Transnational Corporations and Management Division Department of Economic and Social Development

World Investment Report 1992 Transnational Corporations as Engines of Growth

NOTE

The Transnational Corporations and Management Division of the United Nations Department of Economic and Social Development serves as the focal point within the United Nations Secretariat for all matters related to transnational corporations and acts as secretariat to the Commission on Transnational Corporations, an intergovernmental subsidiary body of the United Nations Economic and Social Council. The objectives of its work programme include to further the understanding of the nature of transnational corporations and of their economic, legal, political and social effects on home and host countries and in international relations, particularly between developed and developing countries; to secure effective international arrangements aimed at enhancing the contribution of transnational corporations to national development goals and world economic growth; and to strengthen the negotiating capacity of host countries, in particular developing countries, in their dealings with transnational corporations.

The World Investment Report is published annually by the Transnational Corporations and Management Division to contribute to a better understanding of transnational corporations, their activities and their impact.

The term "country" as used in this Report also refers, as appropriate, to territories or areas; the designations employed and the presentation of the material do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. In addition, the designations of country groups are intended solely for statistical or analytical convenience and do not necessarily express a judgement about the stage of development reached by a particular country or area in the development process.

The following symbols have been used in the tables:

Two dots (..) indicate that data are not available or are not separately reported. Rows in tables have been omitted in those cases where no data are available for any of the elements in the row;

A dash (-) indicates that the item is equal to zero or its value is negligible;

A blank in a table indicates that the item is not applicable;

A slash (/) indicates a financial year, e.g., 1988/89;

Use of a hyphen (-) between dates representing years, for example, 1985-1989, signifies the full period involved, including the beginning and end years.

Reference to "dollars" (\$) means United States dollars, unless otherwise indicated.

Annual rates of growth or change, unless otherwise stated, refer to annual compound rates.

Details and percentages in tables do not necessarily add to totals because of rounding.

The material contained in this study may be freely quoted with appropriate acknowledgement. Comments should be sent to the Director, Transnational Corporations and Management Division, United Nations Department of Economic and Social Development, United Nations, Room DC2-1220, New York, NY 10017, United States. Telephone: (212) 963-2990; Fax: (212) 963-2146; Telex: 661062 UNCTNC.

ST/CTC/130
UNITED NATIONS PUBLICATION
Sales No. E.92.II.A.19

ISBN 92-1-104396-4

Copyright © United Nations, 1992
All rights reserved
Manufactured in the United States of America

PREFACE

A major challenge facing the world economy today is the revival of economic growth, especially among developing countries, most of which have suffered serious setbacks during the 1980s. Transnational corporations and foreign direct investment can play an important role in meeting this challenge. Since the early 1980s, world investment flows have been expanding rapidly, much faster than other key economic variables such as world trade and world output. A number of major new developments in the global economic situation—the enhanced role of the private sector and a greater reliance on market forces, major technological breakthroughs, the globalization of firms and industries, the ascendancy of the services sector and trends towards a regionalization of markets—has placed foreign direct investment in a central position to influence the pace and the nature of economic growth in most countries. Finally, developing countries themselves have implemented notable and, in many cases, dramatic policy changes, in order to open their economies to greater contributions by transnational corporations.

The question of how, to what extent and under what circumstances transnational corporations can contribute to economic growth of developing countries forms the core of the analysis in the *World Investment Report 1992*, the second in this annual series. Growth itself is a complex process, involving familiar elements, such as capital accumulation, the creation and dissemination of new technology, the development of human resources, access to markets and, of course, the environmental sustainability of growth. How these elements are combined varies substantially across regions and countries, with different results in terms of growth. The contribution of transnational corporations can also vary substantially, due, among other factors, to the structural conditions and policy environments in host economies.

The evidence provides ample cause for optimism, as transnational corporations have made important and positive contributions to some of the most successful recent cases of economic revival in developing countries. At the same time, transmitting such success to a greater number of countries is a formidable task. The lessons learned from the analysis in this Report about the contributions being made by transnational corporations to growth in developing countries can hopefully assist in policy formulation and the design of technical assistance in an increasing number of countries, and thereby help make the 1990s a decade of renewed economic development.

