

United Nations Conference on Trade and Development

World Investment Report 1997

Transnational Corporations, Market Structure and Competition Policy



United Nations
New York and Geneva, 1997

Note

UNCTAD serves as the focal point within the United Nations Secretariat for all matters related to foreign direct investment and transnational corporations. In the past, the Programme on Transnational Corporations was carried out by the United Nations Centre on Transnational Corporations (1975-1992) and the Transnational Corporations and Management Division of the United Nations Department of Economic and Social Development (1992-1993). In 1993, the Programme was transferred to the United Nations Conference on Trade and Development. UNCTAD seeks to further the understanding of the nature of transnational corporations and their contribution to development and to create an enabling environment for international investment and enterprise development. UNCTAD's work is carried out through intergovernmental deliberations, technical assistance activities, seminars, workshops and conferences.

The term "country" as used in this study 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 (/) between dates representing years, e.g., 1994/95, indicates a financial year;

Use of a hyphen (-) between dates representing years, e.g., 1994-1995, 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.

UNITED NATIONS PUBLICATION

Sales No. E.97.II.D.10

ISBN 92-1-112413-1

Copyright © United Nations, 1997

All rights reserved

Manufactured in Switzerland

Preface

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

Major issues discussed in *WIR 97* are:

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

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

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

New York, July 1997

Kofi A. Annan
Secretary-General of the United Nations

Acknowledgements

The *World Investment Report 1997* was prepared by a team led by Karl P. Sauvant and comprising Victoria Aranda, Philippe Brusick, Sew Sam Chan Tung, Persephone Economou, Wilfried Engelke, Masataka Fujita, Massimiliano Gangi, Michael Gestrin, Kálmán Kalotay, Michael Lim, Padma Mallampally, Ludger Odenthal, Assad Omer, Jennifer Powell, Luisa Sabater, Anh Nga Tran-Nguyen, Jörg Weber and James Xiaoning Zhan. Specific inputs were received from Menelea Masin and Joseph Mathews. The work was carried out under the overall direction of Lynn K. Mytelka.

Principal research assistance was provided by Mohamed Chiraz Baly, Makameh Bahrami, Antonella Convertino, Siri Dalawelle, Lizanne Martinez and Mohamed Berrada. A number of interns assisted at various stages during the preparation of *WIR 97*: Btisame Boudhan, Christian Caruso, Rikke Mortensen and Stefanie Ten Napel. Production of the *Report* was carried out by Jenifer Tacardon, Amanda Waxman, Florence Hudry, Christiane Defranco and Corazón Alvarez. Graphics were done by Diego Oyarzun-Reyes. It was desktop-published by Teresita Sabico. The *Report* was edited by Guy de Jonquières and copy-edited by Frederick Glover.

Experts from within and outside the United Nations system provided inputs for *WIR 97*. Major inputs were received from Joel Davidow and Colm MacKernan, Stephen W. Davies and Bruce Lyons, Edward M. Graham, Donald L. Lecraw, Bijit Bora, Miguel Rodriguez Mendoza, Dieter Ernst, Fabrice Hatem and Peter Nunnenkamp. Inputs were also received from Anna Joubin-Bret, Alvaro Calderón, Basanta Chaudhuri, Terry M. Chuppe, Carlo Gamberale, Tim Kelly, Roger Lawrence, Marcus Noland, Mary Stanier, Lee Tuthill and Terry Winslow.

A number of experts were consulted on various chapters. Comments were received during various stages of preparation (including during expert group meetings) from Jamuna P. Agarwal, Thomas Andersson, Pierre Arhel, Milos Barutciski, Michael Blank, Thomas Brewer, John Cantwell, Jenny Cargill, S. Y. Cochrane, Brian Craig, Claudia Curiel, Rajan Dhanjee, Michel Delapierre, Arghyrios A. Fatouros, Geza Feketekuty, Maxwell Fry, Cathy Goddard, Calvin S. Goldman, Karin Gollan, H. Peter Gray, Chris Hall, Khalil Hamdani, Gary Hewitt, Silke Hossenfelder, Michael J. Howell, Himmat Kalsi, Jorge Katz, Faizullah Khilji, Fred Kilby, Friedrich von Kirchbach, Mark Koulen, Nagesh Kumar, B. P. Kunene, Sanjaya Lall, Richard Lipsey, P.J. Lloyd, Gavin Maasdorp, Jorge Maia, Raymond Mataloni, Rose Mystila, Adrian Otten, Alan Oxley, Terutomo Ozawa, D.J. Pathirana, E.U. Petersmann, Hassan Qaqaya, Claude Rakovsky, Eric D. Ramstetter, Pedro Roffe, Pierre Sauvé, Marjan Svetlicic, Shigeki Tejima, Stephen Thomsen, Hans Ullrich, Meg Vorhees, Sarah W. Wainaina, Mark Warner, Larry Westphal, Obie Whichard, Crystal Witterick, Americo Beviglia Zampetti and Zbigniew Zimny.

