted for about one fifth of total FDI flows in 1994-1997 (figure I.1)),² together defined as foreign direct investment (FDI).³ In addition, foreign affiliates can also be financed from funds that they raise in the domestic capital markets of host countries or in international capital markets in forms such as loans and bonds. Flows of funds from international capital markets may in fact sometimes be higher than FDI flows; this was the case in 1988, 1990, 1993 and 1996 in respect to international funds other than FDI channelled to foreign affiliates of United States TNCs (and, therefore, not recorded under FDI (figure I.2)). The relative importance of non-FDI finance for foreign affiliates is, however, likely to be lower in the case of affiliates in developing countries. Financing also comes from equity shares contributed by local partners or shareholders in the case of foreign affiliates that are not wholly owned by their parent companies. Total investment expenditure in foreign affiliates is, therefore, typically higher than the value captured by FDI data (see chapter VI). In the case of foreign affiliates set up through mergers and acquisitions (M&As) (which also include assets acquired in the context of privatization, a special case of M&A), it is not known whether cross-border M&As are being financed by FDI only. They too can be financed from domestic capital markets or from international capital markets. In addition, it is often not known to the user of data whether the payment for an M&A is made in the year of the M&A, or phased over several years (box I.1). Therefore, there is not necessarily a direct correspondence between the value of cross-border M&As and that of FDI flows; in other words, it cannot be taken for granted that the total value of cross-border M&As actually represents FDI inflows.⁴

**Table I.1. Number of parent corporations and foreign affiliates,
by area and economy, latest available year**
(Number)

Area/economy	Year	Parent corporations based in economy ^a	Foreign affiliates located in economy ^a
Developed economies		49 806^b	94 623
Western Europe		39 415	62 226
European Union		33 939^b	53 373
Austria	1996	897	2 362
Belgium	1997 ^c	988	1 504
Denmark	1998	9 356	2 035 ^e
Finland	1997	1 963 ^e	1 200
France	1996	2 078	9 351
Germany	1996	7 569	11 445 ^f
Greece	1991	..	798
Ireland	1994	39	1 040
Italy	1995	966	1 630
Netherlands	1993	1 608 ^g	2 259 ^g
Portugal	1997	1 350	5 809
Spain	1998	857 ^h	7 465
Sweden ⁱ	1998	5 183	3 950
United Kingdom ^j	1997	1 085 ^k	2 525 ^l
Other Western Europe		5 476^b	8 853
Iceland	1998	70	79
Norway	1997	900 ^m	3 000 ^m
Switzerland	1995	4 506	5 774
Japan	1998	4 334	3 321 ⁿ
United States	1996	3 382 ^o	18 711 ^p
Other developed		2 675	10 365
Australia	1998	596	2 550
Canada	1997	1 722	4 562
New Zealand	1998	217	1 106
South Africa	1997	140	2 147
Developing economies		9 246^b	238 906
Africa		43^b	429
Ethiopia	1998	..	21 ^p
Mali ^r	1999	3	33
Seychelles	1998	-	30
Swaziland	1996	30	134
Zambia	1997	2	175
Zimbabwe	1998	8	36
Latin America and the Caribbean		2 594^b	26 577
Bolivia	1996	..	257
Brazil	1998	1 225	8 050
Chile	1998	478 ^s	3 173 ^t
Colombia ^q	1998	877	4 468
El Salvador	1990	..	225
Guatemala	1985	..	287
Guyana	1998	4	56
Jamaica	1997	..	156
Mexico	1993	..	8 420
Paraguay	1995	..	109
Peru	1997	10 ^u	1 183 ^v
Trinidad & Tobago	1998	..	70 ^w
Uruguay	1997	..	123

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Table I.1. Number of parent corporations and foreign affiliates, by area and economy, latest available year (continued)

(Number)

Area/economy	Year	Parent corporations based in economy ^a	Foreign affiliates located in economy ^a
South, East and South-East Asia		6 067^b	206 148
Bangladesh	1997	143 ^x	288
China	1997	379 ^y	145 000
Hong Kong, China	1998	500 ^z	5 312
India	1995	187 ^z	1 416
Indonesia	1995	313 ^{aa}	3 472 ^{ab}
Korea, Republic of	1998	4 488	5 137
Malaysia	1998	..	3 787 ^{ac}
Mongolia	1998	..	1 100 ^{ad}
Pakistan	1993	57	758
Philippines	1995	..	14 802 ^{ae}
Singapore	1995	..	18 154
Sri Lanka ^{af}	1995	..	139
Taiwan Province of China	1990	..	5 733
Thailand	1992	..	1 050
West Asia		449^b	1 948
Oman	1995	92 ^{ab}	351 ^{ab}
Saudi Arabia	1989	..	1 461
Turkey	1995	357	136
Central Asia		9	1 041
Kyrgyzstan	1997	9 ^{ag}	1 041 ^{ah}
The Pacific		84	2 763
Fiji	1997	-	151
Papua New Guinea	1999 ^{ai}	-	2 342
Tonga	1998	84	270
Central and Eastern Europe		850^b	174 710
Albania	1998	..	1 239
Armenia	1998	..	157 ^{aj}
Belarus	1994	..	393
Bulgaria	1994	26	918
Croatia	1997	70	353
Czech Republic	1999	660 ^{ak}	71 385 ^{al}
Estonia	1999	..	3 066 ^{am}
Hungary	1998	..	28 772 ^{af}
Lithuania	1998	16	1 778
Poland	1998	58 ^{an}	35 840 ^{ao}
Romania	1998	20 ^{an}	9 195 ^{ap}
Russian Federation	1994	..	7 793
Slovakia	1997	..	5 560 ^{aq}
Slovenia	1997	..	1 195 ^{af}
Ukraine	1998	..	7 066
World		59 902	508 239

Source: UNCTAD estimates.

^a Represents the number of parent companies/foreign affiliates in the economy shown, as defined by that economy. Deviations from the definition adopted in the World Investment Report (see section on definitions and sources in the annex B) are noted below.

^b Includes data for only the countries shown below.

^c Provisional figures by Banque Nationale de Belgique.

^d Of this number, 1,517 are majority-owned foreign affiliates.

^e Directly and indirectly owned foreign affiliates.

^f Does not include the number of foreign-owned holding companies in Germany which, in turn, hold participating interests in Germany (indirect foreign participating interests).

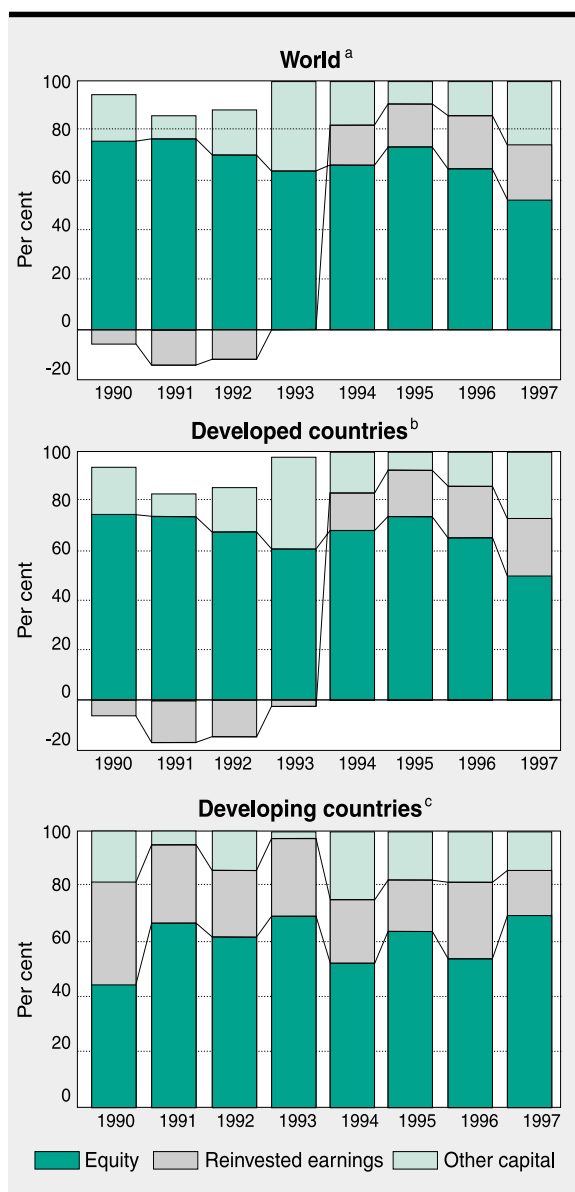
^g As of October 1993.

^h Includes those Spanish parent enterprises which, at the same time, are controlled by a direct investor.

- i Data provided by Sveriges Riksbank. Includes non-active firms (i.e. firms that are not in operation). If the Swedish enterprises owning majority-owned foreign affiliates are considered, the number of Swedish TNCs was 1,833. Similarly, the number of majority-owned foreign affiliates operating in Sweden was 3,953. The survey on majority-owned foreign affiliates is conducted by NUTEK (Swedish National Board for Industrial and Technical Development).
- j Data on the number of parent companies based in the United Kingdom, and the number of foreign affiliates in the United Kingdom, are based on the register of companies held for inquiries on the United Kingdom FDI abroad, and FDI into the United Kingdom conducted by the Central Statistical Office. On that basis, the numbers are probably understated because of the lags in identifying investment in greenfield sites and because some companies with small presence in the United Kingdom and abroad have not yet been identified.
- k Represents a total of 27 bank parent companies and 1,058 non-bank parent companies.
- l Represents 453 foreign affiliates in banking and 2,072 non-bank foreign affiliates.
- m Approximation.
- n Only foreign affiliates that have over 20 per cent stake in their affiliates located in Japan. plus the number of foreign affiliates, insurance and real estate industries in November 1995 (284).
- o Represents a total of 2,613 non-bank parent companies in 1996 and 60 bank parent companies in 1994 with at least one foreign affiliate whose assets, sales or net income exceeded \$3 million, and 709 non-bank and bank parent companies in 1994 whose affiliate(s) had assets, sales and net income under \$3 million. Each parent company represents a fully consolidated United States business enterprise, which may consist of a number of individual companies.
- p Represents a total of 12,226 bank and non-bank affiliates in 1996 whose assets, sales or net income exceeded \$1 million, and 5,551 bank and non-bank affiliates in 1992 with assets, sales and net income under \$1 million, and 534 United States affiliates that are depository institutions. Each affiliate represents a fully consolidated United States business enterprise, which may consist of a number of individual companies.
- q Represents the number of foreign affiliates that received permission to invest during 1992-May 1998.
- r As of April 1999.
- s Estimated by Comité de Inversiones Extranjeras.
- t Number of foreign companies registered under DL600.
- u Less than 10.
- v Out of this number, 811 are majority-owned foreign affiliates, while 159 affiliates have less than 10 per cent equity share.
- w An equity stake of 25 per cent or more of the ordinary shares or voting power.
- x Estimates by the Board of Investment.
- y As of 1989.
- z As of 1991.
- aa As of October 1993.
- ab As of May 1995.
- ac Wholly-owned foreign affiliates only.
- ad The number of companies receiving foreign investment that are registered with the Foreign Investment and Foreign Trade Agency.
- ae This number covers all firms with foreign equity, i.e., equity ownership by non-resident corporations and/or non-resident individuals, registered with the Securities Exchange Commission from 1989 to 1995.
- af Data are for the number of investment projects.
- ag The number of firms that are registered with the National Bank of Kyrgyz Republic. The actual number of firms that are in operation was three.
- ah The number of firms that are registered with the National Bank of Kyrgyz Republic. The actual number of firms that are in operation was 387.
- ai As of March 1999.
- aj The number refers to the firms that are in operation. The total number of foreign affiliates registered is 1,299.
- ak As of 1997.
- al Out of this number 53,775 are fully-owned foreign affiliates. Includes joint ventures.
- am As of 15 March 1999. Only registered affiliates with the Estonian Commercial Register.
- an As of 1994.
- ao Number of firms with foreign capital.
- ap The number of affiliates established during December 1990-December 1998.
- aq Includes joint ventures with local firms.

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

Figure I.1. Components of FDI inflows, 1990-1997

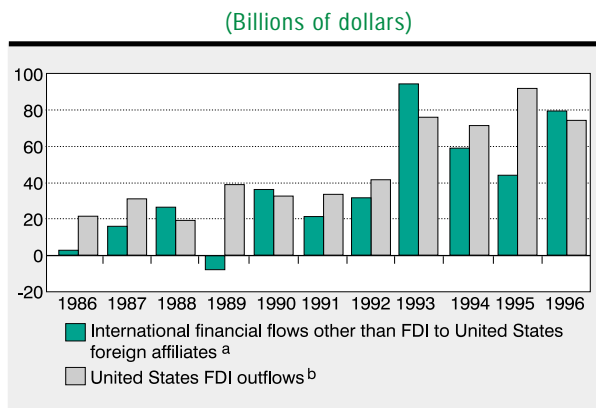


Source: UNCTAD, based on IMF, the May 1999 International Financial Statistics CD-ROM.