Hamdan BenAissa Director

Transnational Corporations and Management Division

New York, June 1992

The present Report was prepared by a team led by Karl P. Sauvant and comprising Marita Andersson, Victoria Aranda, Persephone Economou, Michelle Gittelman, David Gold, Torben Huss, Azizul Islam, Peter Koudal, Padma Mallampally and Paz Estrella Tolentino. Specific inputs were received from Vincent Casim, Norman Edinberg, Alejandro Grinspun, Hiroshi Kawamura, Charles Lipton, Anita Mathur, Ike Minta, Anna Theofilopoulou and Zbigniew Zimny. Principal research assistance was provided by Jag Alexeyev, Mohamed Chiraz Baly, Ming-Wah Lam, Zane Nobbs and Dorothy Woo. The team received extensive advice from John Dunning, Senior Economic Adviser to the Director of the Transnational Corporations and Management Division, Peter Hansen and Goran Ohlin. The Report was edited by Betty Hamnett and was desktop-published by Valerian Monteiro. Production of the Report was carried out by Marie Antoine, Carmelita Aquilizan, Maria Luisa De Jesus, Juliet Capili, Kanayalal Israni and Armi Manamtam.

Experts from within and outside of the United Nations system provided many substantial inputs that were utilized for the Report. They included Manuel Agosin, Susan Bartholomew, John Cantwell, Edward M. Graham, David Hartridge, John Kline, Samuel Laird, Charles Pearson, Dominick Salvatore and Arvind Subramanian.

In view of the multitude of issues covered by the theme of this Report, a wide range of experts were consulted and commented on various chapters. Extensive comments were received during various stages of preparation from Paul Bailey, Marino Baldi, Ramon De Reyna, Dennis Encarnation, Arghyrios A. Fatouros, Geza Feketekuty, Harris Gleckman, Khalil Hamdani, Nurul Islam, Mario Kakabadse, Georg Kell, Robert Lipsey, Michael Minor, Theodore H. Moran, Michael Mortimore, M. Ishaq Nadiri, Maurice Odle, Sylvia Ostry, Terutomo Ozawa, Thomas Schroeter, William Stibravy and Raymond Vernon.

Contents

		Pa	age
PREF	ACE		iii
INTR	ODU	CTION	. 1
PAR7	ONI	E: RECENT TRENDS	.9
I.	TRE	NDS IN FOREIGN DIRECT INVESTMENT	11
	A.	Global trends	11
	B.	Regional trends	17
		 Developed countries Developing countries (a) Asia and the Pacific (b) Latin America and the Caribbean (c) Africa Central and Eastern Europe 	22 22 26 29
	C.	Foreign-direct-investment clusters of the Triad members and newly industrializing economies	32
	D.	Regionalization: issues and analysis	34
		 Policy-led versus investment-led integration Foreign direct investment and regional integration in North America: the the possible impact of a North American Free Trade Agreement (a) Foreign direct investment-led integration in North America (b) The possible impact of a North American Free Trade Agreement Regional integration in the 1990s: building blocs or stumbling blocs? 	40 40 42
	E.	Conclusions	45
II.		RELATIVE IMPORTANCE OF THE ACTIVITIES FRANSNATIONAL CORPORATIONS	51
	A.	In the world economy	51
		 Foreign direct investment, domestic investment and output Foreign direct investment, trade, technology and sales Foreign direct investment and capital flows 	51 52
	B.	In host countries	59
III.	REC	ENT POLICY DEVELOPMENTS	65
	A.	The Uruguay Round	66
		 Services Trade related investment measures Trade related aspecxts of intellectual property rights 	70

