Editorial statement

Transnational Corporations (which replaces The CTC Reporter) is a refereed journal published three times a year by UNCTAD. In the past, the Programme on Transnational Corporations was carried out by the United Nations Centre on Transnational Corporations (1975-1992) and by the Transnational Corporations and Management Division of the United Nations Department of Economic and Social Development (1992-1993). The basic objective of this journal is to publish articles and research notes that provide insights into the economic, legal, social and cultural impacts of transnational corporations in an increasingly global economy and the policy implications that arise therefrom. It focuses especially on political-economy issues related to transnational corporations. In addition, Transnational Corporations features book reviews. The journal welcomes contributions from the academic community, policy makers and staff members of research institutions and international organizations. Guidelines for contributors are given at the end of this issue.

Editor: Karl P. Sauvant
Associate editors: Fiorina Mugione, Michael C. Bonello, Kalman Kalotay and James Zhan
Managing editor: Tess Sabico
Guest editor for international framework issues: Arghyrios A. Fatouros

Subscriptions

A subscription to Transnational Corporations for one year is US$ 35 (single issues are US$ 15). Requests for subscriptions should be addressed to: United Nations Publications, United Nations, Sales Section, Room DC2-853, New York, NY 10017, United States - Tel: 1 212 963 3552; Fax: 1 212 963 3062; e-mail: publications@un.org; or Palais des Nations, 1211 Geneva 10, Switzerland - Tel: 41 22 917 1234; Fax: 41 22 917 0123; e-mail: unpubli@unog.ch; or to distributors of United Nations publications throughout the world.

Note

The opinions expressed in this publication are those of the authors and do not necessarily reflect the views of the United Nations. The term "country" as used in this journal 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.

ISSN 1014-9562
Copyright United Nations, 1997
All rights reserved
Printed in Switzerland
Board of Advisers

Chairperson

John H. Dunning, State of New Jersey Professor of International Business, Rutgers University, Newark, New Jersey, United States, and Emeritus Research Professor of International Business, University of Reading, Reading, United Kingdom

Members

Edward K. Y. Chen, President, Lingnan College, Hong Kong, Special Administrative Region of China

Argyrios A. Fatouros, Professor of International Law, Faculty of Political Science, University of Athens, Greece

Kamal Hossain, Senior Advocate, Supreme Court of Bangladesh, Bangladesh

Celso Lafer, Ambassador, Permanent Representative, Permanent Mission of Brazil to the United Nations and to the International Organisations, Geneva, Switzerland

Sanjaya Lall, Lecturer, Queen Elizabeth House, Oxford, United Kingdom

Theodor H. Moran, Karl F. Landegger Professor, and Director, Program in International Business Diplomacy, School of Foreign Service, Georgetown University, Washington, D.C., United States

Sylvia Ostry, Chairperson, Centre for International Studies, University of Toronto, Toronto, Canada

Terutomo Ozawa, Professor of Economics, Colorado State University, Department of Economics, Fort Collins, Colorado, United States

Tagi Sagafi-nejad, Professor of International Business, the Sellinger School of Business and Management, Loyola College of Maryland, Baltimore, Maryland, United States

Oscar Schachter, Professor, School of Law, Columbia University, New York, United States

Mihály Simai, Professor, Institute for World Economics, Budapest, Hungary

John M. Stopford, Professor, London Business School, London, United Kingdom

Osvaldo Sunkel, Special Adviser to the Executive Secretary, ECLAC, Santiago, Chile; Director, Pensamiento Iberoamericano, Chile

Weizao Teng, Professor of International Economics, Nankai University, Tianjing, China

Raymond Vernon, Clarence Dillon Professor of International Affairs Emeritus, Harvard University, Centre for Business and Government, John F. Kennedy School of Government, Cambridge, Massachusetts, United States
Contents

ARTICLES

John M. Kline and Rodney D. Ludema
Building a multilateral framework for investment: comparing the development of trade and investment accords

Aradhna Aggarwal
Liberalization, internationalization advantages and foreign direct investment: the Indian experience in the 1980s

Erich Gundlach and Peter Nunnenkamp
Globalization and labour markets in the triad: different adjustment patterns

Heinz-Josef Tüselmann
The Multilateral Agreement on Investment: the case for a multi-speed convergence approach to liberalization

RESEARCH NOTE

Eric D. Ramstetter
Export performance and foreign affiliate activity in Japan\textsuperscript{\textregistered} large machinery firms

VIEW

A.V. Ganesan
Development-friendliness criteria for a multilateral investment agreement

BOOK REVIEWS

Just Published
Books Received
Global policy makers are scrambling to catch up with the expanding role of foreign direct investment which has outpaced world trade and GNP growth while linking 45,000 parent firms with 280,000 foreign affiliates. No multilateral framework for investment exists, comparable to the international regime that developed to govern trade relations over the past half century. As foreign-direct-investment issues are debated in various international forums, useful comparisons can be drawn between contemporary multilateral framework for investment issues and the historical development of the General Agreement on Tariffs and Trade. This article analyses how the movement from a system of bilateral trade treaties to an international trade regime contrasts with the current juxtaposition of the proliferation of over 1,300 bilateral investment treaties with the start of discussions about developing a multilateral framework on investment. The analysis discovers important similarities between these situations, especially regarding how key trade and foreign-direct-investment principles found in bilateral treaties can serve as potential building blocks for multilateral agreements. Significant differences also exist, including dissimilar political contexts for negotiations, divergent applications of similar principles and the unique role being played by private transnational corporations in the creation and implementation of foreign-direct-investment agreements. These conclusions point towards key issues that are driving the remarkable expansion of bilateral investment treaties and that will shape the emerging negotiations on a possible multilateral framework on investment.

Dramatic changes in transnational business are outpacing the established framework of intergovernmental agreements that govern global commerce. The creation of the World Trade Organization (WTO) upgraded the international community's capacity to address many issues, but critical problems remain on the agenda, including how to extend intergovernmental cooperation over rapidly evolving investment relationships. In response, governments are negotiating an expanding network of bilateral investment treaties (BITs), and also negotiating a Multilateral Agreement on Investment (MAI) in the Organisation for Economic Co-operation and Development (OECD) (contemplated to be completed by mid-1998), while a WTO working group has opened discussions on international investment issues. The relationship between these bilateral and multilateral actions, however, remains unclear.

This article seeks to address one major aspect of the bilateral/multilateral relationship, i.e., whether or how the proliferation of BITs, numbering over 1,300 at the beginning of 1997, may influence the development of a multilateral framework on investment (MFI). The question is explored by first examining how bilateral trade agreements affected the development of the General Agreement on Tariffs and Trade (GATT): did most-favoured-nation (MFN) treatment

* Director, Karl F. Landegger Program in International Business Diplomacy, Georgetown University and Assistant Professor of Economics, School of Foreign Service, Georgetown University, respectively.
Trade and investment at the crossroads

International investment is reshaping the global economy, expanding faster than trade flows or world gross domestic product (GDP). Outward FDI stock reached $3.2 trillion in 1996, linking 45,000 parent firms with 280,000 foreign affiliates (UNCTAD, 1997a). Enterprise strategies reflect the emergence of integrated international production systems that tie trade and investment decisions closely together (UNCTAD, 1993). Intra-firm trade among affiliated firms comprises a growing proportion of trade flows, accounting for as much as 38 per cent of total exports and 43 per cent of total imports in some countries (UNCTAD, 1996a). This expansion of globally integrated business operations contrasts with the traditional segmentation of government trade and investment policies, and highlights the absence of an international agreement on FDI issues.

Competition for private investment funds is intensifying as more nations recognize the potential benefits from FDI (UNCTAD, 1996a). Legislative reforms have liberalized national regulations, while governments are exploring bilateral and multilateral mechanisms to facilitate FDI flows (UNCTAD, 1994, 1996a). Bilateral investment treaties can play a significant role in efforts to create a more hospitable FDI climate by setting forth agreed principles that establish a necessary if not fully sufficient policy basis for attracting FDI. The perceived importance of these mechanisms is reflected in their astonishing proliferation. Beginning with the first two treaties negotiated in 1959, some 1,330 BITs had been concluded by 1 January 1997, with some two-thirds coming into existence during the 1990s (UNCTAD, 1996a, 1997a).