- ^a Includes two economies in Central and Eastern Europe: Estonia, for which data starts in 1992, and Poland.
- ^b Includes Australia, Finland, Germany, Iceland, Netherlands, New Zealand, Switzerland, United Kingdom and the United States.
- ^c Includes Antigua and Barbuda, Barbados, Botswana, Dominica, Fiji, Grenada, Guatemala, Kazakhstan, Malta, Mexico, Namibia, Netherlands Antilles, Panama, Saint Lucia, Saint Vincent and the Grenadines, Senegal, Sri Lanka, Swaziland, and Trinidad and Tobago. 1996 data are not available for the Netherlands Antilles and Trinidad and Tobago. 1997 data are not available for Antigua and Barbuda, Dominica, Fiji, Grenada, Netherlands Antilles, Saint Lucia, Saint Vincent and the Grenadines, Senegal, and Trinidad and Tobago. Data for Kazakhstan are not available prior to 1995.

Note: Figures are based on 30 countries for which the data on each component of FDI inflows are available throughout the period.

Figure I.2. International financial flows other than FDI outflows to foreign affiliates of United States TNCs and United States FDI outflows, 1986-1996



Source: UNCTAD, based on United States Department of Commerce, various issues a and various issues b.

- ^a Covers only majority-owned non-bank foreign affiliates of non-bank United States parent firms. Not including reinvested earnings. Fiscal year.
- ^b Excluding outflows to banking industry.

Box I.1 The difficulty of relating M&A values to FDI flows

In July 1998, Brazil privatized Telebrás System, the state-owned Brazilian group comprised of some 20 Brazilian telecommunications companies. The state sold its interests in Telebrás System for \$18.9 billion. Foreign investors invested \$12.62 billion (or about two-thirds of the total sale). The payments were supposed to be phased over three years, with 40 per cent in 1998, 30 per cent in 1999 and 30 per cent in 2000.

The payments for 1998 were made in 1998; the payments for 2000 were advanced to 1999 and made together with the 1999 payments. Out of the total of \$12.62 billion, \$5.26 billion were paid in 1998, of which \$2.72 billion took the form of FDI, while \$2.54 billion were borrowed in international capital markets.

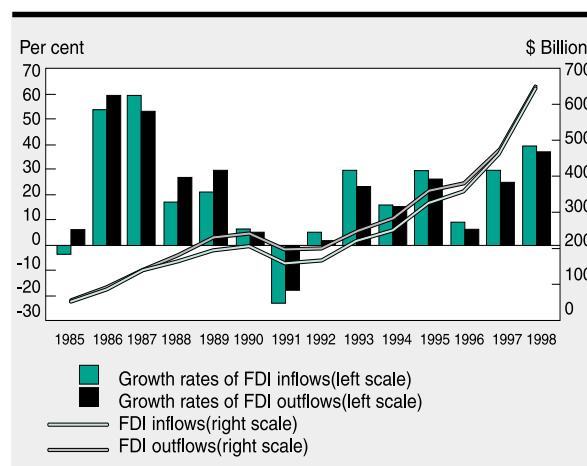
If the total amount paid by foreign investors for the privatization of Telebrás (\$12.62 billion) would have been calculated as a per cent of total 1998 FDI inflows (of \$26 billion), the ratio would have been 48 per cent. In reality, however, only about 10 per cent consisted of FDI inflows on account of the Telebrás privatization in 1998.

This example demonstrates the difficulty of simply calculating M&A amounts as a percentage of FDI inflows. Indeed, there are other sources of finance for foreign investors not captured by FDI flows, and parts of the payment can be phased.

Source: UNCTAD, based on information from the Banco Central do Brasil.

Total outward FDI per annum – the value of financial flows per year (including the value of in-kind assets) from home countries to foreign affiliates in host countries – and the inward FDI corresponding to it (which should, in principle, equal outward FDI) have grown steadily in recent years (figure I.3). In 1998, world FDI outflows reached a record level of \$649 billion and inflows, \$644 billion (table I.2), making it the single most important component of private capital flows to developing countries (box I.2). These levels were reached against the backdrop of numerous unfavourable conditions in the world economy which could have slowed down FDI in 1998 – but, at least in 1998, did not: recession in Asia, including Japan; instability in financial markets in Asia, the Russian Federation and Latin America; reduced bank lending; declining world trade; decreases in commodity prices, especially oil prices; reduced privatization activity; and

Figure I.3. World FDI inflows and outflows: value and annual growth rates, 1985-1998



Source: UNCTAD, FDI/TNC database.

Table I.2. Selected indicators of FDI and international production, 1986-1998

(Billions of dollars and percentage)

Item	Value at current prices (Billion dollars)			Annual growth rate (Per cent)				
	1996	1997	1998	1986-1990	1991-1995	1996	1997	1998
FDI inflows	359	464	644	24.3	19.6	9.1	29.4	38.7
FDI outflows	380	475	649	27.3	15.9	5.9	25.1	36.6
FDI inward stock	3 086	3 437	4 088	17.9	9.6	10.6	11.4	19
FDI outward stock	3 145	3 423	4 117	21.3	10.5	10.7	8.9	20.3
Cross-border M&As ^a	163	236	411	21.0 ^b	30.2	15.5	45.2	73.9
Sales of foreign affiliates	9 372	9 728 ^c	11 427 ^c	16.6	10.7	11.7	3.8 ^c	17.5 ^c
Gross product of foreign affiliates	2 026	2 286 ^d	2 677 ^d	16.8	7.3	6.7	12.8 ^d	17.1 ^d
Total assets of foreign affiliates	11 246	12 211 ^e	14 620 ^e	18.5	13.8	8.8	8.6 ^e	19.7 ^e
Exports of foreign affiliates	1 841 ^g	2 035 ^g	2 338 ^g	13.5	13.1	-5.8 ^g	10.5 ^g	14.9 ^g
Employment of foreign affiliates (thousands)	30 941	31 630 ^f	35 074 ^f	5.9	5.6	4.9	2.2 ^f	10.9 ^f
<i>Memorandum:</i>								
GDP at factor cost	29 024	29 360	..	12.0	6.4	2.5	1.2	..
Gross fixed capital formation	6 072	5 917	..	12.1	6.5	2.5	-2.5	..
Royalties and fees receipts	57	60	..	22.4	14.0	8.6	3.8	..
Exports of goods and non-factor services	6 523	6 710	6 576 ^h	15.0	9.3	5.7	2.9	-2.0 ^h

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

^a Majority-held investments only.

^b 1987-1990 only.

^c Based on the following regression result of sales against FDI inward stock for the period 1982-1996:
Sales = 757 + 2.61 * FDI inward stock.

^d Based on the following regression result of gross product against FDI inward stock for the period 1982-1996:
Gross product = 224 + 0.60 * FDI inward stock.

^e Based on the following regression result of assets against FDI inward stock for the period 1982-1996:
Assets = -506 + 3.70 * FDI inward stock.

^f Based on the following regression result of employment against FDI inward stock for the period 1982-1996:
Employment = 13 448 + 5.29 * FDI inward stock.

^g Based on the following regression result of exports against FDI inward stock for the period 1982-1995:
Exports = 261 + 0.52 * FDI inward stock.

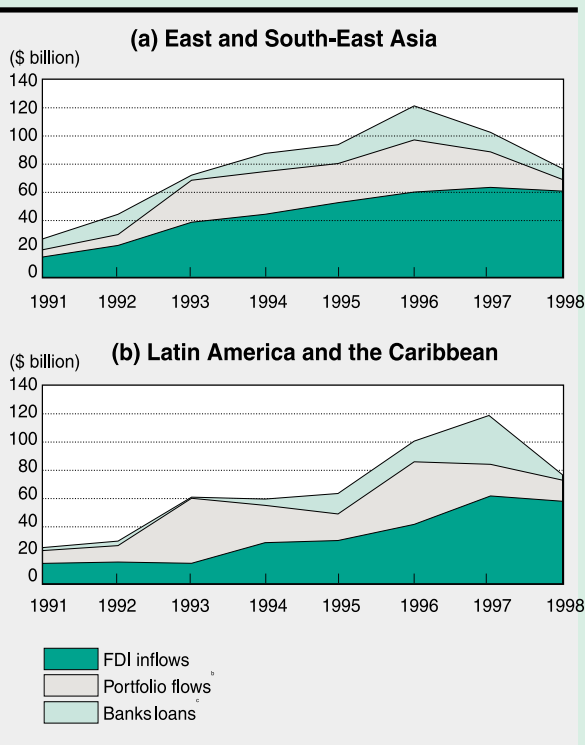
^h On the basis of an estimated -2 per cent growth rate by the World Trade Organization (WTO, 1999).

Note: Not included in this table are the value of worldwide sales by foreign affiliates associated with their parent firms through non-equity relationships and the sales of the parent firms themselves. Worldwide sales, gross product, total assets, exports and employment of foreign affiliates are estimated by extrapolating the worldwide data of foreign affiliates of TNCs from France, Germany, Italy, Japan and the United States (for sales and employment) and those from Japan and the United States (for exports), those from the United States (for gross product), those from Germany and the United States (for assets) on the basis of the shares of those countries in the worldwide outward FDI stock.

Box I.2. The rise of FDI as a source of finance for developing countries

As a result of its growth in recent years, FDI has come to account for an increasing share of international financial flows. These include (in addition to FDI) funds that firms borrow from foreign banks and raise from other sources in foreign financial markets, as well as official flows, primarily official development assistance (ODA). FDI differs in nature from private bank lending in that a good part of it is non-debt creating, and returns to it are directly linked to the performance of the projects that it finances, which are a part of the international production systems that it brings into being. Moreover, and largely because of the interest and direct involvement of the investors in the production activities financed, FDI flows differ

Box figure I.2.2. Private net resource flows^a to selected developing regions, 1991-1998

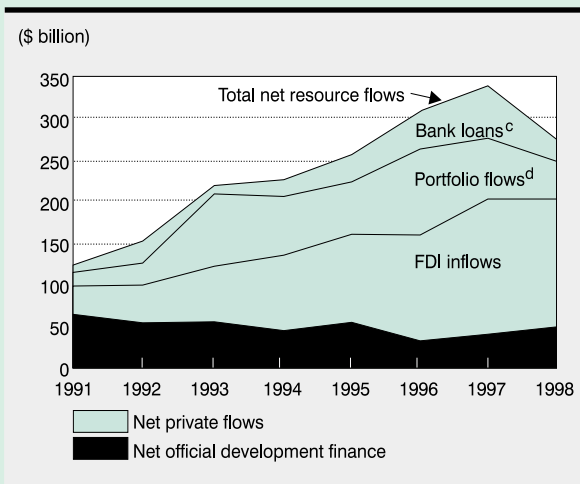


Source: World Bank, 1999b.

- a Net resource flows refer to flows net of divestments or repayments of principal on loans. They are not net of dividends, interests, royalty payments etc.
- b Bonds and portfolio equity flows.
- c Includes other private flows.

Source: UNCTAD.

Box figure I.2.1. Net resource flows^a to developing countries,^b 1991-1998



Source: World Bank, 1999b.

- a Net resource flows refer to flows net of divestments or repayments of principal on loans. They are not net of dividends, interests, royalty payments etc.
- b Includes Central and Eastern Europe.
- c Includes other private flows.
- d Includes other private flows.

Note: The World Bank's classification on developing countries is different from that of UNCTAD. Central and Eastern Europe is also included in developing countries.

from portfolio capital flows raised in international capital markets in that they are usually not geared towards short-term profits (but rather long-term returns) and are not prone to herd behaviour (UNCTAD, 1998a).

Total net resource flows to developing countries reached \$275 billion in 1998 (box figure I.2.1). Private capital flows have increased until 1997, while official flows have been declining in absolute terms compared to the beginning of the 1990s. Within private capital flows, the relative shares of both bank loans and portfolio investment have declined, while the share of FDI has increased over the past few years. In 1998, bank lending and portfolio investment declined in absolute terms as well, which could affect FDI flows. In contrast to other types of private capital flows, FDI flows to developing countries have demonstrated remarkable resilience in the face of the financial and economic crises of the past two years (box figure I.2.2).

excess capacity (e.g. in automobiles) contributed to a slow-down in world economic growth in 1998 to an estimated two per cent, compared to a growth rate of 3.4 per cent in 1997.⁵ Indeed, estimates of FDI flows for 1998 and 1999 made by various organizations all reflected expectations of a substantial slow-down in FDI flows, albeit to different degrees (box I.3).

Contrary to expectation, FDI flows grew in 1998 by 39 per cent in the case of inflows and 37 per cent in the case of outflows, the highest growth rate attained since 1987 (figure I.3). Indications are that FDI flows could increase further in 1999, even though the world economic scenario continues to be difficult and a further decrease of world GDP growth to 0.9 per cent is expected (World Bank, 1999a). For example, the value of cross-border M&As announced in the first half of 1999 reached a new record level (\$574 billion), already close to the value of all cross-border M&As announced in the whole 1998.⁶

The apparent paradox of FDI growth under adverse global circumstances is partly resolved by a closer look at FDI trends by region:

- On average, virtually all of the increase in FDI in 1998 was concentrated in developed countries. There, the rate of economic growth has remained more or less stable (with growth rates of 2.5 per cent in 1996, 2.7 per cent in 1997 and 2.3 per cent in 1998), mainly because the effects of the recession in Japan were compensated for by increases in production in the United States and the European Union. FDI inflows to and outflows from developed countries reached new heights of \$460 billion and \$595 billion, respectively (representing increases over 1997 of 68 per cent and 46 per cent, respectively).
- In developing countries, which grew at a rate of only 1.5 per cent in 1998 (and that, too, almost entirely on account of China) – the first time in 10 years that they recorded a lower rate of economic growth than the developed countries⁷ – inward FDI flows decreased slightly, from \$173 billion in 1997 to \$166 billion in 1998, a decline of four per cent. The extent of the decline was moderated by factors such as currency depreciations, FDI policy liberalization and more hospitable attitudes towards M&As (chapter II).
- Flows to the economies in transition of Central and Eastern Europe remained almost stable, at close to \$19 billion,⁸ although the Russian Federation saw a sharp decline.
- The 48 least developed countries (LDCs) continued to attract less than \$3 billion, accounting for 1.8 per cent of flows to all developing countries and 0.5 per cent of world FDI flows.