		1	Page
	B.	Regional and bilateral developments	. 75
		 The 1991 review of OECD instruments	
	C.	National developments	. 79
		 Regulatory changes Privatization 	
	D.	Self-regulation	90
PART	TWO	D: TRANSNATIONAL CORPORATIONS AND GROWTH IN DEVELOPING COUNTRIES	97
IV.		NSNATIONAL CORPORATIONS AND ECONOMIC GROWTH: AMEWORK FOR ANALYSIS	99
	A.	The increasing importance of transnational corporations	99
	B.	The new world economy	100
		 The increasing importance of market forces Technology and the shrinking of economic space The globalization of industries and firms The emerging services world economy The regionalization of the world economy and the emergence of the Triad 	101 104 105
	C.	Economic growth and its elements	106
	D.	A framework for the analysis of transnational corporations and growth	108
V.		NSNATIONAL CORPORATIONS, CAPITAL FORMATION ECONOMIC GROWTH	111
	A.	Capital formation and economic growth	111
	B.	Sources of savings for host developing countries	112
	C.	Transnational corporations and financial intermediation	116
	D.	The contribution of foreign direct investment to host country investment	117
		 Aggregate data Linkage effects 	
	E.	The contribution of transnational corporations to the effectiveness of host country investment	122
	F.	Assessment	124
	G.	Some policy implications	125

		1	Page
VI.	TRA	ANSNATIONAL CORPORATIONS, TECHNOLOGY AND GROWTH	131
	A.	Technology as a determinant of growth	131
		 Linkage between technology and growth	
	B.	Transnational corporations and technology development	134
		 Overview	
	C.	Transnational corporations and the transfer of technology to developing countries	139
	D. E.	1. Transnational corporations and the supply of capital goods 2. Technology transfer through foreign direct investment (a) Direct effects (i) Transnational corporations and factor productivity (ii) Transnational corporations and product composition (iii) Transnational corporations and export composition (iv) Research and development by affiliates (v) Organizational innovation and management practices (b) Indirect effects 3. Transnational corporations and technology transfer through non-equity forms 4. Strategic alliances and technology transfer Assessment Some policy implications	141 141 141 145 146 148 149 152 155
/II.		NSNATIONAL CORPORATIONS, HUMAN OURCE DEVELOPMENT AND GROWTH	163
	A.	Human resource development as a factor in growth	164
	B.	Transnational corporations and human resource development	167
		1. Impact on health and nutrition 2. Impact on general education 3. Impact on vocational training 4. Impact on management capability (a) Formal learning (b) Non-formal learning (i) Non-formal learning through direct training and development (ii) Non-formal learning through collaborative arrangements (c) Informal learning	169 170 171 172 175 175

			Page
	C.	Transnational corporations and employment opportunity	183
		 Direct effects	186
	D.	Assessment	188
	E.	Some policy implications	190
VIII.	TRA	INSNATIONAL CORPORATIONS, TRADE AND GROWTH	197
	A.	The relationship between trade and growth	197
	B.	The impact of transnational corporations	200
	C.	1. Exports (a) Relative importance in exports of developing countries (b) Structural change (c) Non-equity links (d) The role of trading companies (e) The export of services 2. Imports (a) Imports of capital and intermediate goods (b) Imports of services 3. Externalities Assessment Some policy implications	201 202 203 206 209 209 210 212 214 216
IX.	_ ,	NSNATIONAL CORPORATIONS, ENVIRONMENTAL	21,
		ALITY AND SUSTAINABLE GROWTH	223
	A.	Economic growth and environmental quality	224
		 Conceptual linkages Sustainable development and the measurement of growth The role of policy 	225
	B.	Transnational corporations and environmental quality in host countries	226
		 The extent of transnational corporation involvement and influence Assessing the environmental impact of transnational corporations 	
	C.	Some policy implications	235
X.		NSNATIONAL CORPORATIONS AND GROWTH: INTEGRATED ASSESSMENT	245
	A.	The dynamics of transnational corporations and growth	245