At the same time, the international trading system entered a new era with the establishment of the WTO. In addition to improving the rules and dispute-settlement procedures covering the GATT’s traditional policy domain (mainly trade policies for manufacturing), the WTO broadened its scope with new agreements on agriculture, textiles, intellectual property rights, services and trade-related investment measures (TRIMs). In extending its authority over trade in services and TRIMs, the WTO assumed a role in policies closely related to those found in FDI agreements (e.g., right of establishment and national treatment). This growing overlap between the WTO and BITs, coupled with the WTO’s success in
coordinating and formalizing international trade relations, led to the discussion of negotiating international investment principles as part of the WTO.\(^1\)

Thus far, no consensus has developed within the WTO as to its role in the area of investment. In particular, some developing countries are reluctant to broaden its authority in this field, and OECD countries are engaged in the MAI negotiations.\(^2\) If the MAI negotiations are successful, the accord would cover intra-OECD investment, but would be open to accession by non-OECD countries as well (and potentially could be brought under the WTO in some form). The negotiating process on international investment issues is therefore still evolving and, therefore, might benefit from a comparison with the experience in developing an international trade framework.

**The international trade experience**

In attempting to anticipate and interpret the direction of investment agreements, it is natural to look for historical precedent. But why in the area of international trade? The main reason is that the transition from a multitude of bilateral investment treaties to a single multilateral framework on investment (if indeed there is to be such a transition) has a parallel in the history of trade agreements, as bilateral trade agreements gave way to the GATT.

Beyond historical circumstances, there are also similarities in the kinds of issues that arise in connection with agreements on trade and investment. For example, at the core of both trade and investment agreements is the objective of containing the propensity of national governments to apply discriminatory economic policies, whether the discrimination is between domestic and foreign products or producers or between different foreign products or producers. The domestic political calculus with respect to these agreements is also essentially the same: firms vulnerable to foreign competition oppose liberalization; firms that stand to benefit from greater foreign market access support it; and the interests of consumers are generally underrepresented.

A final reason for conducting this comparison is that there is a broad similarity between the patterns of trade and investment flows. Trade and investment flows tend to go together, with most of them moving between developed countries, although the shares for developing countries are increasing (UNCTAD, 1996a, 1997a). The broad similarities suggest that a comparison between the historical experience of trade and the current situation in investment has the potential to yield insights into the likely direction of future investment agreements.

**A brief history**

The nineteenth-century liberal bilateral trading system originated somewhere between 1846, the year of the United Kingdom’s repeal of the Corn Laws, and 1860, the year of the Cobden-Chevalier Treaty between the United Kingdom and France. The United Kingdom’s unilateral repeal of the Corn Laws was followed by a wave of liberalization in several European countries and the United States

---

\(^1\) The TRIMs agreement calls for the WTO to review the agreement within five years to determine the need for more general rules on investment and competition policy and for expanding the scope of the existing definition of TRIMs.

\(^2\) Further background information on these developments is available in Blackhurst and Otten (1996), Brewer and Young (1995), Brittan (1995) and Williams (1996).
(Kindleberger, 1975). However, it was the Cobden-Chevalier Treaty, with its inclusion of the MFN clause, that ushered in the era of bilateral trade agreements. After the treaty reduced French tariffs on imports from the United Kingdom, other European countries moved quickly to enter agreements with France (and the United Kingdom) to secure equal treatment for their goods. In the period from 1862 to 1867, France signed a series of commercial treaties with Belgium, Prussia and the Zollverein, Sweden, Italy, Switzerland, Norway, the Hanse towns, Spain, the Netherlands, Austria and Portugal (Curzon, 1965). These countries also signed agreements with each other, and since all the agreements included MFN clauses, the tariff reductions contained in them were extended to all. By the end of the century, over one hundred such bilateral trade agreements existed (Blackhurst and Otten, 1996).

The system began to weaken in the 1870s, primarily because of an influx of cheap grain from the United States and Russia, which depressed European agricultural prices. European grain-importing countries began raising tariffs in the late 1870s. In addition, most of the agreements signed in the 1860s had set expiry dates, which required renewal every few years. As protectionist pressures mounted, the renegotiation of these agreements became increasingly contentious and, on several occasions, trade wars ensued (Irwin, 1994). The trend towards protectionism continued more or less until the First World War.

With the outbreak of war, protection in the form of quantitative restrictions and exchange controls was put in place, removing what remained of the earlier liberal trading regime. After the war ended, matters did not improve substantially. The political reorganization of nation-States, mainly in eastern Europe, substantially increased the number of international borders and thus impediments to trade. Throughout Europe, import-competing industries that had been built up during the war to alleviate shortages now demanded protection. Although quantitative restrictions and exchange controls came down throughout the 1920s, tariffs rose to offset their liberalizing effect. Both the United Kingdom, the traditional free-trade stalwart, and the United States, the emerging leader, raised tariffs in the early 1920s.

Several attempts were made to stabilize tariffs and reinstitute MFN treatment during the inter-war period, interestingly, through informal multilateral accords. The Covenant of the League of Nations (1919), for example, called for the removal of economic barriers and the establishment of “equitable treatment” in trade (Irwin, 1994). The World Economic Conference of 1927 called for the restoration of MFN treatment. These early attempts, however, were no match for the Great Depression.

The upward spiral of tariffs from 1929 to 1933 is well documented (Kindleberger, 1973). In 1930, the United States passed the Smoot-Hawley tariff bill, which raised tariffs to an average level of 53 per cent. Other countries retaliated by raising their own barriers, and the volume of trade plummeted as the world entered the Depression. Multilateral conferences met throughout this period but were ineffective. This experience - or, more accurately, the determination to avoid reliving it - would profoundly affect the GATT in later years.

Another development that took place during the 1930s and was destined to substantially influence the GATT was the passage of the United States Reciprocal Trade Agreements Act of 1934. In it, Congress delegated tariff negotiating authority to the President and authorized the reduction of United States tariffs, through reciprocal agreements, by up to 50 per cent. Between 1934 and the onset of the Second World War, the United States concluded 20 bilateral trade agreements under this Act.
Half of the agreements were with countries of Latin America, one with Canada and several with European countries, most notably the United Kingdom. All of them included MFN treatment.

The period immediately following the Second World War saw the rise of multilateral cooperation on economic matters generally. It is very clear that the origins of the GATT during this period were quite unique. The United States Secretary of State, Cordell Hull, who was the main architect of United States trade policy during the Roosevelt era, believed that the United States should bear primary responsibility for the restructuring of world trade along liberal lines. In the early 1940s, the United States began making plans for a “multilateral convention on commercial policy”, while, at the same time, policy makers in the United Kingdom were developing similar plans for what they called a “Commercial Union”. In 1943, the United States and the United Kingdom began collaborating on this issue and, by 1945, the content of these talks emerged as the United States “Proposal for Consideration by an International Conference on Trade and Employment”. The United Nations appointed a preparatory committee of 19 countries, which met between 1946 and 1947 to prepare the Charter of the International Trade Organization (ITO) (Gardner, 1956).

The ITO Charter was completed in a conference in Havana in 1947; but it lacked support from the legislatures of both the United Kingdom and the United States, and was never adopted. A key problem was that the two countries had "sought to incorporate in the Charter a detailed statement of their favorite economic doctrines... The result was an elaborate set of rules and counter-rules that offered imperfect standards for national policy. These rules and counter-rules satisfied nobody and alienated nearly everybody" (Gardner, 1956, p. 379). Another, lesser-known aspect of the Havana Charter was that it contained a number of exceptions to the rules for developing countries. At the insistence of Australia, Chile, India and Brazil, developing countries were allowed to impose stringent restrictions of foreign investment, enjoy tariff preferences and escape the ban on quantitative restrictions for the purposes of economic development.

The GATT succeeded where the ITO failed, mainly because of the context in which it was signed. In 1945, the United States Congress once again granted the President authority to reduce tariffs by 50 per cent, but renewed its negotiating authority for only three years. Eager to make use of this opportunity, the United States proposed the GATT as an efficient way to negotiate tariff reductions. The rules incorporated in the GATT were the provisional rules of the ITO charter, from the 1946 London and 1947 Geneva sessions, and were seen as a stop-gap measure until the ITO could ultimately be completed. When the ITO failed, the responsibility for managing the international trading system fell to the GATT, a task for which it was largely unprepared. This accounts for the original GATT's relatively narrow scope and limited authority.

**The influence of bilateral agreements on GATT**

While the GATT began a new era of multilateral cooperation on trade, it was also the product of the bilateral system that preceded it. There are four different aspects of the GATT that clearly reveal the influence of the bilateral system: (i) many provisions of the GATT were drawn directly from existing bilateral agreements; (ii) other provisions were established in response to the evident failure of the bilateral system; (iii) certain practices at odds with GATT principles but permitted under existing bilateral agreements were allowed to persist through special "grandfather clauses"; and (iv) new rules were put into the GATT to deal with existing and future bilateral agreements. Over the years, many of these
bilateral aspects of the GATT faded or were reformed. Nevertheless, they are important for understanding the historical transition from a bilateral to a multilateral trading system.