The dramatic growth of FDI in 1998 was fuelled to a large extent by a boom in cross-border M&As. Their value, at \$544 billion, was \$202 billion higher than in 1997. Some of these – e.g. the takeover of Amoco by BP for \$55 billion and the acquisition of Chrysler by Daimler-Benz for \$44.5 billion – involve record amounts. As discussed further below, the increased competition brought about by liberalization and globalization and the special needs and conditions of particular industries leading to a consolidation on a global scale, especially in developed countries, are driving cross-border M&As. This is aided by the fact that most of the large M&A deals do not necessarily require cash or new funds, as they can be based on a mutual exchange of stock. By historical standards, however, the size of today's M&As may not be all that big: when, at the turn of the 19th century, the United States internal market went through a

Box I.3. FDI estimates

Various private and public organizations estimate FDI flows. Among international organizations, these include UNCTAD, the World Bank and OECD; in the private sector, institutions such as the Institute of International Finance and J.P. Morgan estimate or forecast FDI flows. Except for estimates by UNCTAD, none of these estimates are for the world as a whole. Moreover, there are differences in the estimates made by different institutions for the regions or countries that they all cover. These differences arise from differences in the time of the year at which estimates are made and different methods of estimation. UNCTAD estimates that FDI flows to developing countries and Central and Eastern Europe as a whole were \$183 billion in 1998. J.P. Morgan, for example, estimated for a group of selected developing countries and Central and Eastern European countries (classified as “emerging markets”) FDI flows to be \$101 billion (annex table A.I.1).

Source: UNCTAD.

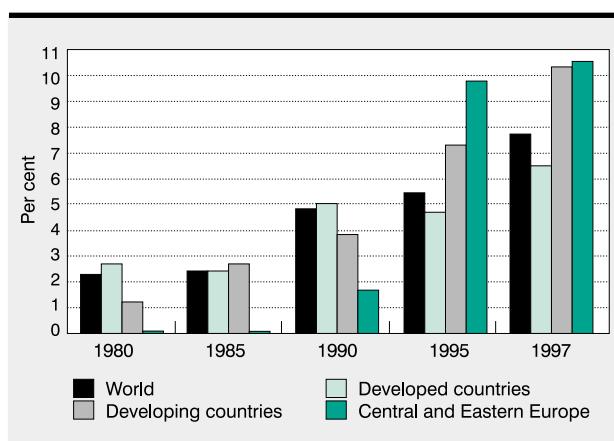
process of consolidation – perhaps not unlike what the global economy may be experiencing today – the value of the largest merger of that time, leading to the creation of US Steel,⁹ represented seven per cent of the country’s GDP (Maucher, 1998). The merger between BP and Amoco represented one per cent of combined GDP of the United Kingdom and the United States.

To the extent that M&As become a more important form of entry of TNCs into host markets, the rising ratio of FDI to gross fixed capital formation (GFCF) that can be observed in recent years (figure I.4) must be reinterpreted, since it does not necessarily signify an increase in the net contribution to domestic investment in host countries. Rather, it indicates a turnover of ownership and management control over countries’ production facilities among shareholders located in different countries. This applies primarily to FDI in developed countries, because, on the whole, M&As play a smaller (though rising) role as a mode of entry for TNCs in developing countries. At the same time, as FDI is a package of which capital is only one (and, as noted, not necessarily the most important) component, this rising ratio, signaling greater TNC participation in host country production activity, may well indicate increasing additions to overall resources and capabilities of host countries as well as increasing control over production by TNCs. Be that as it may, the ratio of FDI flows to GFCF has exceeded six per cent for the world as a whole, and 10 per cent for developing countries in 1997. If total capital mobilized by TNCs is taken into account, the ratio capturing investment under the governance of TNCs as a percentage of total investment in host countries is likely to be higher (table VI.6).

Regardless of whether foreign affiliates are established through new (greenfield) investment or M&As, the upshot is to increase the share of international production activities that comes under the common governance of TNCs. This, in turn, leads to “deep integration” – integration at the production level – of the economies concerned, compared to the “shallow integration” of markets alone brought about by trade. A part of the capital base of international production, the part financed by FDI, is measured by the accumulated stock of FDI. The world stock of FDI rose by about 20 per cent in 1998, to reach \$4.1 trillion (table I.2). Judging from data for such countries as Germany, Japan and the United States, in developed countries the total value of assets of foreign affiliates (a measure that includes the value of production facilities under TNC governance, as well as other assets, financed not only by FDI but also in other ways) is some four to five times the value of FDI inward stock (annex table A.I.2). In developing countries, however, this asset value is only slightly higher than FDI stock. This suggests that international production activity in developing countries relies much more on capital from parent firms than it does in developed countries. The global stock of total assets associated with international production is estimated at around \$15 trillion in 1998 (table I.2). However, this figure does not capture the asset base of international production that takes place in establishments under non-equity forms of TNC control. The size of, and stakes in, international production are much larger and extend wider than the assets owned by TNCs.

Technology, created by parent firms and elsewhere within TNC systems, is a key element in the stock of assets built up in foreign affiliates. It is generally a part, along with capital, of the package of resources made available by TNCs to their affiliates in host countries. Some of it

Figure I.4. FDI inflows as a percentage of gross fixed capital formation, 1980, 1985, 1990, 1995 and 1997



Source: UNCTAD, FDI/TNC database.

is embodied in machinery and other capital goods exported to foreign affiliates; some takes the form of codified knowledge contained in blueprints, designs or manuals made available for affiliates' use; and some involves the training of local personnel, knowledge conveyed by expert individuals or teams and generated by technological activity in affiliates. Technology is also often provided via contractual arrangements (for example, licensing, franchising, management and marketing service agreements, subcontracting) that involve control by the foreign provider over the operations of recipient firms (during the life of the contract). These kinds of "unpackaged" or "externalized" technology flows represent direct participation in international production activity in much the same manner as FDI that involves the acquisition of a controlling equity stake. However, in many contractual arrangements control is shared between the provider and the recipient, or rests primarily in the recipient. The depth of integration between home and host country firms involved in the international production made possible by such arrangements is likely to be weaker than in the case of the other forms of TNC participation discussed above.

Data on technology payments and receipts – flows of royalties and licence fees paid by technology recipients and received by technology providers – give a rough idea of trends in technology flows within and outside TNC systems.¹⁰ Technology payments and receipts worldwide have risen steadily since the mid-1980s, reflecting the growing importance of technology for international production. If data for Germany, Japan and the United States are indicative, between two-thirds and nine-tenths of international technology flows by this measure are intra-firm in nature (annex tables A.I.3 and A.I.4). This share has increased over time, suggesting that the industrial pattern of FDI has shifted increasingly towards technology-intensive activities (see below). As technology-based assets have become more important for TNCs' overseas operations, and R&D in foreign affiliates has risen, intra-firm flows of technology and payments of royalties and fees have increased. The increased share of intra-firm payments in total technology payments also suggests that, in technology-intensive industries, the role of non-equity inter-firm arrangements for the acquisition of technology has diminished in importance. This might make technological catching up by developing countries on their own more difficult (chapter VII). On the other hand, inter-firm alliances for the generation of technology are on the rise (chapter III), and these do not necessarily involve payment flows.

Reflecting the high share of intra-firm flows of technology in the total of such flows, world FDI flows and flows of technology measured – however imperfectly – by payments of royalties and fees have grown at comparable rates for some time (figure I.5a). In the 1990s, payments of royalties and fees for technology rose more rapidly than FDI in developed countries (reversing the trends of the late 1980s). This suggests that the movement of technologies among these countries is increasing (figure I.5b). Flows of technology payments by foreign affiliates in developing countries have also been rising in the 1990s, but at a lower rate than FDI inflows to them and at a lower rate than that of technology payments to developed countries (figure I.5c). This may mean that the sophistication of technologies in developing countries is not increasing at the same pace as that in developed countries. In the countries of Central and Eastern Europe, the rate of growth of FDI flows has been much higher than that of technology payments ever since those countries' transition to market economies began (figure I.5d). This probably reflects the fact that extending the scope of international production to these countries requires, first of all, inflows of finance and, perhaps most importantly, knowledge of organizational and managerial practices ("soft technology"), rather than new or more modern product and process technologies.

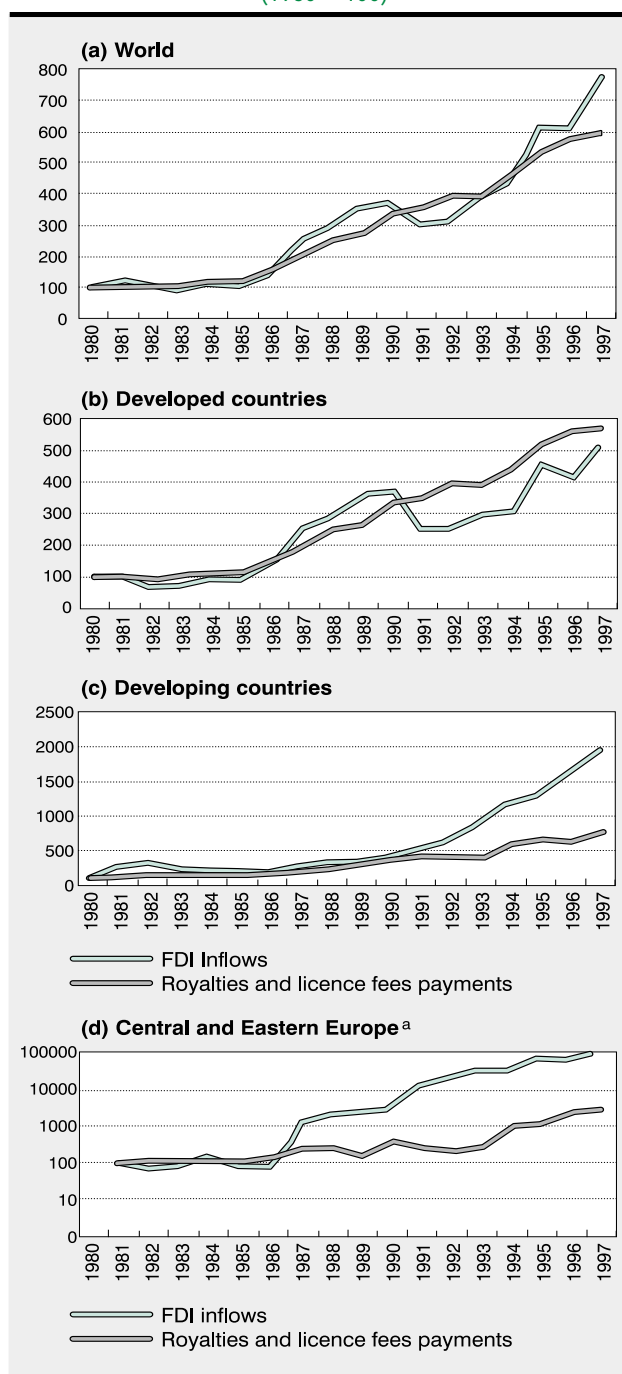
The purpose of building up facilities for international production and equipping them with requisite technology is to generate output for sale in markets, be they in host countries, home countries or elsewhere on the globe. Various measures – value-added,¹¹ sales, employment, exports, R&D, profits – show that, while international production is increasing in importance at the global level, its relative importance in individual host countries varies greatly (annex tables A.I.5-A.I.11). During the past decade, global output and sales of foreign affiliates have been growing faster than output generally, that is, world gross domestic product (GDP) (table I.2). Output and sales of foreign affiliates have also been growing faster than world exports. Indeed, the value of estimated total foreign-affiliate sales (\$11 trillion in 1998) has exceeded that of

world exports (\$7 trillion in 1998) since the early 1980s (UNCTC, 1992), making international production globally more important than trade in terms of delivering goods and services to foreign markets.

Part of international production itself takes place, of course, because of opportunities for international trade. Exports by foreign affiliates – including intra-firm exports – are estimated to account for one fifth of sales of foreign affiliates in the world (table I.2), a ratio that ranges widely between countries (figure I.6a and I.6b; see also chapter VIII). On the one hand, international production is the principal means for the international delivery of products – especially services – that are impossible or difficult to trade at arm’s length. On the other hand, international production provides a stimulus to international commerce in goods and services that are tradable. This it does by extending the opportunities for the international division of labour by bringing mobile and nonmobile factors of production together in particular locations for production within TNC systems and, in the case of some industries, by enabling firms to reap large economies of scale and scope. However, although trade within TNC systems and involving TNCs at arm’s length makes up for a significant share of world trade (each accounting for about one third of total world trade; see chapter VIII), the size and relative significance of exports and those of production by foreign affiliates in individual countries are not necessarily correlated with one another. This reflects the fact that there are different types of FDI; in particular, domestic- market-oriented FDI is not associated with exports. Thus, the positions of different countries with respect to the relative significance of exports by foreign affiliates in total exports (annex table A.I.8) are different as compared with their respective positions as regards sales, value added or employment, the latter two of which are correlated with one another (annex tables A.I.5 - A.I.7).