This year, *World Investment Report* benefited from comments and discussions on its theme received through an INTERNET conference on the AIBnet organized by Tagi Sagafi-nejad. Pontus Braunerhjelm, Gunnar Fors, Virginia Brown Keyder, Sylvia Ostry, Howard V. Perlmutter, Lee Preston, Val Samonis and Raymond Vernon shared their views through this process.

The Australian APEC Study Centre, the Asian Business Centre at Melbourne University and the Victoria University of Technology organized a roundtable on foreign direct investment and competition policy in connection with *WIR 97*.

Especially through the provision of data and other information, numerous officials in Central Banks, statistical offices, competition authorities, investment promotion agencies and other government offices, as well as executives of a number of companies, also contributed to *WIR 97*.

The *Report* benefited from overall advice from John H. Dunning, Senior Economic Adviser.

The financial support of the Governments of the Netherlands and Norway, and of Hong Kong, are gratefully acknowledged.

Contents

	Page
Preface	ii
Overview	xiii

PART ONE TRENDS

I. GLOBAL TRENDS	3
A. Overall trends	3
1. Trends	3
(a) Characteristics of foreign-direct-investment booms	10
(b) Cross-border inter-firm agreements and cross-border strategic research-and-development partnerships	12
2. International production	16
3. Recent changes in regulatory frameworks	18
4. Trends in technology flows	20
B. Estimating actual investment in foreign affiliates	22
1. Estimating "real" FDI	23
2. The financing of investment in foreign affiliates	25
C. The largest transnational corporations	28
1. Highlights of the world's top 100 and the top 50 developing-country transnational corporations	28
2. Future trends	36
Notes	39
II. REGIONAL TRENDS	41
A. Developed countries	41
1. United States	41
2. Western Europe	46
3. Japan	47
4. Australia	49
B. Developing countries	52
1. Least developed countries	52
(a) Trends	52
(b) Prospects	55
2. Africa	56
(a) Trends	56
(b) Prospects	62

	Page
(c) South African transnational corporations and the economic development of southern Africa	64
i. Growth pole	65
ii. Building the nest?	67
iii. Conclusions	71
3. Latin America and the Caribbean	71
(a) Trends	71
(b) A regulatory shift	75
4. South, East and South-East Asia	78
(a) Trends	78
(b) Does foreign direct investment create balance-of-payments problems?	85
i. Singapore	87
ii. Malaysia	90
iii. Thailand	91
iv. China	92
5. West Asia	94
C. Central and Eastern Europe	96
1. Trends	96
2. Foreign direct investment and competition	100
3. Conclusion	101
Notes	102

III. FOREIGN PORTFOLIO EQUITY INVESTMENT 107

A. Linkages between foreign direct and portfolio investment	107
B. Trends	112
1. General trends	112
2. Trends in outflows to emerging markets from the principal source countries	114
C. Investment mechanisms	115
1. Venture capital funds	115
2. International equity investment funds	116
3. American depositary receipts and global depositary receipts	117
4. Convertible bonds and bonds with equity warrants	117
D. Some issues raised by FPEI	118
Notes	119