Déjà vu

In many ways, the GATT can be said to have evolved from a long process of past commercial practice. The principles of trade liberalization through reciprocity and non-discrimination, as well as most of the specific provisions in the GATT, were drawn from past commercial agreements, brought together and codified in the General Agreement. Because the United States took the lead in negotiating and shaping the GATT from the start, it naturally looked to its own trade law as a model, partly because of its familiarity with this law and partly to minimize the disruption that the GATT would ultimately cause to the law. As a result, most of the articles of the GATT are found in agreements concluded under the Reciprocal Trade Agreement Act.

The original GATT consisted of three parts. Part I contained the MFN clause, as well as a second clause which instituted legally binding tariff schedules. Part II contained rules that governed non-tariff barriers, exceptions to the agreement and dispute settlement. Part III dealt with procedural and administrative matters and set forth the criteria for preferential trade agreements and the accession of new members.

The MFN clause (Article I) was perhaps the oldest and most important convention found in the GATT. As early as 1226, Emperor Frederick II extended to Marseilles the same trade privileges previously granted to Pisa and Genoa. The term “most favoured nation” appears to have originated with the 1692 treaty between Denmark and the Hanse cities (Caplin and Krishna, 1988). In its unconditional form (which is the form in which it appeared in the GATT) MFN treatment was used throughout Europe from the early seventeenth century onwards, and was especially championed by the United Kingdom in the nineteenth century. By the time of the ITO/GATT negotiations, most countries supported the insertion of MFN treatment into the agreement, although certain exceptions were included, ironically at the insistence of the United Kingdom (Gardner, 1956).

The original purpose of MFN treatment was to deal with some of the multilateral dimensions of bilateral trade relationships. The tariff reduction by one country on its imports from a second country will almost always have an effect on third countries. While the economics of this third-country effect can be complex, historically third-country governments perceived the effect to be negative, regarding it as an erosion of the preference (relative to the second country) that their exports may have enjoyed in entering the first-country market. Thus, during the bilateral era, countries sought to protect themselves against this negative effect by insisting upon MFN treatment from any country with which they signed an agreement. As preference erosion was seen as a major source of potential trade disputes, GATT negotiators were quick to establish MFN treatment as a fundamental rule.

---

3 Part IV was added in 1965. It dealt with the specific needs of the developing countries. It officially recognized that GATT signatories should not expect reciprocity from developing countries. Also, it allowed countries to waive MFN treatment in order to grant preferential access to goods from developing countries.

4 Article XXIV, which dealt with preferential trade agreements, was not actually included in the original GATT. It had been, however, in the Havana Charter and was added to the GATT in 1948.
Whereas MFN treatment prevents a nation from discriminating against foreigners from different countries (so-called external non-discrimination), national treatment (Article III) guarantees that once foreign goods enter a country, they are accorded the same treatment as domestic goods (internal non-discrimination) by the government of that country. Thus, the national treatment clause applies mainly to internal taxes and regulations. Its primary purpose is to prevent countries from circumventing their agreed tariff bindings and MFN obligations through the use of internal measures.

A national treatment clause was inserted into the agreements of the United Kingdom from the early 1900s, as well as in United States agreements negotiated under the Reciprocal Trade Agreements Act. It was not a controversial rule to bring into the GATT, probably because at that time tariffs were still quite high. As these tariffs already afforded countries sufficient protection for their domestic industries, there was little need for them to discriminate further using internal taxes. Thus, national treatment served mainly to confine protection to tariffs, in keeping with the GATT's overall goal of transparency. However, there was some controversy in the GATT/ITO negotiations over whether national treatment should apply only to goods covered by the binding tariff schedules or whether national treatment should apply to all goods (Jackson, 1969). It was ultimately decided that it should apply to all goods, so as to conform with existing bilateral agreements. This is one of many cases where existing bilateral agreements set the standard for rules, which the GATT then copied in order to achieve uniformity across the contracting parties.

Many other rules found in the GATT had precursors in bilateral agreements. For example, anti-dumping and countervailing duties (Article VI) had been employed at least as far back as the 1880s. The United Kingdom imposed countervailing duties against continental "sugar-bounties" (subsidies) in 1880. The ban on quantitative restrictions (Article XI) and the escape clause (Article XIX) appeared in the United States-Mexico agreement of 1941, negotiated under the Reciprocal Trade Agreements Act (Jackson, 1969). The "nullification or impairment" clause (Article XXIII), which was the nucleus of the GATT dispute-settlement procedure, also appeared to have originated with the United States-Mexico agreement (Hudec, 1990).

**Shortcomings of the bilateral system**

While much of its content was familiar, the GATT was also designed to overcome some of the evident failures of the earlier bilateral system and to create a more coordinated environment in which to handle economic and political fluctuations. Areas of the GATT that were so designed included the procedures for negotiations, balance of payments and dispute settlement.

The procedures governing the negotiation of the tariff reductions of 1947 were taken from the 1946 London Report of the first ITO preparatory committee, but they were not formally part of the GATT. They were essentially those that the United States had used in negotiating its Reciprocal Trade Agreements Act agreements. However, there was one important difference. Whereas negotiations of those agreements were strictly bilateral, the GATT negotiations added the innovation that all countries would negotiate their agreements at the same time and in the same place. Thus, the negotiations took on a multilateral aspect.

One of the principal reasons for moving towards multilateral bargaining was the operation of MFN treatment. As mentioned earlier, the latter was commonly credited with propelling major tariff
reductions throughout Europe in the nineteenth century. The outcome was a network of bilateral agreements all linked together through MFN treatment. Once the network had been established, however, further tariff reductions were not as forthcoming (Irwin, 1994). This result was arguably due to a “free-rider” problem: with universal and unconditional MFN treatment, any bilaterally negotiated tariff reduction must be extended to every other country. The external recipients of this tariff reduction are free-riders in that they do not “pay” for the tariff reduction with tariff reductions of their own. One way to get around this problem is to negotiate multilaterally. This shortcoming of MFN treatment is one of the reasons why the United States decided to pursue multilateral trade negotiations in December 1945 (Jackson, 1969).

The conversion to multilateral negotiations was by no means complete, however. It was not until the Kennedy Round that across-the-board, formal tariff negotiations were instituted (although such a scheme had been suggested by the United Kingdom during the Anglo-American discussions of the early 1940s). There also remained elements of bilateralism in Article XVIII, which determined rights to compensation. Under this Article, when a country withdrew a concession (e.g., raised a previously cut tariff), the only countries entitled to compensation were the countries with which the concession had been originally negotiated and the principal suppliers (which were usually one and the same). Thus, there was no general, multilateral compensation for withdrawn concessions.

In most cases, those GATT articles that represented improvements over what had previously been contained in bilateral agreements were created in response to very special historical circumstances. For example, the exception to the ban on quantitative restrictions in cases of balance-of-payments crises (Article XII) was introduced by the United Kingdom during the Anglo-American discussions of the immediate aftermath of the war. Article XII was introduced by the United Kingdom during the Anglo-American discussions of the immediate aftermath of the war. These were countries concerned about their fragile payments positions in the immediate aftermath of the war.

Another example was the GATT dispute-settlement procedure. The establishment of that procedure was a direct response to the unravelling of the bilateral system that had begun after 1870 and was so much in evidence during the inter-war years. Policy makers who had lived through this experience were determined not to repeat the same mistakes. In addition, the “softness” of the multilateral responses to the protectionism of the inter-war years was clear evidence that controlling such impulses must have the force of law.

The GATT’s dispute-settlement procedure was really a set of rules governing how countries should respond to apparent breaches of the agreement by other countries. The nullification or impairment clause allowed parties to withdraw concessions (raise tariffs) if the value of those concessions was somehow nullified or impaired by the actions of another country. This provision essentially allowed countries to back out of agreements they no longer found beneficial. What the GATT added to this was a requirement that countries consult with one another to resolve their disputes (Article XXII). It also set up a number of procedures to administer the nullification or impairment clause and provided a role for the contracting parties to investigate and recommend actions (Article XXIII.2). This role was strengthened and the procedures refined in subsequent GATT negotiating rounds, culminating in the establishment of the WTO.
"Grandfather clauses"

The GATT did not rescind previous bilateral agreements. However, where the bilateral agreements deviated from GATT obligations, either the countries had to renounce the bilateral agreements, or an exception had to be inserted (“grandfathered”) into the GATT. The most common of these exceptions were the “historical” preferences -- exceptions to MFN treatment based on pre-existing preferential trade agreements. The United Kingdom maintained its preferences on trade with the Dominions. France maintained preferences within the French Union. The United States maintained preferences with Cuba and the Philippines.