International production is closely intertwined with trade not only because part of that production is for export, but also because foreign affiliates import goods and services that are inputs for their production activities. In some countries in which foreign affiliates contribute significantly to exports, they also have high propensities to import, indicating that the strong link between international production and trade may sometimes result in increasing the deficit or reducing the surplus of the countries

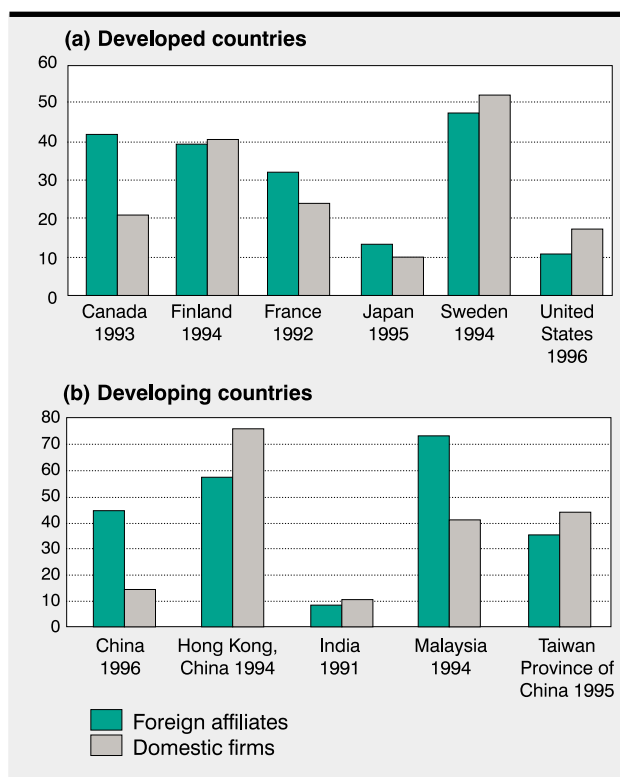
Figure I.5. Growth of technology payments and FDI flows, by group of countries, 1980-1997
(1980 = 100)



Source: UNCTAD, based on UNCTAD FDI/TNC database; and IMF, balance of payments Statistics CD-ROM (February 1999).

^a 1981-1997 only, due to unavailability of data on royalties and licence fees in 1980. The present country composition is applied throughout the period.

Figure I.6. The export propensity^a of foreign affiliates and domestic firms in manufacturing, latest available year (Percentage)



Source: UNCTAD, based on annex tables A.I.6 and A.I.8; UN Comtrade database; OECD, 1997a; UNIDO Industrial Statistics Database; and UNCTAD FDI/TNC database.

^a Defined as exports as a percentage of sales.

the developing Asian region, international production has become an important and growing source of employment, the lion's share of it comprising locally-hired labour and professional staff.

R&D is another area of international production activity of special importance to host countries. Innovative activities, reflected partly in the number of researchers or R&D expenditures in foreign affiliates, contribute to the building of technological capacities and competitiveness of host countries (chapter VII). Data on persons employed in R&D in foreign affiliates are available for only Japan and the United States, where they accounted for one per cent (1992) and nine per cent (1993), respectively, of total scientists, engineers and technicians engaged in R&D (UNESCO, 1998). Data on R&D expenditures, available a little more widely, show that foreign affiliates account for quite different total R&D expenditures of host countries (annex table A.I.10). But parent firms control by far the greater proportion of R&D expenditure: as much as 97 per cent (1995) and 87 per cent (1996) of total R&D expenditures by Japanese and United States TNCs, respectively (United States, Department of Commerce, 1998a; and Japan, MITI, 1998a). In general, developing countries have not attracted much by way of TNC activities in R&D, despite their eagerness to attract technology-intensive FDI and, in some cases, special incentives offered to such FDI (chapter VII).

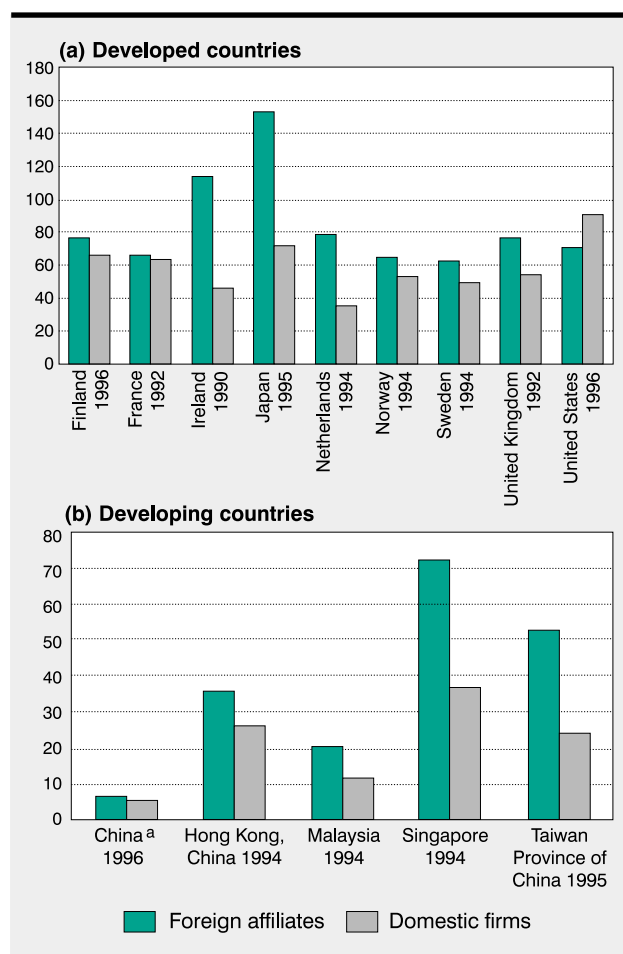
Judging from data on value added per employee for a number of developed countries and a few developing countries, productivity is generally higher in foreign affiliates than in domestic firms in host countries (figure I.7). Noteworthy exceptions are the United States, where

on their trade and balance-of-payments accounts (see annex table A.I.9 and chapter VI).

One dimension of international production that is of particular interest to many host countries is the extent to which location-bound factors of production – especially labour – are utilized in international production. This is what largely determines how much of the income generated by that production accrues to residents of the host economy (although taxes on foreign affiliates' dividends and profits also represent retained income), how much employment is generated and what multiplier and linkage effects can be expected to result from the deep integration that international production involves. In recent years, the number of employees in foreign affiliates has increased noticeably, even though employment in TNC parent firms in some major home countries has stagnated or increased marginally (see chapter IX), a trend also observed for the world's largest 100 TNCs (chapter III). In particular, employment in foreign affiliates in developing countries has grown significantly (chapter IX). Nevertheless, it accounts for only a small percentage of total paid employment even in those countries taken as a group, and a somewhat higher but still modest share of paid employment in their manufacturing sectors (annex table A.I.7). However, in some individual countries, especially in

Figure I.7. Value added per employee of foreign affiliates and domestic firms in manufacturing in selected host economies, latest available year

(Thousands of dollars)



Source: UNCTAD, based on annex tables A.I.5 and A.I.7; OECD, 1997a; UNIDO Industrial Statistics Database; and UNCTAD FDI/TNC database.

^a All industries.

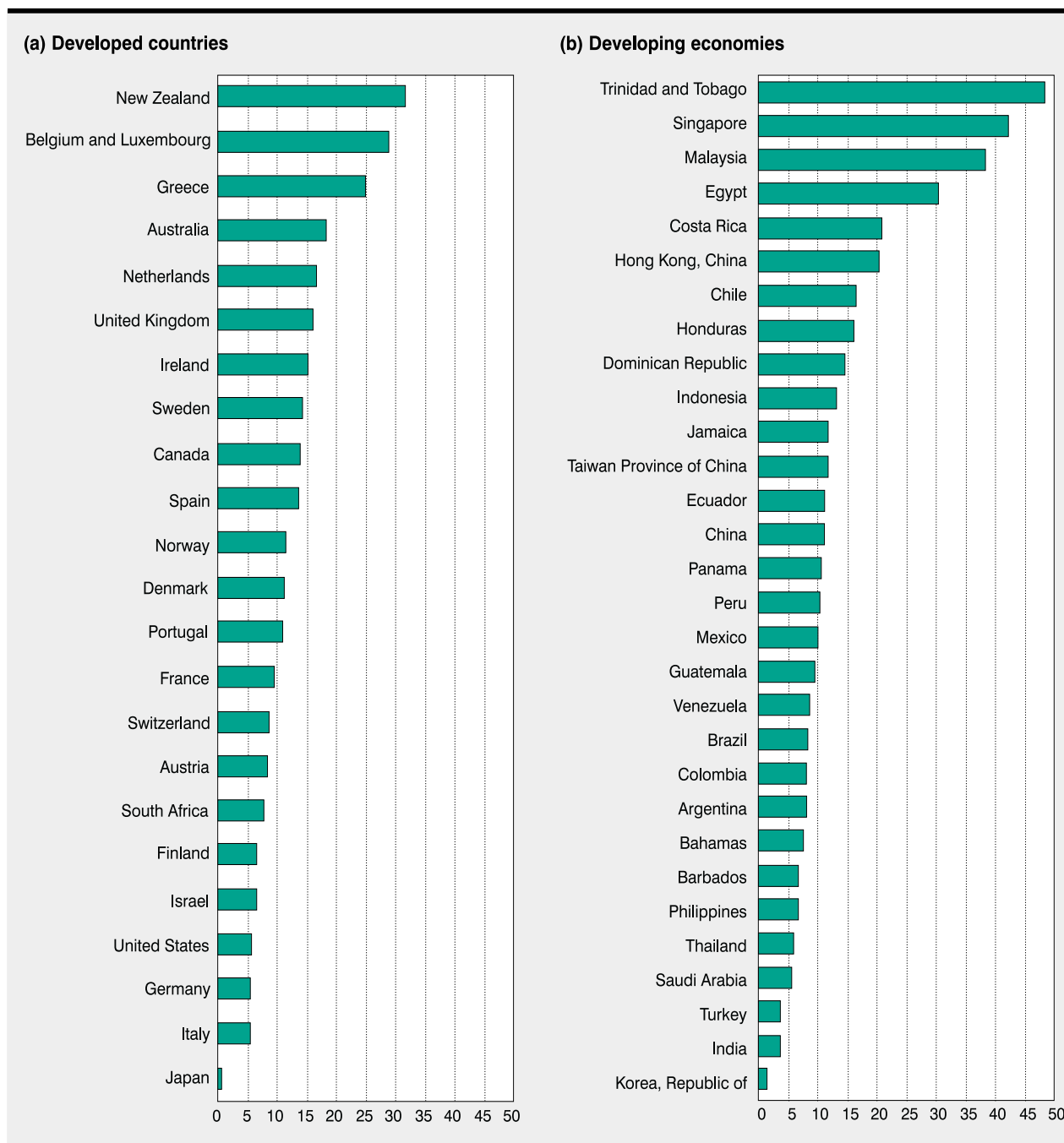
the reverse situation prevails,¹² and France and China, where foreign affiliates and domestic firms have similar productivity. There are, of course, wide variations between foreign-affiliate productivity in different countries, reflecting the differences in the industries and activities in which affiliates in different countries are engaged and in the capital- and technology-intensity of affiliate operations. Differences in productivity may explain, at least partly, differences in profitability. Higher productivity of foreign affiliates would therefore be accompanied by higher profitability of foreign affiliates, resulting in the share of foreign affiliates in total profits being higher than their share in value added. Countries for which foreign affiliates account for higher shares of profits or net income (annex table A.I.11) are not necessarily the same countries as those in which the share of foreign affiliates in production variables such as value added or sales is high (annex tables A.I.5 and A.I.6). Japan and the United States provide a remarkable contrast in this regard. International production has low significance in Japan in terms of any production measure, both absolutely and in relation to the country total (annex tables A.I.5 - A.I.7). In terms of profits, however, it becomes less insignificant (annex table A.I.11). The profitability of foreign affiliates operating in Japan is, in fact, twice as high as that of domestic firms (Japan, MITI, 1998b). On the other hand, in keeping with their lower productivity in manufacturing as compared with domestic firms (figure I.7), foreign affiliates in the United States do not earn much compared to domestic firms, and account for less than six per cent of total profits generated by all firms in the

manufacturing sector (annex table A.I.11).

* * *

The magnitudes of FDI and various foreign-affiliate operations each provides a measure of a different dimension of international production; and the magnitude of each relative to the relevant total provides a measure of the relative significance for a host country or group/region of international production in terms of a particular dimension. These different measures can be combined into an integrated host country “transnationality index”, which, however imperfect, throws some light on the overall significance of international production for each host economy.¹³ For the 53 countries for which data (or estimates) are available for 1996 (figure I.8), the host country transnationality index ranges between less than one per cent for Japan and 32 per cent for New Zealand among developed countries, and between 1.4 per cent for the Republic of Korea and 48 per cent for Trinidad and Tobago among developing countries. Smaller host countries appear to rank higher on the transnationality index.

Figure I.8. Transnationality index^a of host countries,^b 1996
(Percentage)



Source: UNCTAD estimates.

^a Average of the four shares: FDI inflows as a percentage of gross fixed capital formation for the last three years; 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.

^b Only the countries for which the data for all of these four shares are available, are selected. Data on value added are available for Finland, Japan, Sweden, United States, China, India, Mexico and Taiwan Province of China only (annex table A.I.5). For other countries data are 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 for Finland, Germany, Japan, Sweden, United States, Brazil, China, Hong Kong (China), Indonesia, Mexico and Taiwan Province of China only (annex table A.I.7). For other countries, data are estimated by applying the ratio of employment of German and United States affiliates to German and United States outward FDI stock to total inward FDI stock of the country.