PART TWO
FOREIGN DIRECT INVESTMENT, MARKET
STRUCTURE AND COMPETITION POLICY

Introduction		123
IV. FOREIGN DIRECT INVESTMENT, MARKET		
STRUCTURE AND COMPETITION		133
Introduction		133
A. Foreign direct investment, market structure and		
competition in host economies		135
1. Inward investment and the contestability of markets		135
2. Transnational corporations and host country market concentration		136
(a) The positive correlation between transnational corporation		
activity and industry/market concentration		137
(b) The impact of foreign direct investment on host-country		
market concentration		140
i. At-entry effects on concentration		140
ii. Post-entry effects on market concentration		142
3. Firm behaviour and competition effects		150
(a) Competitive behaviour, the efficiency of firms, and		
impact on performance		150
(b) Anticompetitive business practices		156
i. Collusion		156
ii. Monopolizing mergers and acquisitions		157
iii. Exclusionary vertical practices		158
iv. Predatory behaviour		158
4. Inducing foreign direct investment by granting market power		159
B. Foreign direct investment, market structure and competition in		
a globalizing world economy		163
1. The emergence of regional and global markets		163
(a) Foreign direct investment, efficiency and the structure		
of regional/global markets		164
(b) Competition effects		169
(c) Integrated international production, market structure		
and competition: the hard-disk drive industry		171
i. Industry characteristics and market-entry conditions		171
ii. Integrated international production in hard-disk drives		171
iii. Market structure and competition in the industry		172
iv. Globalization and volatility of market positions:		
the dynamics of competition in hard-disk drives		173
2. International production, supply response and competition		175
3. Conclusions		177

	Page
Notes.....	179
V. POLICY IMPLICATIONS	183
Introduction	183
A. Investment liberalization.....	184
1. Liberalization of entry and operations	184
2. Limiting market-power inducements.....	185
(a) Assessing costs and benefits.....	185
(b) Minimizing anticompetitive effects	186
B. The interface of foreign direct investment and competition law	189
1. The growing emphasis on competition law	189
2. Main elements of competition law	190
3. Competition law and foreign direct investment	192
(a) At-entry inward merger review	194
i. General trends	194
ii. Typical scenarios involving mergers and acquisitions	196
(b) Outward merger review	198
(c) Worldwide dominant positions	202
(d) Post-entry competition issues	203
i. Ancillary agreements restraining competition	203
ii. Secondary effects	204
iii. Cross-border technology alliances.....	205
C. Broader policy implications	210
1. The importance of competition policy	210
2. International cooperation	217
(a) The need for international cooperation.....	217
(b) Obstacles	218
i. Impediments to information access	218
ii. Limited enforcement cooperation	219
iii. Differences in competition laws	219
(c) Existing cooperation arrangements	220
3. Looking ahead.....	226
D. Competition policy and market outcomes	227
1. Naturally concentrated markets	227
2. Competing objectives	229
(a) Promoting development	229
(b) Other objectives	231
Notes.....	233
References	239

	Page
Annexes	261
Annex A. Additional text tables	262
Annex B. Statistical annex	294
Annex C. Major instruments of foreign portfolio equity investment	370
Selected UNCTAD publications on Transnational Corporations and Foreign Direct Investment	378
Questionnaire	382

Boxes

I.1.	The Computel-Boston Technology strategic partnership	16
II.1.	Why do FDI flows reported by host and home countries differ?	44
II.2.	Cambodia	54
II.3.	South Africa: the “wait-and-see” phase is over	57
II.4.	Morocco, a rising star	61
II.5.	Asian FDI in Africa	63
II.6.	The Southern African Development Community	65
II.7.	The Maputo development corridor	71
II.8.	Foreign investors’ confidence in Hong Kong, China, after reversion	79
II.9.	Investment from developing Asia into the European Union is on the rise	84
II.10.	Empirical findings on the BOP effects of inward FDI	88
II.11.	Hungary’s nascent outward investors	98
II.12.	TNCs in consumer and service industries in Central and Eastern Europe	100
III.1.	Data on FPEI	109
III.2.	Financing of domestic enterprises in Malaysia and Thailand	110
III.3.	Volatility of FPEI flows and macroeconomic instability in Malaysia, South Africa, Thailand, Turkey and Venezuela	112
	Introduction to Part Two: 1. Market competition and performance: key concepts and theories	125
	Introduction to Part Two: 2. Contestability of markets	127
	Introduction to Part Two: 3. Competition, development and competition policy	131
IV.1.	TNCs, entry barriers and market concentration: three examples from the United Kingdom	143
IV.2.	Defensive reactions and responses to the entry of FDI: illustrations from the retailing industry in Asia	145
IV.3.	FDI, market structure and competition in South Africa's banking industry	147
IV.4.	FDI and competition in India’s markets for soft drinks and white goods	153
IV.5.	Predatory pricing: an example	158
IV.6.	Inducing FDI by offering market protection: the case of Lanka Lubricant Ltd.	160
IV.7.	Granting exclusive rights to induce FDI: two examples from Kenya	162
IV.8.	Inducing FDI by offering market protection: the case of the Colombo Gas Company in Sri Lanka	162