The governance of ongoing bilateralism

Bilateral agreements were permitted by the GATT and, in some cases, were negotiated after 1947. An early example was the Belgian-German Tariff Concession Agreement of 1954. The rule on such agreements was that they had to meet the general GATT obligations, such as MFN treatment, but could be omitted from the official schedule of bound tariffs included in the GATT. As such, countries would not have recourse to GATT machinery for compensation or dispute settlement in the event that a concession was withdrawn or a dispute arose. Thus, bilateral agreements had to meet all obligations but were accorded none of the protections of the GATT.

There was a major exception to this rule, however. If a pair, or group, of countries were willing to eliminate substantially all of their trade barriers, thereby satisfying the definition of a free trade area or customs union, MFN treatment could be waived on intra-area/union trade. This was the well-known Article XXIV, which made possible the European Union, NAFTA, MERCOSUR and all other such preferential arrangements. Throughout its history, the GATT never blocked the formation of a preferential arrangement under Article XXIV, and "substantially all" remained an ill-defined condition.

The contemporary international investment setting

International investment has traditionally been treated as the “neglected twin” of international trade in terms of time and attention from global policy-makers (Julius, 1991). Only recently has this situation begun to change as the dynamic links between trade and investment flows became more apparent. Indeed, whereas the widely accepted product life-cycle theory showed that manufacturing investment historically followed trade patterns (Wells, 1972), FDI may play the major role in shaping contemporary trade flows, particularly through its impact on intra-firm trading: sales by foreign affiliates of TNCs exceed the value of world trade in goods and services, with intra-firm trade accounting for a third of total world trade, while TNC exports to non-affiliates account for another one-third (UNCTAD, 1995).

This reversal in roles derives largely from a fundamental difference between trade and investment: both are flow concepts, but only FDI is cumulative. Hence, the growth in international FDI flows has produced a continual increase in the global stock of FDI. Corporate trading patterns are influenced by the geographical dispersion of already-established production facilities, thus making FDI policy increasingly important for trade-policy makers and helping to explain the discussion of trade-related investment measures in the WTO. By extension, the stock dimension to FDI also means that
distortions or interruptions to FDI flows can have more costly, far-reaching effects than interruptions to current trade flows, increasing the impetus to address FDI issues.

The contemporary debate on international investment stems from more than FDI’s relationship to trade flows, however. A second major stimulus to FDI negotiations is the pursuit of greater stability and predictability in regulations governing foreign investors. The 1970s proved especially contentious as political and ideological shifts in many host countries led to spiralling expropriations, elevating tensions particularly along the North-South divide. Political and economic reforms in the late 1980s marked a dramatic turn towards market forces, but many developing and transitional economies lacked clearly elaborated or tested legal frameworks governing FDI. The current discussions on developing international investment rules reflect an attempt both to supplement and to reinforce evolving national policies on FDI. The foundations for this effort can be found in the earlier evolution of bilateral investment treaties.

**BIT negotiations**

The earliest provisions relating to FDI are found in bilateral commercial treaties in the late eighteenth century that covered owning property or doing business in foreign nations. The United States added FDI-related provisions to its Treaties of Friendship, Commerce and Navigation, particularly with European nations, seeking establishment and investment-protection rights for United States nationals. This thrust was supplemented after the World War II by agreements providing for subrogation rights and dispute-settlement procedures relating to official FDI insurance programmes such as that of the United States Overseas Private Investment Corporation (UNCTC and ICC, 1992).

The first actual BIT was signed on 25 November 1959 by the Federal Republic of Germany and Pakistan, followed the next month by a BIT between the Federal Republic of Germany and the Dominican Republic. Switzerland, France and the Netherlands developed their own BIT-negotiation programmes soon afterwards. Both the bilateral pattern and the specific content of early BITs reflected the initiative of capital-exporting countries. As opposed to the trade-oriented pattern of Friendship, Commerce and Navigation treaties, BITs typically matched a developed and a developing country where (one-way) FDI flows moved from the former to the latter. Treaty provisions clearly emphasized the protection of existing FDI (the responsibility of the host nation), while using only hortatory language to address home country responsibilities to promote such investment. Much specific content in early BITs drew upon provisions of a draft convention on FDI protection (the so-called Abs-Shawcross Draft Convention) that was recommended in revised form by the OECD Council of Ministers to member States as a model for BIT negotiations (UNCTC and ICC, 1992).

Three sequential developments mark the evolution of negotiations on BITs since the early 1980s:

- The United States began negotiating BITs in 1980, signing its first accord in 1982. The United States initiative extended BIT-content objectives by seeking improved entry or establishment provisions as well as limitations on the use of trade performance requirements.

- By the mid-1980s, more developing and formerly communist nations were adopting policies to attract rather than restrict FDI. This shift increased the number of potential signatories and
expanded their receptiveness to FDI-enhancing provisions. The countries of Central and Eastern Europe have been particularly active, with over 500 BITs during the past decade (UNCTAD, 1997a).

- The latest change is the nearly fourfold increase in BITs negotiated between developing countries during the 1990s. Historically, BITs were concluded between a developed and a developing country, a partnership pattern reflected in 83 per cent of all BITs through the 1980s. The proliferation of BITs among developing countries reduced this proportion to 62 per cent by 1996 (UNCTAD, 1997a). This development also reflects the movement of some newly industrializing nations into the ranks of capital exporters (UNCTAD, 1995), enlarging -- but also changing -- the composition of home countries with an interest and stake in the BIT-negotiation process. The growth of TNCs from some developing countries may also progressively alter the practical significance of older BITs which were drafted in terms of mutually applicable guarantees, even though initial FDI flows were essentially unidirectional. Now, growing two-way flows may generate new applications for BIT provisions involving FDI from developing nations investing in traditional developed home nations.

**BIT content**

Most BITs contain four major substantive areas whose key principles may be compared with the content of bilateral trade treaties: entry; treatment; protection; and dispute settlement. Entry (or right-of-establishment) provisions are broadly stated but narrowly applied, subordinate to often-restrictive host country laws that effectively limit FDI access to the domestic economy. This area gained importance when United States BITs introduced expanded access provisions that apply both MFN and national treatment principles to right of establishment. In this instance, the national treatment principle is generally more important than MFN treatment because the foreign investors must be granted establishment rights in whatever industries national investors (sometimes defined to include state-owned enterprises) operate. Of course, this guarantee is limited by permitting the governments to reserve this establishment right for sectors specified in a BIT annex.

Treatment of FDI, once established, also draws on the principles of MFN and national treatment, as well as formulations such as fair and equitable treatment. Although most BITs contain MFN provisions, fewer include national treatment guarantees because many host countries traditionally seek to protect their right to grant advantageous treatment to local enterprises in order to promote their development. However, as nations adopted strategies to attract FDI, newer BITs began incorporating national treatment provisions. The MFN provisions can then have the effect of extending the national treatment guarantees provided in one BIT to foreign investors from nations that are signatories parties to other BITs. The specific wording regarding a BIT's application may limit this extension effect in some instances, and exceptions can restrict its coverage. For example, BIT provisions can preserve special FDI privileges for customs-union members similar to MFN limitations in trade agreements. In general, however, MFN provisions tend to narrow the differences between BITs by raising the level of treatment guarantees in earlier BITs to the level of newer ones negotiated in the more FDI-friendly contemporary environment.

The use of broad, less well established standards (such as fair and equitable treatment) provides more ambiguous guarantees for FDI. These formulations aim at establishing some minimum floor for
interpreting and applying BIT provisions. A different approach arises when BITs provide advantageous
treatment for FDI, such as provisions specifying the application of the more favourable of the MFN and
national treatment standards where their results may differ (such as when an FDI-promotion strategy
grants foreign investors benefits not available to national investors). References to international law
standards are another way of specifying a floor for treatment guarantees that may be favourable to the
foreign investor.

Protection provisions generally address expropriation and compensation issues, limiting
expropriations to instances that meet criteria such as non-discriminatory actions taken through due
process and for a public purpose, with compensation. (The investor’s generally preferred formulation is
“prompt, adequate and effective” compensation.) Many BITs cover indirect and “creeping”
expropriations where host government actions may severely impair the value of the investment without
an actual seizure. This type of concern leads to provisions such as those relating to the transfer of funds
where guarantees provide for the right to transfer payments into freely convertible currency at a
specified exchange rate. Conditional limitations and exceptions may exist on such transfer guarantees,
such as permitting delays when a host nation faces a serious foreign exchange shortage.