B. Geographical and sectoral distribution

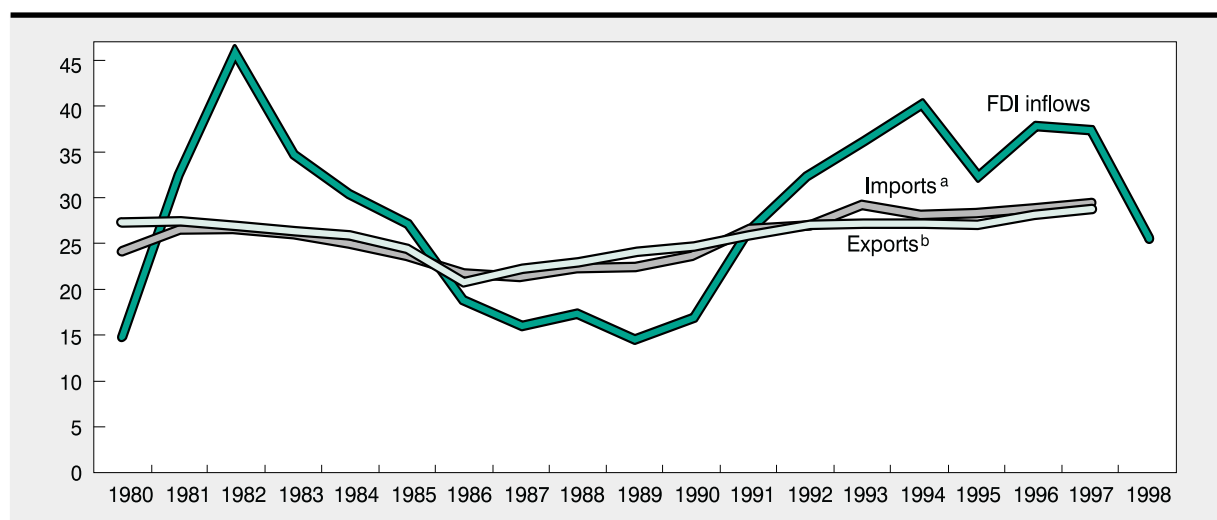
While international production has been growing rapidly and has come to assume an important role in the globalization process, its significance, quantitative as well as qualitative, is not the same for all countries, or in all economic activities. There are striking disparities in the extent to which different regions, countries and industries are involved in the process. An examination of the geographic and industrial distribution of FDI flows sheds some light on these disparities.

1. Geographical patterns of FDI

a. Regional distribution

Until 1998, which saw a reversal in the trend, the share of developing countries in world FDI inflows had increased, reaching 37 per cent in 1997. The share of Central and Eastern Europe in the world inflows performed similarly. The reversal in 1998 is largely explained by the exceptionally strong FDI performance of the developed countries and the weaker one of the other regions (especially Asia).¹⁴ The share of developing countries in world FDI inflows has exceeded their shares in world imports and exports between 1991-1997 (figure I.9). This suggests that, as a group, developing countries play a more important role in world inward FDI flows than as participants in world trade. The least developed countries (LDCs), however, did not participate in the upward trend in FDI flows to developing countries: their share in world FDI flows remained less than one per cent during most of this period, similar to their share in world trade.

Figure I.9. FDI and trade shares of developing countries in world totals, 1980-1998
(Percentage of world total)



Source: UNCTAD, FDI/TNC database.

^a Imports of goods and non-factor services to developing countries.

^b Exports of good and non-factor services for developing countries.

What is particularly striking is the concentration of world FDI flows in a handful of top home and host countries (figure I.10). The 10 largest *home* countries (in terms of outward FDI stock) accounted for four-fifths of the world's outward FDI flows in 1998; in total, some 34 countries had FDI outflows of \$1 billion or more (compared to 13 countries in 1985). On the host country side the 10 largest (in terms of inward FDI stock) accounted for 71 per cent of world FDI inflows in 1998. At the same time, 111 countries in 1998 recorded inflows of over \$100 million, compared to 45 countries in 1985. If only developing host countries are considered, the degree of concentration seems to have risen recently: the five largest host countries over the past decade

or so (China, Brazil, Mexico, Singapore and Indonesia, in that order on the basis of inward FDI stock) accounted for 55 per cent of FDI inflows to all developing countries in 1998, compared to 41 per cent in 1990.

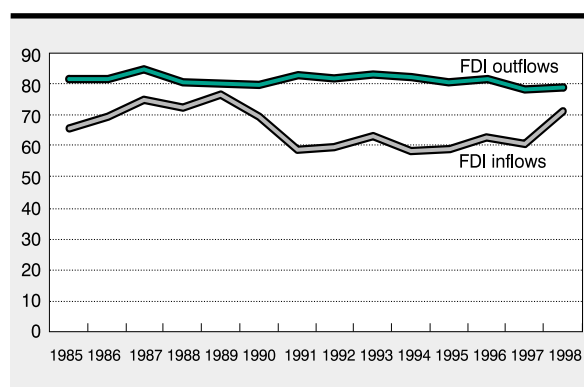
The pattern of concentration of FDI inflows and outflows by absolute values of flows does not, however, provide a full picture of the significance of inward and outward FDI for different countries. If the size of host economies is taken into account by looking at FDI inflows per \$1,000 of GDP, in 1997, developing countries as a group received more FDI per income dollar than did developed countries, several developing regions received more FDI per income dollar than did any developed region, and the disparities among different developing regions were considerably reduced from those suggested by the distribution of absolute values of world FDI inflows (table I.3 (b) and (a)). What this means, of course, is that developing countries receive more FDI inflows than might be expected on the basis of their incomes (and market size) alone. This is not surprising, since FDI is also attracted by factors other than market size, especially natural and human resources. Perhaps more importantly, this means that the significance of FDI needs to be seen against the size of each economy to appreciate its importance. It should, however, be cautioned that in some cases, high FDI per \$1,000 may simply reflect exceptionally low GDP.

As far as FDI outflows are concerned, outflows per income dollar from developed countries remain higher than those from developing countries but, judging from data for 1997, the disparity in outflows between the two groups is less than might be expected from the shares of the two groups in world FDI outflows (table I.3b). Moreover, for some developing regions, such as South, East and South-East Asia, FDI outflows per \$1,000 of income do not fall far short of outflows per \$1,000 of income for developed countries in general as well as some major developed outward investor countries. This suggests that, even at lower levels of development, countries are likely to have firms that are sufficiently competitive to establish themselves abroad.

In contrast to the picture of a less uneven distribution of FDI inflows that is seen if GDP of countries is taken into account, taking population into account reveals a picture in which the gaps between FDI inflows and outflows per capita between regions are higher than what might be expected by looking at their respective shares in absolute values of world FDI inflows and outflows (table I.3c). For example, in 1998, the value of *per capita* FDI inflows to developing countries as a group were about seven per cent of that for developed countries.¹⁵ This simply reflects the fact that developing countries receive a smaller proportion of the world's FDI and yet account for the bulk of the world population. Not surprisingly, a similar remark can be made as regards comparisons between outward FDI per capita.

Differences in the involvement of developed and developing regions in international production and in the nature of that involvement are also reflected in the patterns of technology payments. Developed countries accounted for 88 per cent of payments and 98 per cent of receipts for technology in cross-border flows of royalties and license fees in 1997.¹⁶ The United States is the largest recipient and the second largest (after Japan) payer country for international technology flows, accounting for 56 per cent of the world's total cross-border receipts, and 18 per cent of payments, of royalties and license fees in 1997.¹⁷ However, its dominant position as

Figure I.10. Concentration of FDI flows by the largest 10 host^a/home^b countries, 1985-1998^c
(Percentage)



Source: UNCTAD, FDI/TNC database.

- a United States, United Kingdom, China, Germany, France, Netherlands, Belgium and Luxembourg, Brazil, Canada and Spain.
- b United States, United Kingdom, Germany, Japan, Netherlands, France, Switzerland, Italy, Canada and Hong Kong (China).
- c FDI flows of the 10 largest countries as a percentage of world's FDI flows.

Table I.3. Regional distribution of FDI inflows and outflows, 1995-1998

(a) Regions as a share of totals^a (Percentage)								
Region/country	Inflows				Outflows			
	1995	1996	1997	1998	1995	1996	1997	1998
Developed countries	63.4	58.8	58.9	71.5	85.3	84.2	85.6	91.6
Western Europe	37.0	32.1	29.1	36.9	48.9	53.7	50.6	62.6
European Union	35.1	30.4	27.2	35.7	44.7	47.9	46.0	59.5
Other Western Europe	1.8	1.8	1.9	1.2	4.2	5.8	4.6	3.1
United States	17.9	21.3	23.5	30.0	25.7	19.7	23.1	20.5
Japan	-	0.1	0.7	0.5	6.3	6.2	5.5	3.7
Other developed countries	8.5	5.3	5.6	4.1	4.4	4.6	6.4	4.9
Developing countries	32.3	37.7	37.2	25.8	14.5	15.5	13.7	8.1
Africa	1.3	1.6	1.6	1.2	0.1	-	0.3	0.1
Latin America and the Caribbean	10.0	12.9	14.7	11.1	2.1	1.9	3.3	2.4
Developing Europe	0.1	0.3	0.2	0.2	-	-	0.1	-
Asia	20.7	22.9	20.6	13.2	12.3	13.6	10.0	5.6
West Asia	-0.1	0.2	1.0	0.7	-0.2	0.6	0.4	0.3
Central Asia	0.4	0.6	0.7	0.5	-	-	-	-
South, East and South-East Asia	20.4	22.1	18.9	12.0	12.5	13.0	9.6	5.3
The Pacific	0.2	0.1	-	-	-	-	-	-
Central and Eastern Europe	4.3	3.5	4.0	2.7	0.1	0.3	0.7	0.3
<i>World</i>	100	100	100	100	100	100	100	100

(b) FDI flows per \$1,000 GDP (dollars)								
Region/country	Inflows				Outflows			
	1995	1996	1997	1998	1995	1996	1997	1998
Developed countries	9.4	9.5	12.4	..	13.8	14.4	18.4	..
Western Europe	13.7	12.8	15.8	..	19.8	22.6	28.2	..
European Union	13.7	12.7	15.6	..	19.1	21.2	27.0	..
Other Western Europe	13.1	14.0	21.0	..	32.9	48.3	52.4	..
United States	8.5	10.5	13.5	..	13.2	10.3	13.6	..
Japan	-	-	0.8	..	4.4	5.1	6.2	..
Other developed countries	23.5	15.2	19.9	..	13.3	14.0	23.4	..
Developing countries	19.3	22.3	26.9	..	9.4	9.8	10.0	..
Africa	12.5	16.2	15.6	..	1.4	-0.1	3.7	..
Latin America and the Caribbean	19.2	25.0	33.7	..	3.0	3.1	6.1	..
Developing Europe	10.0	21.5	20.0	..	1.4	1.8	5.2	..
Asia	20.0	21.6	24.8	..	13.4	13.9	12.7	..
West Asia	-0.7	0.9	7.4	..	-1.6	3.1	3.3	..
Central Asia	37.7	42.9	49.9	..	-	-	0.1	..
South, East and South-East Asia	24.2	25.8	27.8	..	16.5	16.4	14.7	..
The Pacific	49.8	15.0	12.5	..	-0.4	0.1	2.7	..
Central and Eastern Europe	20.6	15.2	22.3	..	0.7	1.4	4.1	..
<i>World</i>	11.6	12.3	15.8	..	12.7	13.1	16.2	..

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a supplier of technology flows has declined somewhat, with its share in receipts of cross-border technology payments declining from 62 per cent in 1985 to 56 per cent in 1990. This reflects the emergence of other technology suppliers, including developing countries whose share increased marginally from 0.7 per cent in 1990 to 1.3 per cent in 1997. The smaller share of developing countries in receipts of royalties and fees than in FDI outflows suggests that international production by developing country TNCs is based more on competitive strengths other than advanced technology. However, the technological content of FDI from some newly industrializing economies such as the Republic of Korea is increasing (UNCTAD, 1997b). On the payments

Table I.3. Regional distribution of FDI inflows and outflows, 1995-1998 (concluded)

(c) FDI flows per capita (dollars)								
Region/country	Inflows				Outflows			
	1995	1996	1997	1998	1995	1996	1997	1998
Developed countries	238.6	240.3	309.3	518.3	350.4	364.0	460.2	669.5
Western Europe	317.0	300.0	350.1	614.8	457.8	530.5	623.4	1 051.9
European Union	310.9	292.3	337.9	614.7	431.7	488.0	584.9	1 032.1
Other Western Europe	509.2	541.2	730.2	617.6	1 280.0	1 864.0	1 826.3	1 670.4
United States	220.0	283.7	402.2	706.4	344.7	277.7	404.8	485.2
Japan	0.3	1.8	25.7	25.3	180.9	186.9	206.9	191.8
Other developed countries	286.6	192.1	256.3	257.9	161.6	177.2	302.0	307.3
Developing countries	23.8	29.8	37.4	35.4	11.7	13.0	14.1	11.1
Africa	6.1	8.5	10.8	10.9	0.7	-	2.0	0.7
Latin America and the Caribbean	69.7	96.2	140.1	144.8	16.0	15.0	32.0	31.2
Developing Europe	37.5	84.2	76.0	99.9	5.4	7.0	19.8	11.2
Asia	20.7	24.5	28.1	24.6	13.4	15.4	14.0	10.5
West Asia	-2.0	2.8	20.7	20.0	-4.1	9.7	9.3	8.1
Central Asia	21.0	28.3	42.1	41.6	-	-	-	0.1
South, East and South-East Asia	22.2	26.0	28.3	24.6	14.9	16.2	14.7	10.9
The Pacific	91.4	28.6	22.7	26.7	-0.5	0.1	3.3	3.8
Central and Eastern Europe	42.3	36.8	55.1	52.2	1.4	3.3	10.2	5.7
<i>World</i>	58.0	62.4	79.6	108.9	63.2	66.0	81.4	109.7

Source: UNCTAD, based on annex tables B.1 and B.2 and UNCTAD, FDI/TNC database.

