Footnotes

1/ UNCTAD, *Trade and Development Report, 1989* (United Nations publication, Sales No. E.89.II.D.14), pp. 71-72; and GATT, *International Trade 89-90*, vol. I (Geneva, GATT, 1990).

2/ UNCTAD, *Trade and Development Report, 1990* (United Nations publication, Sales No. E.90.II.D.6), pp. 91-95.

3/ Foreign direct investment measures the overseas investments of transnational corporations ("parents") in foreign companies ("affiliates") which may or may not be wholly-owned by the parent. Foreign direct investment stock is the parent company's total investment in its overseas affiliates, and includes equity in the affiliate and net outstanding debts owed by the affiliate to the parent. Foreign direct investment flows are all capital transactions which take place between a parent company and its foreign affiliates in a given time period, usually a year. As such, stock is a measure of the volume of foreign direct investment at a single point of time, while flows are a measure of foreign direct investment activities which occur over a period of time. Flows may be negative due to disinvestment by the parent company.

The figure of $1.5 trillion represents the minimum estimate by UNCTC of the stock of world-wide foreign direct investment at book value. The figure has been derived based on an earlier estimate of the world-wide stock at book value made for 1985, to which was added cumulative flows of foreign direct investment for the years 1986 through 1989, with some valuation adjustments. Those adjustments arise mainly from the exclusion of reinvested earnings in the foreign-direct-investment statistics of some countries.

Recalculating the value of world-wide foreign-direct-investment stock at current replacement costs or market value would result in a considerably higher value. For example, the value of United States direct investment abroad in 1989 was $373.4 billion at book value and $804.5 billion at market value. The comparable figures for foreign direct investment in the United States in 1989 were $400.8 billion and $543.7 billion.

4/ DeAnne Julius, *Global Companies and Public Policy: The Growing Challenge of Foreign Direct Investment* (London, Royal Institute of International Affairs/Pinter Publishers, 1990), p. 36.

5/ United Nations, Projections and Prospective Studies Branch data base. Data for developing countries are for 1985-1988. Data for developed countries are for 1985-1989.

6/ Joint Ministerial Committee of the Boards of Governors of the Bank and the Fund on the Transfer of Real Resources to Developing Countries (Development Committee), "Role of foreign direct investment in development", 4 April 1991, mimeo.

7/ Estimates of world-wide foreign-direct-investment inflows to developing countries by the United Nations Centre on Transnational Corporations differ from those reported by the International Monetary Fund in the *Balance of Payments Statistics, Yearbook*, vol. 41, Part 2 (1990) due to: (i) inclusion of data obtained from the Organisation for Economic Co-operation and Development (OECD) for countries and territories which are not members of IMF, for example, Bermuda and Hong Kong (IMF uses its own estimates of FDI for Hong Kong, which differ from those reported by OECD). OECD data are also used to supplement IMF data for some "tax havens" and least developed countries and to replace the data reported to IMF by Saudi Arabia, which in the past had included some non-FDI flows. Data reported by OECD reflect foreign-direct-investment outflows to individual countries reported by the members of the Development Assistance Committee; (ii) inclusion of estimates for countries which report to IMF, but for which data are not available for the latest year(s). Those estimates are derived by using average annual inflows over a specified period, usually the three preceding years; (iii) inclusion of inward flows for Taiwan Province of China reported by national sources (IMF includes FDI in Taiwan Province of China in its total figure for Asia, as reported by national sources and measured as the difference between inward and outward flows. Since outward flows have greatly exceeded inward flows in recent years, the reported inward flow figure is negative.)

8/ United Nations, *World Economic Survey* (United Nations publication, Sales No. E.90.II.C.1), table I.2, p. 3.