	Page
IV.9. The globalization of telecommunications and competition	165
IV.10. Knowledge-based oligopolistic networks in bio-pharmaceuticals	168
IV.11. Supply response through FDI	177
V.1. The privatization of Manila Metropolitan Water and Sewage System	186
V.2. BOT in the electricity-generating industry of the Philippines	188
V.3. Selected restrictive business practices addressed by competition law	191
V.4. Market-allocation investment cartels	193
V.5. Merged parent firms, merged foreign affiliates	198
V.6. Encouraging greenfield investment	198
V.7. Suppressing versus encouraging competitive potential	199
V.8. Third country effects of mergers of parent firms and their foreign affiliates	199
V.9. The German Federal Cartel Office Guidelines on "domestic effects" for the review of outward mergers	200
V.10. Outward FDI reviewed	201
V.11. Worldwide concentration	202
V.12. Ancillary constraints in joint ventures	203
V.13. Secondary effects after FDI entry	204
V.14. Access to essential facilities	205
V.15. Exemption of R&D arrangements	206
V.16. Main features of the exemption of R&D agreements in the European Union	207
V.17. Anticompetitive practices and licensing arrangements concerning intellectual property rights	209
V.18. Market structure, FDI and competition rules in the WTO negotiations on basic telecommunications services	212
V.19. Supply response in competition analysis	216
V.20. Competition policy in the era of globalization	217
V.21. The UNCTAD Set of Multilaterally Agreed Equitable Principles and Rules for the Control of Restrictive Business Practices	225

Figures

I.1. Top ten largest host and home countries for FDI, among developed countries, developing countries and Central and Eastern Europe, 1996	5
I.2. Components of FDI inflows, 1980-1995	8
I.3. Relationship between cross-border mergers and acquisitions and FDI, 1985-1996	9
I.4. Greenfield investment and mergers and acquisitions in the United States inward FDI, 1985-1995	10
I.5. FDI inflows and outflows, 1970-1996	10
I.6. Growth of domestic and foreign direct investment, 1980-1996	11
I.7. Share of developing countries in FDI inflows, exports and imports, 1970-1996	11
I.8. Number of cross-border inter-firm agreements and number of all inter-firm agreements, 1990-1995	12
I.9. Cross-border inter-firm agreements (excluding strategic R&D partnerships), 1990-1995	13

	Page
I.10. Inter-firm agreements and strategic R&D partnerships	14
I.11. Number of cross-border strategic R&D partnerships, 1990-1995	14
I.12. Number of times a region/country appears in cross-border, non-equity strategic R&D partnerships, 1990	15
I.13. Types of changes in FDI laws and regulations, 1996	19
I.14. Growth of BITs, 1959-1996	19
1.15 Growth of intra-regional BITs in developing countries and economies in transition, 1960s through 1990s.....	20
I.16. FDI inflows in nominal and real prices, 1971-1996	24
I.17. World FDI outflows and changes in global foreign-affiliate assets, 1982-1994	26
I.18. United States and German FDI outflows and changes in foreign-affiliate assets between consecutive years, 1982-1994	26
I.19. Actual flows of investment abroad by TNCs, 1970-1996	27
I.20. Future trends: significance of exports and production abroad, 1992-1996 and 1997-2001	36
I.21. Future trends: main forms of investing abroad, 1992-1996 and 1997-2001	37
I.22. Future trends: investment priorities, by area of location, 1992-1996 and 1997-2001	37
I.23. Future trends: internationalization efforts, by function, 1992-1996 and 1997-2001	38
I.24. Future trends: expected increases in FDI flows, 1996-2001	39
II.1. FDI flows into developed countries, 1995 and 1996	42
II.2. FDI outflows from developed countries, 1995 and 1996	42
II.3. FDI inflows as a percentage of gross fixed capital formation in developed countries, 1995	43
II.4. FDI stock as a percentage of GDP in developed countries, 1995	43
II.5. Share of developing countries in the total FDI outflows from, and FDI flows into, the Triad, 1987-1994	45
II.6. Share of intra-European Union FDI in total European Union FDI flows, 1985-1994	46
II.7. Profitability of foreign affiliates in Japan, 1988-1994	49
II.8. Australia's FDI inward and outward stocks, by country, 1995	50
II.9. Sectoral distribution of Australia's FDI outward stock, 1995	50
II.10. FDI flows into the top 20 LDCs, 1995 and 1996	52
II.11. FDI inflows as a percentage of gross fixed capital formation in the top 20 LDCs, 1995	53
II.12. FDI flows into the top 20 countries in Africa, 1995 and 1996	59
II.13. FDI inflows as a percentage of gross fixed capital formation in the top 20 countries in Africa, 1995	60
II.14. FDI flows into the top 20 countries in Latin America and the Caribbean, 1995-1996	72
II.15. FDI inflows as a percentage of gross fixed capital formation in the top 20 countries in Latin America and the Caribbean, 1995	73
II.16. FDI flows into the top 20 countries in South, East and South-East Asia and the Pacific, 1995-1996	78