^a Due to rounding, the sum of subregions might not add up to the total.

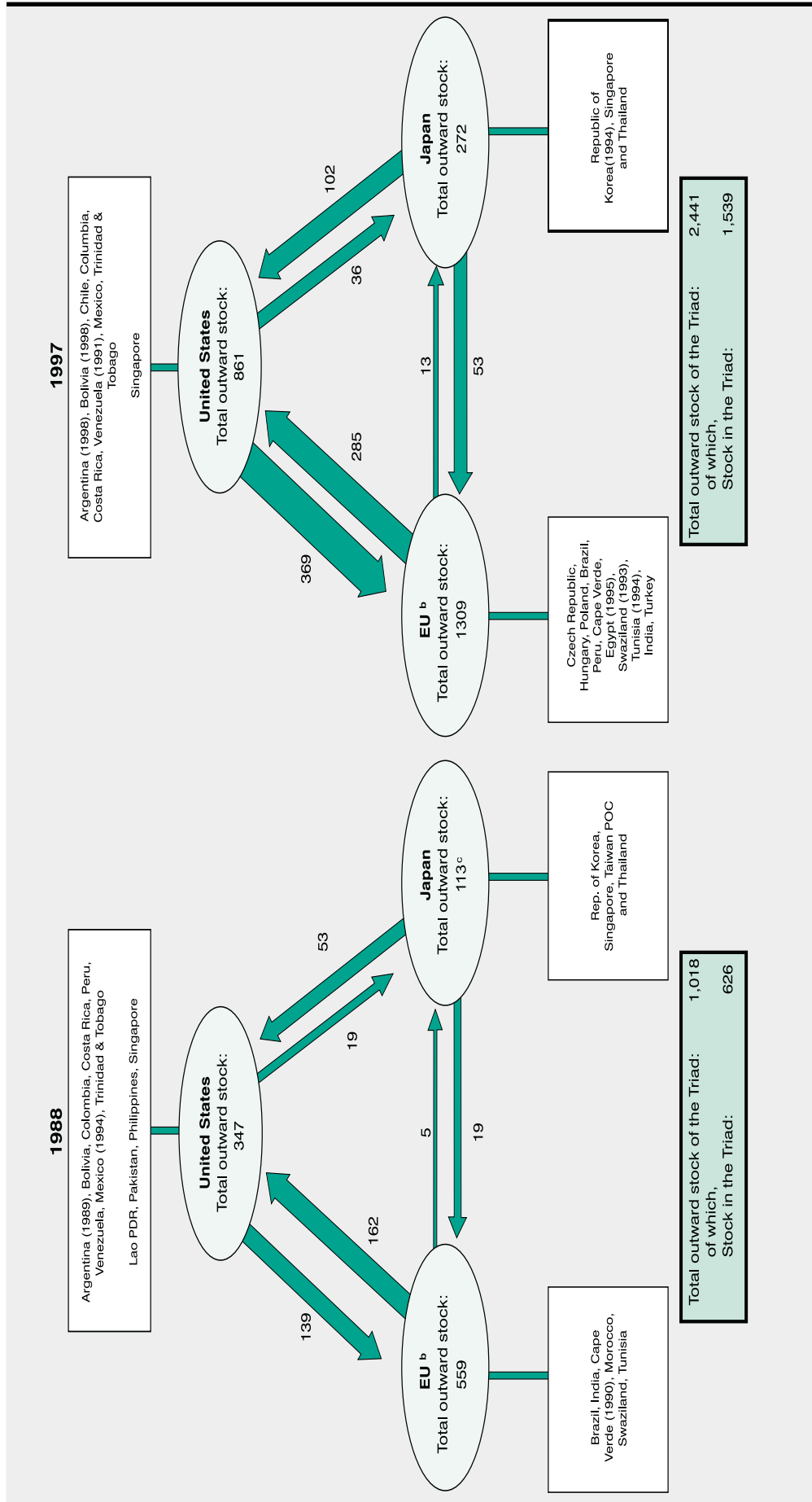
side, although developing countries account for a larger share of total technology payments (as compared with receipts), these payments are highly concentrated among a few countries (chapter VII).

Although, as pointed out, there have been significant increases in FDI flows to developing countries and in their share in world FDI over the past two decades, the basic fact that the bulk of FDI stock originates from, and is located in, developed countries remains unchanged. FDI from developed countries remains mostly in developed countries, in particular in the Triad (Japan, European Union and United States). In fact, the FDI concentration of the Triad increased over the past decade: some 63 per cent of total FDI outward stock from the Triad in 1997 was located in the Triad, compared to 61 per cent in 1988 (figure I.11).¹⁸ This means that the importance of non-Triad countries as destinations for outward FDI from the Triad member countries has declined. However, developing countries did not experience a decreasing share: on the contrary, their share as recipients in outward FDI stock from developed (mainly Triad) countries increased during the last decade from 19 per cent to 21 per cent. The increase in developing countries' share in FDI outflows from developed countries is more evident than that in FDI stock (from 17 per cent in 1988 to 24 per cent in 1997).

b. FDI among developing countries

Developing countries' participation in international production was, until not long ago, mainly to host foreign affiliates of TNCs, which have been increasingly welcomed as a means of establishing and strengthening an industrial base for economic development. In the past two decades, however, firms from developing countries have also been investing abroad, giving rise to international production themselves (Kumar and McLeod, 1981; Wells, 1983). FDI from developing countries has grown to account for about 14 per cent of world FDI outflows in 1997 (but declined to eight per cent in 1998), compared with about 5-7 per cent in the 1980s (figure

Figure I.11. FDI stocks among the Triad and the countries in which FDI from the Triad dominates,^a 1988 and 1997
(Billions of dollars)



Source: UNCTAD, FDI/TNC database.

^a The host countries in which the Triad member accounts for at least 30 per cent of total FDI inflows during a three-year period in the latter half of the 1980s/beginning of the 1990s or total inward FDI stock in 1988 are selected for the 1988 chart; and at least 30 per cent of total FDI inflows during a three-year period in the mid-1990s or total inward FDI stock in 1997 for the 1997 chart. In cases where data are available for years other than those stated in the respective charts, those years are indicated in parenthesis.

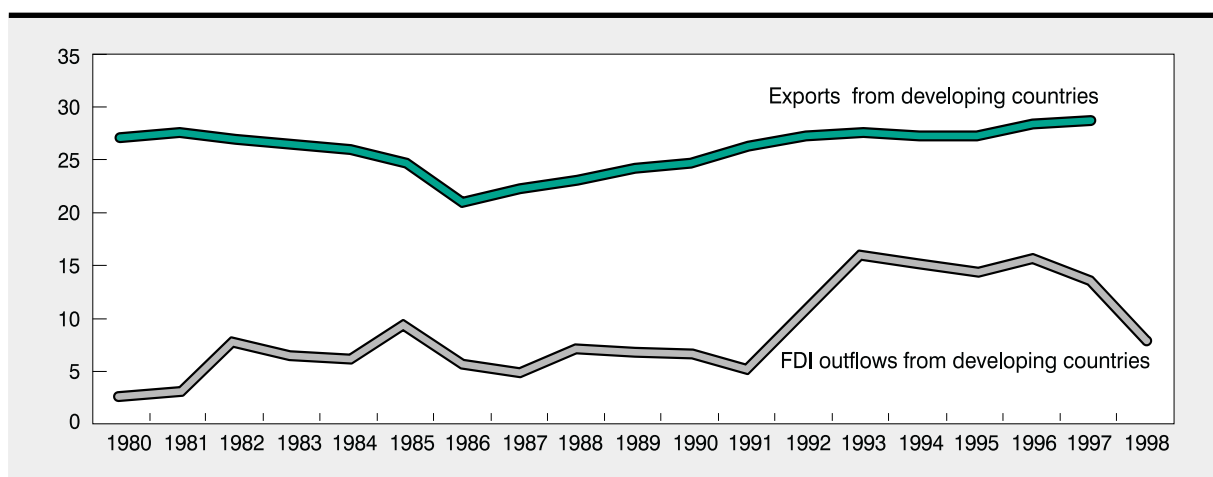
^b Includes Austria (1996 instead of 1997), Denmark (1991 instead of 1988, and 1996 instead of 1997), Finland (1991 instead of 1997), Germany (1996 instead of 1997), Italy, Netherlands (1996 instead of 1997), Sweden (1996 instead of 1997) and United Kingdom that account for more than 90 per cent of the EU outward stock. Denmark is not included for 1988 due to unavailability of data.

^c Cumulative flows on a balance-of-payment basis since 1968.

I.12). The destination of this FDI is mainly other developing countries. Many developing countries are heterogeneous with respect to levels of development, size of domestic markets, efficiency, diversification of production and other factors. Asymmetrical levels of industrial development among heterogeneous member countries provide opportunities to exploit different comparative advantages and derive benefits from an international division of labour by TNCs, although they may also make the integration of production among the countries involved more difficult.

The increasing importance of FDI from developing countries until 1997 reflects, among other things, the growing ownership advantages of firms from a number of developing countries. This is in line with improvements of the performance of their home economies as reflected, for example, in competitiveness rankings¹⁹: while, in 1986, there was only one developing economy (Turkey) among the 20 most competitive economies in the world, that number increased to six in 1998 (Singapore, Hong Kong (China), Taiwan Province of China, Malaysia, Chile and the Republic of Korea in that order) (EMF Foundation, 1986; World Economic Forum, 1998a). The improved performance of developing countries is also reflected in their growing share in world exports since the mid-1980s (figure I.12).

Figure I.12. FDI outflows and exports of goods and non-factor services from developing countries as percentages of the world total, 1980-1998



Source: UNCTAD, FDI/TNC database.

FDI from developing countries exhibits a high level of home-country concentration: a few of the more developed among the developing countries account for the bulk of FDI from developing countries. The major home economies in terms of FDI stock are, Hong Kong (China), Singapore, Taiwan Province of China, China, the Republic of Korea, Malaysia, Nigeria, Brazil, Argentina and Chile (annex table B.4).²⁰ These 10 largest investors account for about 80 per cent of FDI stock from the developing world.

It is difficult to generalize regarding trends in FDI among developing countries. One reason is that FDI from most of these countries is generally so small that a single large investment easily changes the pattern of their outward FDI. Nevertheless, data confirm that most of the TNCs based in developing economies (except, notably, those from Mexico) invest more in developing countries than in developed countries (annex tables A.I.12 - A.I.15). It is therefore important to developing countries whether firms from other developing countries will continue to invest in, and direct more FDI to, other developing countries over the coming years. While some developing countries such as Colombia, Malaysia and Thailand have seen a decrease in the share of host developing countries in their outward FDI stock over the past decade or so (annex table A.I.13 and A.I.15), developing countries in general have been increasing their FDI more in other developing countries than in developed countries (table I.4). This rising share should be considered in the context of many events that could have diverted FDI from developing

countries to other regions during the past decade. These include the opening up of Central and Eastern Europe to FDI and the economic integration of the European Union and North American countries, as well as, more recently, a less favourable climate for investment in some developing countries affected by such factors as financial crisis, debt problems and depressed commodity prices.

The importance of developing countries as partners for one another in international transactions is greater, in relative terms, in the case of FDI than in exports. FDI directed to other developing countries as a percentage of total developing country FDI stock is estimated to be about four-fifths (table I.4), as compared with a 44 per cent share in total developing country exports in 1997 (IMF, 1998). This implies that FDI and international production are beginning to play a role in integrating countries in the developing world. However, it must be recognized that the magnitude of inter-developing country FDI is still small. Measured in terms of the number of affiliates, there is a much higher concentration in FDI by developing countries than in FDI by developed countries (Fujita, 1990). For example, firms based in the Republic of Korea established about four-fifths of their foreign affiliates in developing countries (Republic of Korea, Bank of Korea, 1998). Some noteworthy trends in FDI among developing countries are summarized in box I.4.

* * *

All in all, as an outcome of their development over the past few decades, developing countries as a group now have a larger potential for mutually beneficial investment and technology flows among themselves. Differences among developing countries in terms of levels and forms of skills and technical know-how provide conditions conducive to mutual exchanges of goods and services. Faced with a rapid shift in competition from the national to the regional and to the global level, TNCs from both developed and developing countries have responded rapidly to these developments.²¹ The implications of this for developing countries as host and home countries for FDI are important not only for maintaining the current levels of and even attracting new inflows of FDI into their economies, but also for securing the participation of TNCs in their efforts of integration into a rapidly changing and globalizing world economy.