9/ Excluded tax havens are the Bahamas, Bermuda, the Cayman Islands, the Netherlands Antilles and Panama.
10/ UNCTC estimates use data from 96 capital-importing developing countries. Net resource transfers are defined as inflows of foreign direct investment (including reinvested earnings) minus remittances on account of such investment (for example, profits, royalties and technology payments etc.).
11/ United Nations Economic Commission for Europe, *East-West Joint Ventures News*, No. 7 (February 1991).
12/ Data as of October 1990. Carl McMillan, "Foreign direct investment flows to Eastern Europe and their implications for developing countries". Paper prepared for the United Nations Committee for Development Planning (April 1991).
13/ Keith A. Rosten, "Soviet joint ventures riding on troubled waters", *The Wall Street Journal*, 7 May 1990.
14/ United Nations Economic Commission for Europe, *East-West Joint Ventures News*, No. 7 (February 1991), table 3, p. 19. Data are for 2,050 joint ventures.
15/ Results of a survey conducted by DRT International as reported by *Business Eastern Europe* (8 October 1990).
16/ UNCTC, *Foreign Direct Investment and Transnational Corporations in Services* (United Nations publication, Sales No. E.89.II.A.1), p. 30.
17/ UNCTC, *Transnational Corporations in World Development: Third Survey* (United Nations publication, Sales No. E.83.II.A.14), p. 8.
18/ The systems of industrial classification used in national accounts are based on a traditional distinction between "goods" and "services" or "manufacturing" and "service industry" and do not reflect these changes. As it turns out, however, steelmaking and other manufacturing industries are becoming service businesses. "When a new alloy is molded to a specific weight and tolerance, services account for a significant part of the value of the resulting product. Steel service centers help customers choose the steels and alloys they need, and then inspect, slit, coat, store and deliver the materials. Computer manufacturers are likewise in the service business, where a larger and larger portion of every consumer dollar goes toward customizing software and then integrating and installing systems around it ... In 1990 more than one third of [IBM's] profits came from designing software, up from 18 per cent in the mid-1980s, and more than 20 per cent came from integrating computer systems. Much of the rest was related to what it calls 'sales and support', which involves helping customers define their data-processing needs, choose appropriate hardware and software, get it up and running, and then working out the bugs. Less than 20,000 of IBM's 400,000 employees were classified as production workers engaged in traditional manufacturing. The immensely successful IBM personal computer itself comprises a collection of services — research, design, engineering, sales, service; only 10 per cent of its purchase price is for the physical manufacture of the machine ... The pharmaceutical industry is classified under 'manufacturing', although a drug's production costs actually represent only a tiny fraction of the total costs, which mostly involve services like research and development, clinical trials, patent applications and regulatory clearances, drug detailing, and distribution". Robert R. Reich, *The Work of the Nations, Preparing Ourselves for 21st-Century Capitalism* (New York, Alfred A. Knopf, 1991), pp. 85-86.
19/ John H. Dunning, *Transnational Corporations and the Growth of Services: Some Conceptual and Theoretical Issues*, (United Nations publication, Sales No. E.89.II.A.5), p. 37.
20/ United Nations, "Impact of transnational service corporations on developing countries", Report of the Secretary-General (E/C.10/1991/6, 20 February 1991), pp. 5-6.
21/ UNCTC, *Foreign Direct Investment and Transnational Corporations in Services*, pp. 8, 20-27.
22/ Dunning, op. cit., pp. 38-39.
23/ Data for the European Community used in this comparison exclude reinvested earnings; therefore, the proportion is probably much higher.
24/ Eurostat, "Les investissements directs de la Communauté Européenne. Années 1984 à 1988" (Luxembourg, August 1990), pp. 83-90.
25/ Dunning, op. cit., p. 47.
26/ UNCTC, "Impact of...", pp. 6-7.
27/ Karl P. Sauvant, "The tradability of services", in World Bank and UNCTC, *The Uruguay Round: Services in the World Economy* (Washington, D.C. 1990), pp. 114-122; see also "Transnational corporations in services other than banking", Report of the Secretary-General (E/C.10/1989/14, 17 February 1989), pp. 38-40.
28/ For details, as well as a discussion of intellectual property rights, see UNCTC, *New Issues in the Uruguay Round of Multilateral Trade Negotiations* (United Nations publication, Sales No. E.90.II.A.15).
29/ UNCTC, *Foreign Direct Investment and Transnational Corporations in Services*, op. cit.