Dispute-settlement procedures in BITs provide for both state-to-state and investor-to-state
disagreements. Consultation and binding third-party arbitration provisions outline the process to be
followed in the former cases. Home countries can also, of course, seek to support and represent their
investors in disputes. However, BITs also give foreign investors more direct rights to seek redress
beyond local law procedures or appeals to their home governments. Investor-to-state dispute-
settlement mechanisms provide for referrals by either party to specified arbitral bodies, most commonly
the World Bank’s affiliate International Centre for Settlement of Investment Disputes (ICSID) or
sometimes the International Chamber of Commerce or ad hoc bodies that often use arbitration rules of

The enforcement of decisions from BIT dispute-settlement procedures generally rely on
provisions in the ICSID Convention or the United Nations Convention on the Recognition and
Enforcement of Foreign Arbitral Awards (the so-called New York Convention) to provide for judicial
enforcement in local courts of any signatories to these Conventions. This procedure can result in the
seizure of assets located in third-party member nations in order to execute an arbitral award. In
practice, from the time the first dispute-settlement provision was incorporated in a BIT in 1968 through
mid-1997, only one arbitral award had been made among eight cases brought to ICSID that involved
BITs, although some cases were still pending. No state-to-state dispute procedures have been formally
invoked under BITs (UNCTAD, 1997b).

Comparing negotiations on international trade and investment frameworks

An historical review of the development of bilateral treaties on trade and on investment issues
suggests three principal areas for comparison as governments look towards the negotiation of a possible
MFI:

• Important differences exist in the surrounding international environment that will condition such
talks, including the distribution of political and economic power, changes in global commerce,
and the role of existing regional and international organizations.
• A broader and more influential array of non-governmental actors, including enterprises with transnational identities, will exert greater influence on negotiations now than during the mid-century period when the post-war multilateral trading structure was adopted.

• A comparison of international trade and investment instruments reveals both similarities and differences in bilateral treaty principles and approaches. This comparison suggests the areas in which trade experience may help inform current FDI negotiations.

The international environment

No world crisis or predominant power

The web of bilateral trade treaties that helped organize and expand world commerce in the early twentieth century suffered interruptions and major crises brought on by depression and war. The post-war international trade structure aimed to lessen conflict by overcoming some of the weaknesses in bilateral trade treaties, including their limited coverage and lack of an enforcement mechanism. The GATT emerged as a key element in the post-Second World War international system, shaped largely by United States interests and ideology. With European industry in ruins and a communist security threat looming, the United States became the clearly predominant political, military and economic power, able and willing to exercise strong leadership in shaping the post-war world.

Although the United States emerged from the Cold War as the only superpower, neither its political nor its economic position reaches the level of dominance achieved in the immediate postwar period. With power more broadly dispersed and without a global crisis or security threat to forge national alliances, the negotiation of an MFI will require a more demanding and cumbersome balancing of diverse country interests compared with the United States-designed trade framework established by the GATT.

Complex integration of trade and investment

The very success of the GATT in reducing traditional tariff barriers arguably set the stage for its eclipse by the WTO which encompasses a broader array of new issues, including trade in services, intellectual property rights and trade-related investment measures. This enlarged agenda reflects the transformation of modern commerce from principally a physical exchange of natural resources and manufactured products to complementary transactions that span a spectrum of physical, financial, technological and information-based goods and services. Trade and investment are now integrally linked through the global operations of TNCs, calling into question the traditional separation of trade and investment policies reflected in most governmental institutions and agreements (Otten, 1997).

This changed reality in global commerce will require governmental decisions regarding whether to adapt traditionally divided trade and investment policy approaches and institutions in search of a more integrated framework. Incipient steps in the GATT/WTO to address a few trade-related investment measures suggest an integrative approach, but the limited scope and success of these actions leave the full issue unresolved. Certainly, there is little indication yet that trade- policy makers are prepared to adopt a corresponding investment perspective, for example to examine the existence and effects of
investment-related trade measures (UNCTC, 1992). An alternative approach would be to develop an MFI along a parallel but separate track from already-established trade regimes. Hence, a central issue in the creation of an MFI is whether the task will be conceptualized and negotiated as a separate instrument, perhaps with limited links to the WTO, or incorporated fully within that trade-based institution.

**Existing multilateral and regional economic institutions**

The existence of a current, largely successful international trade institution points to one of the central differences in the negotiating environment for discussions on an MFI, compared with the historical development of GATT. Quite simply, the earlier development of trade regimes means that a tabula rasa no longer exists at the international level. Not only has the GATT evolved into the WTO, but also an array of other relevant multilateral institutions exist. The proliferation of regional economic and trading communities alters the constellation of national interests and actors. Some recent additions, such as NAFTA and MERCOSUR, specifically incorporate investment rules. The OECD, long active in negotiations on investment issues among the industrialized countries, has taken a lead with its negotiations on the MAI. With an international trade organization in place and significant regional trade and investment frameworks evolving, contemporary FDI negotiations must necessarily interact with this factual environment and its component array of interests and actors. This difference means that the task cannot be as singularly focused (as the creation of a GATT) to supersede the pre-war network of bilateral trade treaties.

**Non-governmental actors and interests**

**Mixed-nationality TNCs as direct claimants of FDI rights**

The global business community constitutes the most dramatically evolved and influential set of international private actors. Global enterprises have expanded enormously in both numbers and size while their qualitative role within the international economic system has changed even more, a development particularly relevant to international investment issues. As FDI growth out-paced increases in international trade, and indeed began to shape the flow of traded goods and services, questions began to arise regarding the nationality of these corporate actors. International trade flows could be traced back to originating countries and hence associated with the nationality of the production site. The use of rules of origin in international regimes depends on the premise that a product’s national origin can be determined. This concept has, in fact, become more difficult to apply as products incorporate components from many different countries -- in large part due to increased FDI that organizes a broader geographical dispersion of production sites. However, when corporate entities become legally established in many different countries, with significant output, employment, sales and service in multiple locations, it becomes difficult to identify the firm’s nationality with only the home country of the traditional parent enterprise (UNCTAD, 1993; Reich, 1991).

The advent of BITs calls into question the relationship between countries and companies in an even more fundamental way. International trade agreements are made between national governments. Violations of agreed standards may occur because of the actions of individual firms, but it is the national government associated with the offending or the offended firms or other parties that acts as complainant.
or defendant. Individual enterprises have no direct standing in international trade proceedings and they are not addressed directly by trade instruments.

By contrast, BITs grant investors legal standing. Aggrieved investors can act directly as complainants in proceedings where BIT violations are alleged, and they can do so without their own national government’s active support (or, indeed, even in the face of its opposition). This critical difference defines a much more important role for investor enterprises compared with the indirect involvement of firms in international trade disputes. As a result, enterprises are also in a position to play a more central, influential role in the development and enforcement of standards under an international investment regime than under their historical relationship to bilateral trade treaties and the GATT.

**Disparity in FDI rights and responsibilities**

On a related point, BITs grant foreign investors a number of treaty rights, but few responsibilities. Similarly, the governments of capital-exporting countries bear few obligations under most BITs, other than hortatory language regarding the encouragement of FDI flows. Reciprocal treatment obligations have less practical effect in BITs compared with bilateral trade treaties or the GATT/WTO, simply because the parties covered by trade instruments are all likely to have relatively significant (even if disproportionate) abilities to participate in the trading relationship through exports as well as imports. Bilateral FDI relationships are more often one-sided, with largely unidirectional capital flows identifying the recipient party as the bearer of most defined obligations.

This disparity in investment rights and responsibilities gives rise to discussions regarding whether home countries or TNCs should accept obligations relative to their conduct. For example, if enterprises and their home governments are given a right to hold host governments to a set of legal obligations regarding the treatment of the investor, should bilateral or international investment instruments also address reciprocal obligations regarding the conduct or activities of the enterprises covered? International trade instruments typically set certain standards regarding the conduct of both the exporting and importing parties (bans on export subsidies or dumping practices; prohibitions on increased import taxes or discriminatory treatment). This relative lack of balance between parties’ rights and responsibilities under BITs versus trade instruments constitutes an important distinction that may affect the negotiating dynamic and the substantive content of an eventual MFI.