Table I.4 Outward FDI directed to other developing countries from South, East and South-East Asia and Latin America
(Millions of dollars)

Host region	Flows				Stocks			
	South, East and South-East Asia ^a		Latin America ^b		South, East and South-East Asia ^a		Latin America ^b	
	1987	1997	1986	1992	1987	1997	1986	1992
Africa	43	182	-	-	154	923	16	33
Latin America and the Caribbean	50	1 712	89	1 457	92	6 376	1 139	4 177
South, East and South-East Asia	2 833	40 008	0.2	2	21 107	319 777	16	19
West Asia	110	61	2	-	277	371	27	24
Developing countries, total	3 040	42 144	91	1 459	21 732	327 954	1 199	4 253
<i>Memorandum :</i>								
Developed countries	1 706	4 515	827	1 035	5 734	32 585	2 556	4 312
Central and Eastern Europe	37	123	-	-	27	106	-	0.4
World	4 804	47 449	917	2 494	29 333	368 724	3 755	8 566

Source: UNCTAD, FDI/TNC database and annex tables A.I.12-A.I.15.

^a Includes China, Hong Kong (China), India, Malaysia, Pakistan, Philippines, Republic of Korea, Singapore, Taiwan Province of China and Thailand.

^b Includes Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela.

Box. I.4. Salient features of FDI among developing countries and regions

South, East and South-East Asia:

- The share of developing countries in the total FDI outflows from this region has increased from three-fifths in 1987 to about nine-tenths in 1997 (annex table A.I.12). On a stock basis, more than four-fifths of FDI from this region is in developing countries, with more than 90 per cent of it being invested in the same region (annex table A.I.13).
- FDI among ASEAN member states is fairly significant: 28 per cent of total outflows from Malaysia and 38 per cent from Thailand went to other ASEAN member states in 1997 (UNCTAD, FDI/TNC database). In the case of Singapore, 72 per cent of its total outflows were invested in other ASEAN member states in 1997.
- More than half of FDI flows into relatively newly opened countries in Asia such as Cambodia, Lao People's Democratic Republic, Myanmar and Viet Nam are from other developing Asian countries (UNCTAD, forthcoming b).^a
- The majority of FDI into China is also from other developing Asian economies (especially economies with large numbers of overseas Chinese residents – Hong Kong (China), Singapore and Taiwan Province of China).
- TNCs from the Republic of Korea and Taiwan Province of China have sizeable investments in many countries in the world. However, while FDI directed to developing countries from the former economy is mainly in South, East and South-East Asia, FDI within the region from the latter economy is smaller (about one third of total FDI), comparable to its FDI in Latin America and the Caribbean in terms of stock in 1997 (annex table A.I.13).

Latin America and the Caribbean:

- The share of developing countries in total FDI outflows from this region in the early 1990s was slightly lower than that in outward FDI from South, East and South-East Asia. On a stock basis, in the early 1990s, about half of FDI from this region was in developing countries, compared to about one third in the mid-1980s (annex table A.I.15).
- Intra-regional FDI is significant (see box II.6). All countries except Mexico direct a large part of their FDI to countries in their own region. Intra-regional investment accounts for more than 90 per cent of the region's FDI in developing countries (annex tables A.I.14 and A.I.15).
- Most of the intra-regional FDI is between major Latin American home countries and the Caribbean island economies. FDI from Brazil in Cayman Islands accounted for the bulk of intra-regional FDI in the early 1990s (UNCTAD FDI/TNC database).
- Two-way flows of FDI between Argentina and Brazil are growing. The total cumulative value of registered foreign investment projects between these two countries amounted to \$23 billion by 1997, 10 times larger than that in 1980 (CEP, 1998).^b MERCOSUR has been instrumental in increasing FDI among the two as well as Paraguay and Uruguay, its other member states. Most of the foreign affiliates owned by firms from these countries in this subregion were established in the mid-1990s.
- Most FDI from Mexico is made in the United States, because of NAFTA. Mexico's investment within Latin America and the Caribbean is very small (UNCTAD, FDI/TNC database).

Latin America and the Caribbean and South, East and South-East Asia:

- Investment from South, East and South-East Asia to Latin America and the Caribbean is on the rise. Incentives to export-oriented investment as well as privileged access to the United States market have played a role in attracting, for instance, garments and other labour-intensive industries from Asian to Central American and Caribbean countries (Lall, Mortimore and Romijn, 1999).
- Taiwan Province of China is the largest home economy from Asia for investment in Latin America and the Caribbean (annex tables A.I.12 and A.I.13), but a large part of its investment is concentrated in tax-haven economies such as Panama and the Virgin Islands.

/...

(Box I.4, concluded)

- Latin America and the Caribbean are slowly emerging as hosts for FDI from the Republic of Korea. Five per cent of Korean outward FDI stock in 1997 was in Latin America and the Caribbean, as compared to two per cent in 1987 (annex table A.I.13).
- Most FDI from Latin America in South, East and South East Asia is made by Brazilian firms, which have investments in Singapore and Macau. However, compared to flows from developing Asia to Latin America and the Caribbean, those from the latter to the former are still almost negligible in size (annex tables A.I.13 and A.I.15).

Africa and South, East and South-East Asia:

- FDI from developing Asia in Africa is growing (Fujita, 1997). While the Republic of Korea is the largest investor in Africa, China, India, Malaysia and Taiwan Province of China also have FDI – all of more or less similar levels of stock – in Africa.
- There is some FDI from Africa in developing Asia. For example, Egyptian firms have FDI in Bangladesh, China and India. Kenyan firms have invested in Pakistan. Indonesia has received FDI from Nigeria. However, all of these investments are small, less than \$1 million in FDI stock (except for FDI from Kenya in Pakistan, which is \$3 million). The most notable is investment from Mauritius in India. Because of the conclusion of a double taxation treaty between these two countries in 1982, FDI flows increased over the years to have reached more than \$900 million on approval basis in 1997 (UNCTAD, forthcoming b).^c

Africa and Latin America and the Caribbean:

- No noteworthy FDI is recorded between these two regions, although there is some FDI from Panama in Egypt.

Source: UNCTAD.

^a Based on cumulative flows of approved FDI, Cambodia received 83 per cent of its total inward FDI from South, East and South-East Asia (\$3.7 billion in 1997); Lao People's Democratic Republic, 69 per cent of its total inward FDI from this region (\$4.7 billion in 1997); Myanmar, 55 per cent of total inward FDI from this region (\$3.8 billion in 1998); and Viet Nam, 51 per cent of its total inward FDI from this region (\$13.1 billion in 1996).

^b Registered investment is different from FDI reported on a balance-of-payments basis. It is the latter data that are mostly used in this report.

^c Most of the investment from Mauritius to India is made by holding companies established by United States firms. The double-taxation treaty between Mauritius and India stipulates a dividend tax on Mauritius firms in India of five per cent, while the treaty between the United States and India stipulates a tax on dividends of 15 per cent on United States firms in India (JETRO, 1998).

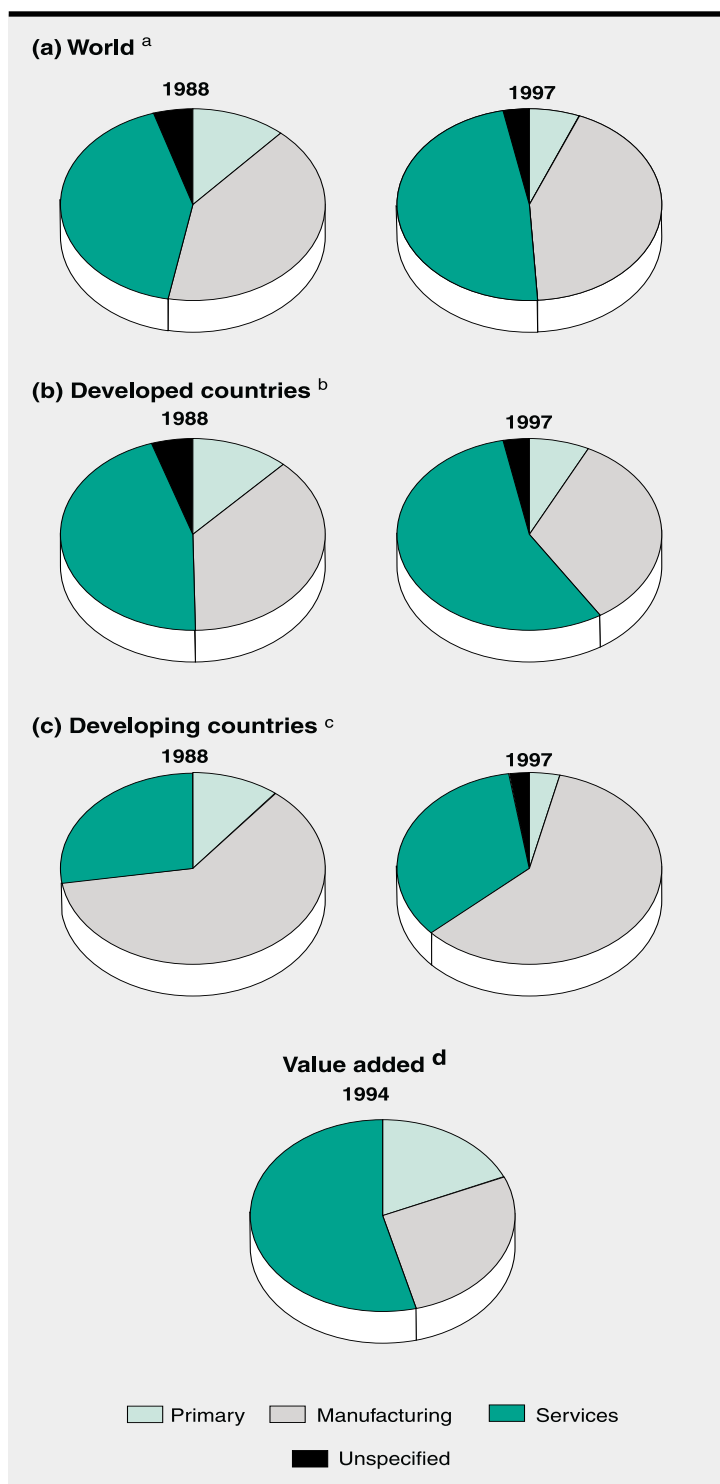
2. Sectoral and industrial patterns of FDI

International production is distributed among different sectors and industries, reflecting, among others, the relative importance of different sectors and industries in home and host countries, the degree of liberalization of host country policies with respect to TNC participation in different sectors and industries, and the strategies of firms. FDI data by sector and industry have limitations of country coverage as well as of disparities in industry classification among the reporting countries; nevertheless, they throw light on various aspects of the sectoral and industrial patterns of international production and the trends emerging in those respects.²²

The most striking feature of the sectoral distribution of the FDI (inward) stock is the decline, by half, of the share of the primary sector between 1988 and 1997, globally as well as in developed and developing countries (figure I.13). The services sector experienced a corresponding increase, again in both developed and developing countries. The share of manufacturing in total FDI remained stable, representing the single most important sector in developing countries (annex tables A.I.16 to A.I.21). A number of other important trends and patterns have, moreover, emerged during the past decade:

Figure I.13. Inward FDI stock, by sector for the world and developed countries, and inward FDI stock and value added, by sector for developing countries, 1988 and 1997

(Percentage)



Source: UNCTAD, based on annex tables A.I.18 and A.I.19 and United Nations, 1997a.

^a Not including Central and Eastern Europe.

^b For 1988, data are based on inward stock in Australia, Austria, Canada, Germany, Iceland, Italy, Norway, Switzerland, United Kingdom and United States that accounted for 76 per cent of total inward stock in developed countries in 1988. For 1997, data are based on inward stock in Australia, Austria (1996), Canada, Denmark (1996), Finland, France (1996), Germany (1996), Iceland, Italy, Netherlands (1996), Norway, Switzerland, United Kingdom and United States. They accounted for 81 per cent of total inward stock in developed countries in 1997.

^c For 1988, data are based on actual inward stock in Bolivia, Brazil, Colombia, Hong Kong (China), India, Indonesia (1992), Namibia (1990), Nigeria, Pakistan, Peru, Philippines, Republic of Korea, Singapore, Swaziland, Thailand and Venezuela, as well as inward stock on an approval basis in Bangladesh, Cambodia (1994), Lao People's Democratic Republic, Malaysia, Nepal, Sri Lanka, Taiwan Province of China and Viet Nam. They accounted for 53 per cent of total inward stock in developing countries in 1988. For 1997, data are based on actual inward stock in Brazil, Colombia, Hong Kong (China), India (1995), Namibia (1994), Nigeria (1992), Pakistan (1996), Peru, Philippines, Singapore (1996), Swaziland (1993), Thailand and Viet Nam (1996), as well as inward stock on an approval basis in Bangladesh, Cambodia, China, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar (1996), Nepal, Republic of Korea, Sri Lanka and Taiwan Province of China. They accounted for 67 per cent of total inward stock in developing countries in 1997.