30/ "Survey of world trade", *The Economist* (22 September 1990).
31/ The statistics apply only to local content and export performance TRIMs. UNCTC and UNCTAD, *The Impact of Trade-related Investment Measures on Trade and Development: Theory, Evidence and Policy Implications* (New York, UNCTC and UNCTAD, 1991).
32/ UNCTC, "Transnational banks and debt-equity conversions" (E/C.10/1991/5).
33/ UNCTC, *Do Government Policies Towards Foreign Direct Investment Matter?*, UNCTC Current Studies, Series A, 1991 (forthcoming).
34/ The concept of a Triad in the world economy has become widespread in discussions of international corporate strategy and in descriptions of patterns of economic growth and world trade. See, for instance, Keniche Ohmae, "The Triad world view", *Journal of Business Strategy*, 7 (Spring 1987), pp. 8-19; and Sylvia Ostry, "The implications of developing trends in trade policy", *Business Economics* (January 1990) pp. 23-27.
35/ In 1980, the EC accounted for the dominant share of foreign- direct-investment stock in France; by 1987, the EC was dominant in France, Belgium, Italy, Portugal and Spain, and was the single largest foreign investor in the Netherlands. In terms of inward flows, the EC is the dominant investor in Germany and the Netherlands, and holds an equal share with the United States in the United Kingdom.
36/ Guy de Jonquieres, "Limited scope in cross-border mergers", *Financial Times*, 24 September 1990; "Supermarket Darwinism: the survival of the fattest", *Business Week* (9 July 1990).
37/ KPMG, *Dealwatch* (Third Quarter, 1990).
38/ United Nations, *National Accounts Statistics: Analysis of Main Aggregates, 1987* (United Nations publication, Sales No. 1990.XVII.2).
39/ "Nice view from up here", *The Economist* (24 November 1990); "US exporters that aren't American", *Business Week* (29 February 1988).
40/ United States, Department of Commerce, Bureau of Economic Analysis, *U.S. Direct Investment Abroad: 1982 Benchmark Survey Data* (Washington, D.C., 1985).
41/ Japan, Ministry of Finance.
42/ For a detailed analysis of shifts in Japanese foreign-direct-investment strategies in the Triad, see Michelle Gittelman and John H. Dunning, "Japanese multinationals in Europe and the United States: some comparisons and contrasts", in Michael W. Klein and Paul J. J. Welfens, eds., *Multinational Enterprises in the New Europe and Global Trade* (New York, Springer, 1991).
43/ Figures are for 1986. Industrial Bank of Japan, *Quarterly Survey of Japanese Finance and Industry*, 80 (Fourth Quarter, 1989).
44/ "World industrial review" (Special Survey), *Financial Times*, 8 January 1990.
45/ Industrial Bank of Japan, op. cit.
46/ Carl Goldstein, "Steering committee", *Far Eastern Economic Review* (15 February 1990), p. 67.
47/ Raymond J. Mataloni, "U.S. multinational companies: operations in 1988", *Survey of Current Business*, 70 (June 1990), pp. 31-44.
48/ "Japan in East Asia: a boom pays off", *International Herald Tribune*, 30 May 1990.
49/ Rob Steven, "Japan's MNCs: the new power in South-East Asia", *Multinational Monitor* (November 1989).
50/ Goldstein, op. cit., p. 67.
51/ "Thai economy booming, thanks to the Japanese", *The New York Times*, 10 May 1990.
52/ Carl McMillan, "Foreign direct investment flows to Eastern Europe and their implications for developing countries", paper prepared for the United Nations Committee for Development Planning (April 1991), mimeo, table 4, p. 13. Data for Czechoslovakia and the USSR are as of October 1990; for Hungary and Poland as of January 1990.
53/ "Hong Kong: Asia its oyster", *The Economist* (8 December 1990).
54/ This concept is explored further in GATT, *International Trade, 89-90*, op. cit.
55/ UNCTC, *Transnational Corporations in World Development: Trends and Prospects* (United Nations publication, Sales No. E.88.II.A.7), p. 97.
56/ If transactions between United States affiliates of foreign transnational corporations and affiliates of the same corporations operating in third countries were included, the percentage of United States imports accounted for by intra-firm transactions would rise by approximately 1.5 percentage points, and the percentage of United States exports accounted for by intra-firm transactions would rise by approximately 1 percentage point. This is based upon data for 1987 and 1988, which are not available for earlier years.
57/ UNCTC, *Transnational Corporations in World Development: Trends and Prospects*, table VI.3.
58/ UNCTAD, *Trade and Development Report, 1990*, p. 95.