**Increased activities among non-business groups**

The dramatic growth in world commerce has expanded the number and range of actors who have a stake, and seek to play a role, in developing or modifying trade and investment rules. Diverse domestic groups are becoming increasingly aware of how global economic interdependence directly and significantly affects their economic well-being. Consumer groups, trade unions, environmental advocates, the media and other organizations pay greater attention to international policies and activities. Many of these are forging links with similar groups in other countries to exchange information and

---

5 The 1955 GATT review conference’s Resolution on International Investment and Economic Development set the pattern, adopted in many later BITs, for addressing home country responsibilities as regards promoting capital flows to foreign countries in need of capital. The Resolution uses hortatory language to call for “best endeavours” to create conditions to stimulate such capital flows (Blackhurst and Otten, 1996).
coordinate actions in areas of mutual interest. Although the objectives of particular national groups may diverge or even conflict on specific issues, their increased activity and potential for cross-border cooperation alter the political dynamic for international economic negotiations.

These changes can be seen in WTO discussions over whether to include labour rights and/or environmental protection issues on the organization’s negotiating agenda. Labour and environmental advocates were not as successful in their advocacy efforts at the WTO’s first Ministerial meeting in Singapore in December 1996 as they were earlier in attaching “side agreements” to the creation of NAFTA. However, their prominent involvement in political processes relevant to WTO decision-making reflects an increasingly well-organized and sophisticated approach to influencing governmental positions on international economic policy issues. This influence is also manifest in the OECD’s MAI negotiations where governments are debating various approaches for addressing sensitive environmental and labour issues\(^6\) (OECD, 1997).

**Comparative principles and approaches**

*Top-down FDI principles versus bottom-up trade lists*

Both similarities and differences emerge when bilateral trade treaties are compared with contemporary BITs with regard to using their basic principles and approaches to develop broader international instruments. To begin with, the approaches to establishing definitions of coverage are distinctive. Along with some generally-applicable rules, traditional trade agreements contained tariff rates or other specific benefits that applied to identified categories of products and services, often divided and subdivided into Standard International Trade Classification groups. By contrast, definitions of investments covered by BITs are more broadly drawn, frequently referring to the investors and/or investment, using general concepts such as assets, direct investment and portfolio investment. The bottom-up approach used in trade treaties that affirmatively designated the industries covered by specific benefits (positive list) contrasts with the more inclusive top-down approach employed by BITs that specify industries not covered by generalized principles (negative list) (Blackhurst and Otten, 1996).

For example, the national treatment principle stands at the core of investment instruments, specifying non-discriminatory treatment of all investments not specifically excepted in an accord. Permitting the exclusion of some industries from coverage might be likened to a type of advance or pre-emptive “escape clause” for BITs. The acceptance of broad principles is made possible by setting aside industries for which domestic protectionist sentiment is politically strong enough to require its exemption. However, beginning from an assumption of inclusive coverage and requiring a negative designation to exempt an industry is generally considered a stronger and more transparent international instrument compared with trade-accord provisions that grant benefits only to those industries specifically designated for inclusion. No provision is generally made in BITs for the type of traditional “escape clause” found in trade agreements, to be invoked after implementation of the accord has begun. This

\(^6\) Domestic political differences over how to address international labour and environment issues are largely responsible for the United States congressional delay in approving new “fast-track” trade negotiating authority for the President after passage of the Uruguay Round trade agreement. An MAI negotiated in the OECD, or any other significant multilateral or international investment accord, will likely require congressional approval and will therefore be subject to these same political influences.
difference seems *apropos* where a principal objective of BIT FDI protection provisions is to provide security against changes in governmental policies.

Other provisions in trade accords and BITs reflect more similarities than differences. Trade-agreement exceptions for balance-of-payments difficulties find a parallel in investment accords that recognize temporary limitations on the principle of free transfer of assets when serious balance-of-payments problems arise. The attempt to restrain export subsidies in trade agreements has parallels in discussions of how investment instruments might limit the distorting effects of investment incentives and trade-performance requirements. Similarly, trade concerns over the anti-competitive effects of predatory dumping are reflected in the investment-related debate over competition policy and how to control restrictive business practices. Both trade and investment accords also tend to provide certain exemptions that recognize the special status of nations affiliated in regional economic entities, although there is a serious debate about whether an MFI would preserve such exceptions.

**Consideration for developing countries**

International trade agreements have traditionally granted developing countries some special and deferred treatment, primarily through exemptions, exceptions and the phase-in of restrictive obligations. Similar mechanisms are discussed (UNCTAD, 1996a) with regard to an MFI, but the practical impact of such provisions would be more limited and could prove counterproductive. The essential difference is that, in trade applications, preferential provisions can affect barriers in both developed and developing countries; with investment accords, developmental preferences are likely to affect only the capital import barriers maintained in developing countries.

With trade, developing countries may benefit from a lowering of import barriers in developed country markets while being permitted to practice some degree of otherwise prohibited import protection or export promotion in their own markets. Investment agreements are unlikely to provide for a similar preferential lowering of barriers to capital exports from developing countries, both because developed countries maintain few barriers against capital imports and because most developing countries export little capital anyway. Preferential investment provisions could apply to barriers in developing country markets, permitting retention of otherwise prohibited restrictions or discrimination against inflows of foreign capital. However, because the capital flows are voluntary, such discriminatory actions would decrease FDI flows to these developing countries. Hence, if a MFI permitted the same type of “preferential” developing country exemptions, exclusions and phase-ins as employed in international trade agreements, the result would essentially be to permit developing countries to deny themselves presumably beneficial inflows of foreign capital.

To grant preferential investment *benefits* to developing countries, comparable to a lowering of import-trade barriers, developed countries would instead have to stimulate their capital exports by giving preferences for FDI going to developing countries. Precedents for such actions can be found in unilateral policies (generally linked to tax and trade incentives) such as the United States Caribbean Basin Initiative and European Union participation in the Lomé Convention. However, this type of preferential treatment is not generally discussed with regard to an MFI. An alternative type of preference might be to permit developing countries to use investment incentives that were otherwise prohibited under an MFI, although the economic efficiency and effectiveness of incentive measures are highly debatable (UNCTAD, 1996c).
A larger role for private parties in dispute settlement

Finally, a fundamental difference between trade and investment instruments is found in the dispute-settlement provisions. Trade accords envision state-to-state disputes, even where the disputed actions may have been taken by private parties. Where discussions fail, the offended government faced a choice of unilateral abrogation of the treaty under traditional bilateral instruments or a unilateral (but multilaterally sanctioned) retaliation under GATT or WTO procedures. Bilateral investment treaties also envision state-to-state disputes, but they additionally provide for investor-to-state disputes where the investor can take a case directly to a specified arbitration forum. (Host governments are less able to take investors to the forum, simply because BITs spell out the legal obligations of governments towards foreign investment but cover few, if any, parallel obligations of the investors.) Arbitral rulings are legally enforceable through the courts of either country or, in cases handled by an institution such as ICSID, through the legal systems in many third countries as well. Hence, even if courts in the host country refuse to enforce a ruling against that country's government, assets of that government located outside its own territory could be subject to seizure to satisfy a judgement.

Conclusions

Perhaps history never repeats itself exactly, but past experience can inform current choices. What lessons from international trade experience can be applied to contemporary international investment negotiations? Did a network of bilateral trade treaties make the negotiation of an international trade agreement logical, easier or even inevitable? Does the proliferation of BITs now suggest a similar path to the creation of an international investment framework in terms of agreed principles, functions, institutions and political processes?

This analysis found interesting and potentially useful comparisons between the evolution of international trade and investment accords. However, the movement from bilateral trade treaties to the development of the GATT was not a simple, straight-line process, and there is little reason to believe that investment negotiations will prove any different. In addition, an FDI regime is more intrusive than an international trade regime, reaching further into traditional domestic economic processes, and making negotiation of an MFI more technically and politically difficult.

The negotiation of BITs both symbolizes and reinforces the shift from a period of investment conflicts to an era in which FDI is welcomed by most countries. In comparison with the role of bilateral trade treaties, however, BITs provide neither the richness of experience nor the failures and subsequent crises that helped spark the search for an international trade agreement. Dissatisfaction with current BITs is more potential than real. Observers worry that the lack of treaty uniformity and the “patchwork” coverage of participating countries may confuse or inhibit prospective investment (OECD, 1996; Blackhurst and Otten, 1996). This sense of incompleteness largely motivates the search for an MFI, even as the proliferation of individual BITs continues.

7 NAFTA, incorporating both trade and investment provisions, establishes dispute-settlement procedures for both, using a NAFTA tribunal for investor-to-state disputes.
The environmental context and political dynamics of the trade and investment cases are quite different. The United States is in no position to dictate an international investment framework at the end of the 1990s, unlike when it developed the outlines of a multilateral trading system at the mid-century. Nevertheless, its economic power gives it an effective veto over the practical application of any international investment framework, and its policy preferences spurred the OECD negotiations on the MAI ahead of in-depth consideration of investment issues in the WTO.