	Page
II.17. Share of ASEAN in total flows into South, East and South-East Asia, 1980-1996	81
II.18. FDI inflows as a percentage of gross fixed capital formation in South, East and South-East Asia, 1995	82
II.19. Inward FDI stock as a percentage of GDP in selected host economies, 1995	82
II.20. FDI outflows from South, East and South-East Asia, 1995 and 1996	83
II.21. FDI flows into West Asia, 1995-1996	94
II.22. FDI inflows as a percentage of gross fixed capital formation in West Asia, 1995	95
II.23. FDI flows into the top 20 countries in Central and Eastern Europe, 1995-1996	97
III.1. Emerging markets share of world market capitalization, 1986-1995	112
III.2. Evolution of FDI and foreign portfolio equity investment in emerging markets, 1986-1995	113
V.1. Number of countries with competition laws, 1971-1996	189
V.2. Foreign firms in publicly reported mergers in Canada, 1971-1993	194
V.3. Reduction of competition in country A by exporter P purchasing domestic rival T	196
V.4. Reduction of competition in country A by parent P of affiliate T acquiring foreign rival S	197
V.5. Reduction of competition in country A by merger of parents P and T in country B	197
V.6. Reduction of potential competition in country A by locally dominant company T acquiring potential foreign competitor P	200

Tables

I.1. Selected indicators of FDI and international production, 1986-1996	4
I.2. Number of parent corporations and foreign affiliates, by area and country, latest available year	6
I.3. Sales of foreign affiliates and their ratios to exports and imports of goods and non-factor services, by region, 1982 and 1994	17
I.4. Regulatory changes, 1991-1996	18
I.5. Receipts and payments of technology-related flows in selected developed countries, 1995	21
I.6. Financing direct investment abroad by United States and Japanese TNCs, 1994 and 1992	27
I.7. The top 100 TNCs ranked by foreign assets, 1995	29
I.8. The top 50 TNCs based in developing economies ranked by foreign assets, 1995	32
I.9. The share of top TNCs in outward FDI stock, selected countries, 1995	34
I.10. Transnationality index, by industry, 1993 and 1995	34
I.11. Geographical concentration of TNCs by foreign assets, foreign sales, foreign employment and number of entries	35
I.12. Distribution of foreign assets, foreign sales and foreign employment of the top 100 TNCs and the top 50 developing-country TNCs, by industry, 1995	35
II.1. United States: FDI inflows and outflows, 1995 and 1996	44
II.2. Germany: recent developments in FDI inflows and outflows, 1994-1996	47

	Page
II.3. Geographical distribution of Japanese FDI outflows, peak period and post-recession period	48
II.4. Privatization revenues in sub-Saharan Africa, 1988-1995	64
II.5. South African FDI stock in selected SADC countries, 1991-1994	66
II.6. Intra-regional disparities in GDP per capital levels in SADC (1994) and in East and South-East Asia (1970)	68
II.7. Annual average wages and share of manufacturing in GDP in SADC countries, 1994	69
II.8. Enrolment ratios in selected SADC countries (1993) as compared to selected South-East Asian economies (1970)	70
II.9. Balance-of-payments transactions of foreign affiliates in selected Asian countries, 1990-1995	89
II.10. Value of international transactions of foreign affiliates in China, 1994-1996	93
IV.1. The most transnationalized and concentrated industries within the European Union, 1987	138
IV.2. Contestability, concentration and TNCs in manufacturing in the European Union and the United Kingdom	139
IV.3. TNCs, concentration and firms in leading and non-leading positions in the United Kingdom, 1986 and 1992	149
IV.4. Involvement of TNCs in United Kingdom competition cases, 1990-1995	151
V.1. Selective list of bilateral and regional arrangements dealing with competition-policy issues	221
V.2. Selected exclusions from competition laws, selected OECD countries	230