59/ Magnus Blomström, *Transnational Corporations and Manufacturing Exports from Developing Countries* (United Nations publication, Sales No. E.90.II.A.21). See also UNCTAD, *Trade and Development Report, 1990*, pp. 91-96.
60/ Raymond J. Mataloni, "U.S. multinational companies: operations in 1988", *Survey of Current Business*, table 12; Obie G. Wichard, "U.S. multinational companies: operations in 1987", *Survey of Current Business*, 69 (June 1989), table 12.
61/ GATT, *International Trade 89-90*, p. 28.
62/ See, for example, United Nations Centre on Transnational Corporations, *Transnational Corporations in the Transfer of New and Emerging Technologies to Developing Countries*, (United Nations publication, Sales No. E.90.II.A.20).
63/ For a general discussion of strategic alliances, see John H. Dunning, "The new style multinationals — circa the late 1980s and early 1990s", in *Explaining International Production* (London, Unwyn Hyman, 1988). See also, UNCTC, *Transnational Corporations in World Development: Trends and Prospects*, chap. IV.
64/ Kan H. Young and Charles E. Steigerwald, "Is foreign investment in the U. S. transferring U. S. technology abroad?" *Business Economics*, 25 (October 1990), table 2. See also, Kan H. Young and Charles E. Steigerwald, "Technology transfer and foreign direct investment in the United States", Office of Business Analysis, U. S. Department of Commerce, 15 November 1989, mimeo.
65/ OECD, *Science and Technology Indicators Report No. 3: R&D, Production and Diffusion of Technology* (Paris, Organisation for Economic Co-operation and Development, 1989), p. 37.
66/ UNCTC, *Transnational Corporations in World Development: Trends and Prospects*, table XI.1.
67/ United Nations Conference on Trade and Development, "Transfer and development of technology in a changing world environment: the challenges of the 1990s", TD/B/C.6/153, 25 January 1991, table 1.
68/ Magnus Blomström, "Host country benefits of foreign investment", Cambridge, Mass., National Bureau of Economic Research, Working Paper No. 3615, February 1991, mimeo.
69/ UNCTAD, "Transfer and development ... ", table 2.
70/ UNCTC estimate for 96 capital-importing developing countries based on world-debt-tables tape and International Monetary Fund balance-of-payments tape.
71/ UNCTAD, "Transfer and development ... ", p. 5.
72/ Shafiqul Islam, ed., *Yen for Development: Japanese Foreign Aid and the Politics of Burden-Sharing* (New York, Council on Foreign Relations, 1991); Edward J. Lincoln, "Japan's role in Asia-Pacific cooperation: dimensions, prospects, and problems", *Journal of Northeast Asian Studies*, 4 (1989), pp. 5-23; Bernard Wysocki Jr., "Japan plots development of other economies in Asia through aid, investment programs", *Asian Wall Street Journal* (27 August 1990).
73/ Kenneth P. Jameson, "Dollar bloc dependency in Latin America: beyond Bretton Woods", *International Studies Quarterly*, 34 (December 1990), pp. 519-541.
74/ See, for example, "The increasing international role of the Japanese yen", *IMF Survey* (1 April 1991).
75/ For an elaboration of this point, see "Ongoing and future research: the determinants of foreign direct investment and their policy implications", E/C.10/1991/7, 20 February 1991.
76/ See UNCTC, *Regional Economic Integration and Transnational Corporations in the 1990s: Europe 1992, North America, and Developing Countries* (United Nations publication, Sales No. E.90.II.A.14), pp. 34-41.
77/ UNCTC, *Foreign Direct Investment, Debt and Home Country Policies* (United Nations publication, Sales No. E.90.II.A.16), pp. 26-36.
78/ For more details, see UNCTC, "Role of transnational corporations in the least developed countries", presented at the Second United Nations Conference on Least Developed Countries held in Paris in September 1990.