				Page
	В.	Inter	national production	.252
		1. 2. 3.	Characteristics of the international production system	. 258
	C.	The	role of host country policies	.260
PART	Г ТНЕ	REE: F	POLICY IMPLICATIONS	.263
XI.	INTI	ERNA	TIONAL PRODUCTION AND GOVERNANCE	. 265
	A.	A ne	w policy perspective	. 267
		2.	Investment related trade measures (a) Relevance (b) How do investment related trade measures work? (c) Conclusions Strategic foreign-direct-investment policy (a) Policy instruments to increase long-term benefits (i) Investment incentives and performance requirements (ii) Restrictions on foreign direct investment in strategic industries (b) Policies to transfer rents (c) Some policy implications	. 267 . 268 . 271 . 272 . 273 . 273 . 275 . 278
	B.		national cooperation on issues arising from the failure ransnational corporation	.280
		1. 2. 3.	Who may be affected by a transnational failure?	. 282
	C.	Mecl	nanisms to support foreign direct investment	. 287
	D.	Trans	sparency and policy review	. 291
		 2. 	International transparency of investment policies (a) The rationale (b) The benefits of increased transparency of investment policies (c) Options for implementation Foreign-direct-investment policy review (a) The need for a review mechanism (b) Ways and means of implementation	.292 .293 .294 .295 .295
XII.	A LC	ок т	TO THE FUTURE	. 301
	A.	New	domestic policy issues	. 302
	B.	New	international policy challenges	. 303
	C.	The r	need for new policy initiatives	. 305

	Pag	e
Annex ta	bles)
	t of publications of the Transnational Corporations and nent Division)
	naire	
	List of boxes	
T 1	How many transnational corporations and foreign affiliates are there?	,
I.1. I.2.	The discrepancy between inflows and outflows	
	Foreign direct investment in Argentina	
	Foreign investments in automobiles in Central and Eastern Europe:	
1.4.		
1.5	an example of regional core network strategies	
	Imperfections of foreign-direct-investment data	
	Issues in the liberalization of foreign direct investment and trade in services	
	•	
	India: a new pragmatism	
	Environmental policy of Chevron	
	Self-regulation and environmental protection	
	The contribution of foreign savings to domestic savings	
	Foreign direct investment in developed countries and technology transfer	
	Transfer of organizational technology: the case of Escorts Ltd. in India	
	Joint ventures in developed countries and technology transfer	r
VII.1.	Examples of contributions to health and nutrition through joint	
	ventures in the food-processing industry	,
	Transnational management education: Canada and China	
VII.3.	Investments in training by transnational service corporations in	
	developing countries	
	Training with transnational corporations	į
VIII.1.	The impact of imports on growth in home countries and the	
	role of transnational corporations	,
VIII.2.	Acquisition of export marketing skill from transnational corporations:	
	the case of garments exports from Bangladesh	
IX.1.	Transnational corporations and tropical deforestation	,
IX.2.	Selected tasks for Governments to support the transition to	
	sustainably managed corporations	
IX.3.	Examples of the transfer of environmentally sound technology	
IX.4.	Corporate steps towards sustainable development management	ŀ
X.1.	The relationship between foreign direct investment and	
	growth: some empirical evidence	ŀ
X.2.	Asea Brown Boveri: an international production network	
	Asia: an illustration of foreign direct investment, dynamic restructuring and growth 256	

	Page
(List of	boxes, cont'd.)
XI.2.	The United States Bankruptcy Code
	List of figures
I.1.	Foreign direct investment, gross domestic product and
	domestic investment, 1970-1990
I.4.	and Taiwan Province of China
II.1.	The importance of foreign direct investment and domestic investment in domestic output for the six largest host countries, 1980-1990
	Investment outflows, exports and royalty and fees receipts, 1970-1990
	and portfolio investment for 93 capital importing developing countries, heavily indebted developing countries and least developed countries, 1970-1990
II.4.	The ratio of investment inflows to gross domestic capital formation, by region, annual average, 1971-1975, 1976-1980, 1981-1985, 1986-1989
II.5.	The ratio of investment inflows to gross domestic capital formation for developing countries by income group, annual average,
371 1	1971-1975, 1976-1980, 1981-1985, 1986-1989
	Intensity of use of selected agricultural raw materials in developed countries
	Transnational corporations and the growth process
	List of tables
	Inflows and outflows of foreign direct investment, 1986-199014
	Outflows of foreign direct investment from five major home countries, 1986-199016
1.3.	Sectoral composition of the stock of outward foreign direct investment of major home countries
I.4.	Inward and outward foreign direct investment in the largest
1.5	developed market economies, 1989
1.5.	Average inflows of foreign direct investment to developing regions, by region, 1970-1979, 1980-1985 and 1986-1990
I.6.	Investment flows to South and South-East Asia, China and the Asian newly industrializing economies from the Asian newly industrializing economies,
	1983-1986 and 1987-1990