The MAI negotiations could develop as a type of halfway house on the road to a truly international investment accord (OECD, 1996), either through the cumulative accession over time of non-OECD countries to it, or with the MAI serving as a fundamental platform from which to negotiate an MFI. The substantive impact of BIT provisions will prove strong in either exercise, providing basic components for an investment agreement, particularly where investment principles and approaches differ from international trade experience. Initial draft MAI provisions appear to draw heavily from the United States model BIT’s content and approach. In a broader perspective, the successful conclusion of the MAI could serve the same purpose as the Reciprocal Trade Agreements Act for the development of the GATT. The new accord would provide an updated and consolidated statement on key investment issues and may contain basic bottom-line positions acceptable to the United States and most other major capital-exporting countries in terms of their domestic political realities.

Among the most intriguing differences between bilateral trade and investment treaties is the direct involvement of private investors in BIT implementation through the dispute-settlement mechanism. Investor-to-state disputes present a fundamentally distinctive departure whose potential implications for the international trading system have not been fully explored. Most recent attention has focused on improvements in the WTO’s dispute-settlement mechanism over GATT procedures, which were themselves viewed as the most effective international enforcement mechanism. In fact, much of the initial motivation for considering negotiation of an MFI within the GATT (or now the WTO) stems from a desire to create ties to the institution’s enforcement powers. It is therefore perhaps ironic that BIT dispute-settlement mechanisms are, in many respects, preferable to those of the WTO, particularly in procedures dealing with investor-to-state arbitration.

The BITs’ approach to dispute settlement appears conceptually preferable in at least three respects. First is the simple fact that aggrieved investors gain the right to initiate dispute-settlement proceedings, generally with the choice of domestic or international forums. This new private right of action gives investors real new powers that have no comparable trade variant at the international level. In addition, the investor-to-state channel offers the potential to muffle the diplomatic friction between home and host country governments often associated with traditional disputes over FDI. Initial discussions about the MAI indicate that investor-to-state dispute settlement will be included in an eventual draft agreement. This approach will also likely appear in any MFI, or else BITs would remain a distinctly preferable alternative from the perspective of private investors.

When the BITs’ arbitral mechanism is considered alongside the WTO’s dispute-settlement approach, two other interesting comparisons emerge. The BITs’ process is more juridical/legal in nature as opposed to the WTO approach, which is still susceptible to more executive/political influences. The implementation of BIT-type decisions is also more international in character, with potential judicial enforcement in member countries rather than (internationally sanctioned) unilateral retaliation by one nation’s executive agencies. From an economic welfare point of view, the costs of alleged offences in a
BIT-type proceeding are likely to be more apparent (transparent) than in a typical GATT/WTO dispute. Assessed penalties would also be less distortionary of market forces. BIT-type proceedings would generally result in the assessment and collection of a monetary judgement, while GATT/WTO penalties typically lead to the creation of additional market distortions meant to penalize the initial distortionary offence; that is, the offended country withdraws trade concessions (i.e., raises trade barriers) to penalize the exports of the offending country. Perhaps experience with a BIT-like approach to dispute settlement on investment issues could lead to consideration of such an approach (more juridical, international, transparent and less market-distortionary) to the settlement of disputes on trade issues as well.

The relatively short history of BITs argues against exaggerating their effect on global commerce or even, in particular, their impact on negotiations towards a possible MFI. Nevertheless, it is equally necessary to recognize how different (and likely more difficult) such negotiations might be today if the prior experience with BITs did not exist. Both in this broad respect, as well as in regard to the content of more specific provisions, BITs will influence the development of a multilateral framework for investment, no matter how, or even whether, an MFI is eventually adopted. As in the history of bilateral trade treaties, BITs will help shape the future of the international commercial system as they play an important role in its current operation.

References


Liberalization, internationalization advantages and foreign direct investment: 
the Indian experience in the 1980s

Aradhna Aggarwal*

This article examines the impact of economic reforms introduced in the mid-1980s on the inter-industry distribution of value-added activities by transnational corporations in a sample of 48 Indian industries. It reveals a complex relationship between policy changes, market conditions and internalization advantages. Economic reforms in a host country not only confer greater freedom on transnational corporations in their choice to internalize or not, but also affect market conditions which, in turn, influence this choice. As the impact of market conditions varies across industries, economic reforms may lead to a changing relationship between inter-industry variation in foreign ownership and its determinants. The empirical findings of the study suggest that, in the aftermath of policy reforms in the mid-1980s, the importance of the competitive advantages of transnational corporations and of the locational advantages of the host country increased significantly while that of market structure and concentration declined in explaining the inter-industry variation of foreign ownership in the Indian manufacturing sector.

Introduction

The literature suggests that the industrial distribution of foreign direct investment (FDI) is linked with the economic environment of the host country (Dunning, 1981, 1988, 1993). This economic environment, in turn, is influenced by the development strategies and macro-organizational policies of the host-country government (Dunning, 1993, chap. 10), Dunning (1993, p. 548) observed that transnational corporations (TNCs) engaged in the type of FDI most suited to the market conditions they faced in a host country, and the government, by its ability to influence the market conditions through its development strategies and macro-organizational policies, could affect their willingness and capacity to internalize. Some of the studies on developing countries (Lall and Mohammad, 1983, for India; and more recently Aswicahyono and Hill, 1996, for Indonesia) have explicitly taken note of the impact of industrial and trade policy regulations on the inter-industry patterns of foreign ownership -- a proxy for the industrial distribution of FDI. The empirical testing of such effects, however, is scarce. This article is an attempt to help fill that gap. It examines the changing relationship between the inter-industry variation of foreign ownership and its determinants in the aftermath of policy reforms introduced in India in the mid-1980s. It analyses the impact of government policies on the industrial distribution of value-added activities by TNCs.

* Research Fellow, V. K. R. V. Rao Center for Studies in Globalisation, Institute of Economic Growth, Delhi, India. The author is grateful to N. S. Siddharthan, A. E. Safarian and K. L. Krishna for their useful comments and suggestions on an earlier draft of the paper. Comments and suggestions by John H. Dunning and two anonymous referees are appreciated. The usual disclaimer applies.
This article provides, first, a brief overview of government policy changes in the 1980s. Then, it discusses the interplay of internalization preferences and government policies in shaping inter-industry variations in foreign ownership in India. On this basis, it applies statistical methods to separate the impact of government policies, and analyses the results. Reserve Bank of India panel data on 48 industries in the manufacturing sector over the period 1980-1990 provide the database for the empirical analysis. The main policy conclusions are presented at the end of the study. The article confines itself to the large private corporate sector, which, as Lall and Mohammad (1983, p. 145) described, constitutes the beat of TNCs.

An overview of changes in government policies in the 1980s

After independence, India adopted a development strategy based on government control and planning, with emphasis on heavy industry and import substitution. To meet planning priorities, industrial licensing was introduced. A licence was required to enter an industry, to expand existing capacities or to diversify a product range. In addition, controls on capital issues, marketing and distribution, allocation of credits, interest rates, prices, take-overs, exchange rates and exports and imports were introduced. Import licensing, quantitative controls and high tariffs restricted imports of almost all commodities. In the late 1960s, when self-reliance and social justice became new major planning goals, the FDI regime, too, was tightened. The entry of foreign firms was restricted to specified industries. All proposals of FDI and technical collaboration were subjected to time-consuming and complicated processing. Also in the late 1960s, the Monopolistic and Trade Practices (MRTP) Act regulated the expansion of large firms, reserved certain activities for small enterprises, and provided for the nationalization of banks and other financial institutions. The Foreign Exchange Act (1973) imposed numerous restrictions on foreign equity participation and on the growth and expansion of foreign-owned companies.