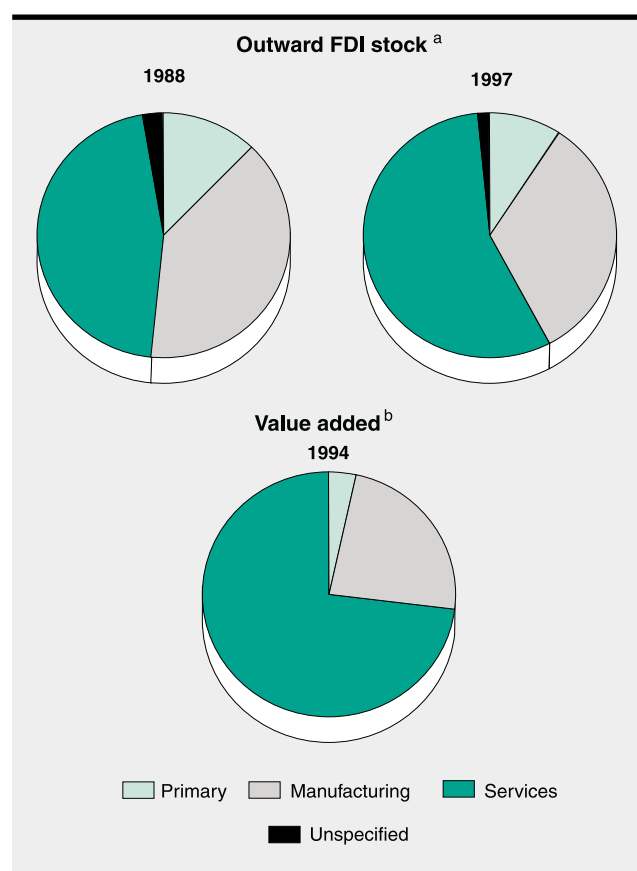
^d Data are based on value added at constant prices for Argentina (1992), Brazil, Chile, China, Colombia (1992), Egypt (1991), Hong Kong (China) (1993), India, Indonesia (1993), Kenya (1993), Malaysia (1992), Mexico (1993), Nigeria, Philippines, Peru, Republic of Korea (1992), Singapore, Thailand, Tunisia (1992), Uganda, Uruguay (1991), Venezuela, Viet Nam (1991), Zambia (1991) and Zimbabwe (1989), that accounted for 73 per cent of total value added of developing countries in 1994.

- The industry with the largest share of inward FDI stock in the *world* is finance followed by trade. The position of financial services (banks, insurance, securities and other financial companies) as top recipient has not changed over the past decade (annex tables A.I.16-A.I.19). The industry distribution of FDI inflows also shows that the finance industry was the largest recipient both in 1988 and 1997 (annex tables A.I.16 and A.I.17). In both inward

stock and inflows, the share of this industry increased. In addition to the usual explanation the need for the presence of TNCs in financial services for facilitating the business (especially international trade) of foreign affiliates in manufacturing and other services – the recent restructuring of this industry in developed countries through cross-border M&As is a factor underlying its dominant share. Liberalization of the industry in developing countries has given further momentum to FDI in financial services.

- In *developed* countries too, finance and trade are the first and second largest recipients, while in the *developing* world, real estate and chemicals are the first and second largest (annex tables A.I.16 to A.I.19).
- In outward FDI from developed countries (which account for some 90 per cent of world outward FDI stock), the manufacturing sector accounts for a larger share than its share in total value added of all economic sectors (figure I.14); this suggests that the industry composition of FDI may not necessarily reflect closely the comparative advantages or demand patterns of home countries. Capital- or technology-intensive industries such as chemicals, electrical machinery and motor vehicles account for a relatively large share in total manufacturing FDI, reflecting the global strategies of TNCs in those industries to benefit from technological development and scale and scope economies from international production. Recent large M&As in motor vehicles and chemicals (pharmaceuticals) have intensified the concentration of FDI in these industries, in which partnership also play an increasing role (chapter III).
- Services FDI has been growing over the past years at a faster rate than FDI in other sectors, increasing its share in total outward FDI stock of developed countries from 45 per cent in 1988 to 56 per cent in 1997 (figure I.14). The increase is explained by the liberalization of investment and trade in many service industries and by the non-tradability of many service products that necessitates FDI for delivering them to foreign

Figure I.14. Outward FDI stock, 1988 and 1997, and value added, 1994, of developed countries, by sector (Percentages)



Source : UNCTAD, based on annex tables A.1.20 and A.1.21 and United Nations, 1997a.

^a For 1988, data are based on outward stock of Australia, Austria, Canada, Finland, France, Germany, Iceland, Italy, Japan (approval basis), Norway, Switzerland, United Kingdom and United States; together these countries accounted for 86 per cent of total outward stock of developed countries in 1988. For 1997, data are based on outward stock of Australia, Austria (1996), Canada, Denmark (1996), Finland, France (1996), Germany, Iceland, Italy, Japan (approval basis), Netherlands (1996), Norway (1996), Switzerland, United Kingdom and United States, that accounted for 91 per cent of total outward stock of developed countries in 1997.

^b Value added at constant prices. Data cover the same countries as FDI stock in 1997. The countries covered accounted for 93 per cent of total value added of developed countries in 1994.

markets. However, the share of services in FDI is still lower than that in the value added of home countries, suggesting that there is still room for international production in certain service industries to expand; at the same time, some service industries, in particular those primarily comprising SMEs, are almost exclusively domestic-market-oriented, and many SMEs in the services sector continue to serve their own country markets only.

- United States TNCs, the largest single country-group that accounts for about one quarter of the world's outward FDI stock, are not necessarily the largest investors in every industry (annex tables A.I.20 and A.I.21). In the manufacture of food, beverages and tobacco, United Kingdom TNCs invested more than their United States counterparts as of end-1997. The largest FDI stocks in machinery and equipment are held by TNCs from Japan.²³ In the services sector, Japan is the largest investor in real estate business and transport services (the latter reflecting the active involvement of Japanese companies in flags-of-convenience FDI), while in business services activities, FDI by German TNCs is larger than that by TNCs from any other country.
- The sectoral distribution of inward FDI stock in developed countries is more or less similar to that of their outward FDI stock (annex tables A.I.18 and A.I.19). This similarity emerges mainly because about three quarters of FDI stock from developed countries is located in other developed countries. Thus, the share of the services sector in inward FDI has been on the rise, while the shares of primary and manufacturing sectors have declined during the past decade (annex table A.I.16 and A.I.17). Large increases in inward FDI stock took place during this period in the financial services industry.
- Similarly, in developing countries, the services sector has gained in importance in inward FDI, but principally at the expense of the primary sector (figure I.13). Although there are small decreases in the share of manufacturing in total inward FDI stock in developing countries during the past decade, manufacturing continued to be the most important sector. Compared with the sectoral distribution of value added of economic activities, the share of the manufacturing sector in total FDI is much higher. However, in terms of FDI inflows, there is a significant decline in the share of this sector in 1997, as compared with that in 1988 (annex tables A.I.16 and A.I.17).

Overall, the sectoral distribution of FDI has changed over the years, reflecting the competitive advantages of firms in host and home countries, the degree of liberalization in each industry and firm strategies in response to globalization in various industries. The range of activities in which TNCs are engaged also affects the industry pattern of FDI, as exemplified by Japanese *sogo shosha* that are engaged in virtually all industries in their international investments abroad. One fifth of Japanese affiliates abroad have been established by such firms (including other trading firms) that accounted for only 17 per cent of all Japanese parent firms (Japan, MITI, 1998a, p.104).

In general, services affiliates are established not only by services TNCs but also TNCs in primary and manufacturing industries: these firms often begin with international production by establishing trading affiliates (UNCTAD, 1996a, chapter III). For example, according to the sectoral distribution by industry of parent firms of United States foreign affiliates, the share of the services sector in total assets of foreign affiliates was only 38 per cent in 1996, while that share was 63 per cent on the basis of the industry of foreign affiliates of United States TNCs (United States, Department of Commerce, 1998a). Similarly, for Japanese TNCs, the numbers of foreign affiliates in services accounted for one third of the total number of all Japanese affiliates in 1996 according to the industry of parent firms; according to the industry of foreign affiliates, they accounted for nearly a half (Japan, MITI, 1998a, pp. 104 and 125).²⁴ All of this points to the fact that the importance of services activities for manufacturing TNCs is an additional factor contributing to the growth of FDI in services.

* * *

To conclude, the momentum for the expansion of international production continues to hold although the world economy is currently affected by a number of factors that could discourage investment, including FDI by TNCs. Although the growth of FDI flows to developing countries fell in 1998, the decline was confined to a few countries (chapter II). Flows of payments for technology continue to grow, reflecting the rise of the knowledge economy. Cross-border M&As among developed countries have contributed substantially to the expansion of FDI flows and international production capacity in 1998. This suggests that TNCs in the Triad are less affected by the immediate turmoil in financial markets but rather take a longer term view and position themselves for the future. They are strengthening their competitive advantages and ready themselves for global expansion (or survival) once the health of the world economy, including countries affected by the recent financial crises and its aftermath, is restored.

Notes

- ¹ An SME is defined in many developed countries as a firm with employment of less than 300-500.
- ² As noted in the discussion on definitions and sources provided in Annex B as well as in footnotes to figure I.1, only 30 countries reported figures on all three components of FDI (equity investment, reinvested earnings and intra-company loans). These countries account for about half of world FDI flows. According to the countries for which data on all of the components of FDI flows in 1998 are available (June 1999), the share of reinvested earnings in total outflows declined - for example, from 53 per cent in 1997 to 41 per cent in 1998 for the United States and from 27 per cent in 1997 to 14 per cent in 1998 for Canada. In the case of FDI inflows to the United States, reinvested earnings accounted for only 10 per cent in 1998, as compared to 24 per cent in 1997 (Bach, 1999).
- ³ For a definition of FDI and its measurement, see Annex B. Equity can also include company stock exchange for the stock of foreign firms acquired through mergers and acquisitions.
- ⁴ In an extreme case, for instance, FDI inflows into a country can be zero, although foreign TNCs have acquired firms worth \$10 billion in that same country (by, for example, financing the acquisition from the domestic capital market).
- ⁵ Data provided by the UNCTAD Secretariat.
- ⁶ Data provided by the Securities Data Company on an announcement basis. The value of announced cross-border M&As in 1998 is \$655 billion.
- ⁷ Going back further, during 1970-1998, there were only four years (1981, 1983, 1988, and 1998) when the real GDP growth rate of developing countries was lower than that of developed countries (UNCTAD, various issues).
- ⁸ Without the countries shown under the heading "Developing Europe" in the statistical annex, FDI flows in 1998 were \$17.5 billion.
- ⁹ In today's figures, this would have been around \$600 billion (Maucher, 1998, p.160).
- ¹⁰ Data on these flows are very imperfect indicators of the magnitude and trends in the international flows of technology for three reasons. First, all flows of technology within TNC systems do not necessarily involve explicit payments of royalties or licence fees; some of them may simply be provided as part of the FDI package and the returns to them reflected in the dividends to the investor. On the other hand, technology payments can be used as a hidden form for other payments or transfers. Third, data on royalties and fees have numerous limitations, including in terms of coverage of countries and of recipients or payers. See also note 17 below.
- ¹¹ "Value added" refers to the total value of outputs minus that of inputs purchased by firms - that is, net addition to production. The value-added measure is a better indicator of the size of production than are sales, which involve problems of measurement since sales may refer to operating revenues, total revenues or net sales, and sales in certain industries (such as wholesale trade, financial institutions) are not directly comparable to those of the manufacturing sector. The data on sales of all industries are therefore not reported by countries.
- ¹² It was already noted in the mid-1980s that there was no systematic difference between foreign and domestic firms in the United States as regards productivity (Graham and Krugman, 1989, p. 58).
- ¹³ The host country transnationality index captures in the form of a simple average the following four ratios: FDI inflows as a percentage of gross fixed capital formation for the last three years; 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.
- ¹⁴ In 1998, with the first decline in FDI flows to developing countries since 1985 and a sizeable increase in flows to developed countries, the share of developing countries in world FDI flows declined to 26 per

- cent, from 37 per cent in the previous year, while that of the developed countries rose to 72 per cent, with the Triad accounting for the bulk of that share (table I.3a).
- 15 In 1996 and 1997, this ratio was slightly higher, at about 12 per cent.
- 16 Based on data on receipts and payments of royalties and licence fees from IMF, Balance of Payments Statistics, CD-ROM, February 1999.
- 17 Based on data on receipts and payments of royalties and licence fees from IMF, Balance of Payments Statistics CD-ROM, February 1999. It should be noted that the coverage of countries is incomplete. Data for Canada, Denmark, New Zealand, Switzerland and many developing countries are not reported. The calculations therefore over-estimate the shares of particular countries in the world's total.
- 18 In terms of FDI outflows the share of the Triad as hosts in total outflows from the Triad declined from 69 per cent in 1988 to 60 per cent in 1997.
- 19 The competitiveness index developed by the World Economic Forum is an index of economic indicators that have proven to be correlated with medium to long-term economic growth. It measures the extent to which a country's national environment is conducive or detrimental to the domestic and international competitiveness of enterprises operating in that country; it incorporates quantitative data, namely indicators of a country's economic performance, technological capacity and infrastructure, as well as survey data measuring the perceptions of business executives about the country in which they operate. (World Economic Forum, 1998a).
- 20 It should be noted, however, that significant portions of FDI from Hong Kong (China) and Singapore are made by foreign affiliates operating in these economies (UNCTAD, 1997f).
- 21 The recent boom in cross-border M&As is a typical example. In 1997, there were four cross-border M&A deals worth more than \$1 billion between developing countries (UNCTAD, 1998a), though this number declined to only one in 1998 (annex table A.III.1).
- 22 Estimated on the basis of 38 countries that report data on inward FDI by industry and account for three-quarters of the world's inward FDI stock, and of 15 countries that report data on outward FDI by industry and account for some 90 per cent of the world's outward stock.
- 23 Data on Japanese FDI by industry are available only on a notification basis. These data show FDI values that are higher than actual FDI.
- 24 Based on data for 2,390 TNCs that cover about 60 per cent of all Japanese TNCs (Japan, MITI, 1998a).