*	Page
(List of t	tables, cont'd.)
•	Total foreign direct investment and foreign direct investment financed through
1./.	debt-equity swaps, 1985-1989
18	Foreign investment registrations in Central and Eastern Europe, by number
1.0.	and value of foreign equity participation, beginning of 1992
1.9.	Mexico-United States trade, by United States affiliates in Mexico, 1982 and 1989 41
II.1.	Estimated worldwide sales of foreign affiliates and total exports, 1982-1989.
	and average annual growth rates 1982-1984 and 1985-1989
II.2.	Sales of foreign affiliates and total exports for selected home countries, 1982-1989,
	and average annual growth rates, 1982-1984 and 1985-1989
II.3.	The relative importance of investment inflows in gross
	domestic capital formation, 1986-1989
II.4.	The relative importance of foreign-direct-investment stock
	in the domestic economy, 1988
III.1.	Trade related investment measures and their possible impact on trade
	and investment
III.2.	
	and developing regions and Central and Eastern Europe, by ten-year period 77
	Main changes in investment regimes in 1991 80
III.4.	Examples of recent privatizations with the participation of
	transnational corporations
V.1.	Tax payments by foreign affiliates of United States transnational corporations,
	as a percentage of total government revenue of the host country, 1989
V.2.	The contribution of foreign direct investment to domestic
	capital formation, selected countries
	Local procurement of Japanese affiliates, by region and industry, 1981 and 1988 121
VI.1.	Selected developing economies in Asia: growth of output and
	contribution of total factor productivity
	Research-and-development expenditure of selected countries and top companies 136
V1.3.	Research-and-development expenditure by top 20 transnational corporations, 1990 137
V1.4.	Number of United States patents, by type of grantee, 1980-1991
V1.5.	attributable to research in foreign locations (outside the home country of the
	parent company), organized by the nationality of parent firms, 1969-1986
VI 6	Capital goods imports by developing countries, 1980-1989
	Shares of high and medium research-intensive industries in
V 1. / .	total sales and manufacturing sales of foreign affiliates, 1982 and 1989
1/1 8	Manufactured exports and research-and-development intensive exports
¥ 1.0.	of foreign affiliates, 1982 and 1989
VIQ	Research and development expenditure of selected developing economies as a
¥ 1.7.	percentage of GNP and research and development expenditures for
	United States majority-owned affiliates as percentage of sales

	Page
(List of t	ables, cont'd.)
VI.10.	United States and the Federal Republic of Germany:
	technology receipts, 1986-1990
VI.11.	International distribution of technology cooperation agreements in
	biotechnology, information technologies and new materials, cumulative 1989156
VII.1.	Contributions by transnational corporations to vocational
	training in Singapore
	Transnational affiliations of institutions of higher education, 1992
VII.3.	Executive training programmes of transnational corporations
* *** 4	and local firms in Turkey
VII.4.	Expatriate employment in foreign affiliates of United States and Japanese
V/II 5	transnational corporations
	A cross-cultural comparison of the roles of women in management
	Manufactured exports by United States majority-owned and Japanese
V 111.1.	foreign affiliates in developing countries, 1982 and 1989201
VIII.2.	
V 111.2.	majority-owned foreign affiliates 1977, 1982 and 1989
VIII.3.	Manufactured exports of Japanese affiliates in Asia and Latin America205
VIII.4.	· · · · · · · · · · · · · · · · · · ·
	in total manufacturing in selected developing countries, 1970, 1980 and 1988206
VIII.5.	The role of trading affiliates of United States transnational corporations
	in exports of United States majority-owned foreign affiliates from
	host countries, 1977, 1982, 1988 and 1989207
VIII.6.	Imports of capital goods by United States affiliates in developing countries210
	Toxic release intensities by manufacturing industries
	United States pollution abatement costs, by industry, 1988
	Share of pollution-intensive industries in outward investment stock
	Sources of pollution-intensive products in world trade
XI.1.	A suggestive list of IRTMs