1 The sample firms are distributed over 84 different industrial groups. However, it was decided to exclude non-manufacturing industries and the industries reserved for small and medium-sized enterprises, such as tobacco other than cigarettes, leather and leather products, and matches and miscellaneous groups of industries. The final sample consists of 48 manufacturing industries. To accommodate the lagged variables, the first two years are excluded from the analysis. The next three years (1982-1983 to 1984-1985) are identified as the pre-liberalization period, and the last three years (1987-1988 to 1989-1990) as the post-liberalization period. Pooled cross-section times series data yielded 288 observations.
In the early 1980s, India's development strategy took a new direction. Emphasis was placed on growth with competitiveness and, for the first time, the Government initiated deregulation. Major deregulation measures were, however, not announced before the mid-1980s, when restrictions imposed on the industrial, trade and financial sectors, and on FDI, were relaxed. Licensing was abolished in a number of industries, and was relaxed in others. Firms were permitted to diversify their product mix and to increase their capacities without prior official approval. The MRTP Act was also changed. In the financial industry, the ceiling on interest rates was dismantled. Public financial institutions were instructed to limit lending at concessional rates. Emphasis was placed on the securitization of debts. In foreign trade, tariff rates were reduced, the tariff structure was rationalized, import licensing was relaxed, the import of raw materials, components and capital goods was de-regulated, and duty-free access to imported inputs for export promotion was permitted.\(^2\) Various exemptions, rebates and incentives were provided to promote the export orientation of firms. The rupee was allowed to depreciate.\(^3\) Policy changes such as the widening of the range of industries eligible for FDI, simplified procedures for the processing of applications, establishment of fast channels for the speedy clearance of FDI, and setting up of duty-free zones lowered the entry barriers for FDI. In the mid-1980s, the rejection rate of foreign collaboration proposals came down from 30 per cent to between 5 and 8 per cent.\(^4\) Average annual FDI inflows increased more than tenfold, from 197.6 million rupees during 1970-1980 to 2.8 billion rupees during 1985-1990.

Beginning in 1991, the Government of India embarked on a major liberalization programme that was a distinct break with the past. The pace and degree of policy changes in the mid-1980s were moderate compared with those in the 1990s. Nevertheless, the reforms of the mid-1980s affected the economic environment significantly. Labour productivity, average size of units, skill intensity, growth of output, investment activities, entry of new units, import and export intensities, and technology imports registered a significant increase in the wake of these policy changes (Siddharthan and Pandit, 1992). Srivastava (1996) noted that the reforms initiated in 1985-1986 marked a watershed in the process of otherwise gradual reforms, making it a suitable cut-off year for examining the impact of the policy changes on certain aspects of industrial behaviour. The following section discusses the impact of this changing economic environment on internalization patterns and formulates hypotheses for empirical testing.

**Analytical framework and hypotheses**

Firms consider internal channels (FDI) and markets as alternative modes of transferring their assets. Market failures such as inefficiency in pricing and a high risk of leakage and imitation (Magee, 1977) lead to a low appropriability of market transfers.\(^5\) Firms try to minimize this risk of leakage, and maximize the rents from their firm-specific advantage by internalizing the externalities created by the

---

\(^2\) In 1989-1990, the weighted average of the effective rate of protection was 128 in the manufacturing sector. It became 88 once all import-duty exemptions were taken into account (Goldar and Saleem, 1992).

\(^3\) The real exchange rate of the rupee depreciated by 9.3 per cent per annum between 1985-1986 and 1989-1990 (Srivastava, 1996).

\(^4\) *India Today*, December 1988.

\(^5\) In the past, several researchers discussed the impact of market failures on transaction costs and tested the transaction cost approach successfully (for a survey, see Dunning, 1988 and 1993). We have adopted the appropriability approach (Magee, 1977) in the present analysis.
public-good aspect of their assets (Bonin, 1987). However, internalization involves various political and administrative costs too (Buckley and Casson, 1976). Therefore, one can hypothesize that internalization advantages are high in industries in which the rent-extracting potential (or appropriability) of ownership (O) advantages is high (Telesio, 1979). This, in turn, depends on the market structure, the ownership advantages of local producers, and the location-specific advantages of the country in that industry. The government can influence the relationship between foreign ownership and its determinants directly by restricting the entry and expansion of foreign firms in certain industries, and indirectly by influencing the economic conditions (through industrial and trade policies). To summarize, the present article tests the function

\[ s_i = F S_L (M_i, T_i, C_i) \]

where

- \( F S_i \): share of TNCs in industry \( i \) sales;
- \( L \): economic environment prevailing in the host country;
- \( M_i \): market structure in industry \( i \);
- \( T_i \): ownership advantages of TNCs relative to those of local firms in industry \( i \);
- \( C_i \): locational advantages of the host country in industry \( i \).

**Internalization and government policies: the hypotheses**

**Market structure**

*Concentration.* On the one hand, the relationship between \( FS \) and concentration is expected to be positive for two reasons. First, concentrated markets reduce the possibility of leakages to, and imitation by, other firms of proprietary technology and hence ensure a high appropriability of the monopolistic advantages of TNCs (Magee, 1977). Second, concentration facilitates collusion and results in entry-forestalling prices and supranormal profits. On the other hand, in a liberal regime, the threat of potential entry and imports reduces the monopolistic advantages of TNCs (Magee, 1977). Increasing international linkages curtail collusive power and may constrain firms to adopt prices closer to competitive prices (Geroski and Jacquemin, 1981; Sleuwagen, 1983). This may weaken profit prospects and hence internalization incentives. The relationships between \( FS \) and concentration might therefore be more prominent under a regulated and protected regime.

**Relative advantages of TNCs**

Transnational corporations have proprietary technology, marketing skills, strong brand names and large pools of capital. Their presence would, therefore, be expected to be dominant in industries characterized by high-technology intensity, production differentiation and capital intensity. However, not all ownership advantages may be subject to high internalization advantages. Appropriability (rent-extracting potential) from intangible assets of TNCs depends not on the absolute properties or qualities of their own proprietary assets but on the qualities of the assets held by firms competing with them in foreign affiliates (Caves, 1996, p. 8). The government can influence the latter through development strategy and industrial and trade policies.

---

6 An empirical study on the Chilean economy by Melo and Urata (1986) supports this proposition.
7 See Lall and Siddharthan (1982); Pugel et al. (1996) for empirical evidence.
Product differentiation. Product differentiation is appropriate in industries where brand names are important. It is believed to be more appropriable in consumer goods than in producer goods.\(^8\) Behind high tariff walls, India acquired (through reverse engineering) considerable technological capabilities in industries where product technologies are important (Lall, 1987).\(^9\) To protect Indian brands, the Government imposed several restrictions on the entry and expansion of foreign firms during the restrictive regime. Therefore, one can hypothesize a relatively weak influence of this factor on FS in the regulated (or pre-reform) regime.

Technology intensity. The possession of proprietary technology could be a major competitive advantage of TNCs in Indian manufacturing in the restrictive regime. This is because, though the government accorded high priority to industrialization based on heavy industries, the technology-generating capabilities of local firms remained limited.\(^10\) The effect of this factor was likely to be accentuated by the direct government policies that favoured foreign entry and expansion in high-technology industries. In the post-reform period, although policy restrictions on entry and expansion of FDI were relaxed, no major changes are expected to have taken place either in the type of research-and-development (R&D) activities undertaken\(^11\) or in technology-generating capabilities of local firms. One may predict that technology will continue to remain an important advantage of TNCs.

Some changes are expected to have occurred in technology-intensive industries. Government policies had originally favoured foreign presence in producer-goods high-technology industries. It is expected that, in the post-deregulation period, foreign presence would increase significantly in consumer-goods high-technology industries, where TNCs have strong brand names.

Capital intensity. Indian policy encouraged capital-intensive industrialization. The possession of capital could, therefore, be a distinct advantage of foreign firms in a capital-scarce environment. However, industrial policies may have weakened the impact of this variable in the restrictive regime. The licensing policy as it operated encouraged pre-empting of capacities\(^12\) by large Indian enterprises. This led to the creation of large capacities in the industrial sector (Lall and Mohammad, 1983). Strict government regulations on financial markets ensured easy availability of capital at regulated interest rates

---

\(^8\) Advertising expenditure is in general higher in consumer-goods industries. Empirical evidence also shows (not unambiguously) that advertising intensities are more effective entry barriers in consumer-goods industries than in producer-goods industries (see Schmalensee, 1989, for discussion and references).

\(^9\) Product technologies subject to a greater risk of reverse engineering than process technologies (Robinson, 1989).

\(^10\) Several studies have shown that local R&D in Indian manufacturing was directed to adaptation and assimilation of foreign technologies and not to innovative activities (Desai, 1980, among others).

\(^11\) According to unpublished data provided by the Department of Technology, in 1992-1993 R&D expenditure as percentage of sales turnover remained less than 1 per cent in the private sector.

\(^12\) Licensed capacities were based on plan targets; and once the plan targets were licensed, that item was put on the banned list. Large business enterprises pre-empted capacities using their influence, but in the absence of follow-up measures, they did not implement them. Various committees appointed by the Government confirmed the practice of pre-empting (see Mohan and Aggarwal, 1990, for details).
from public financial institutions (Kumar, 1987). One can expect that industrial and financial deregulation in the mid-1980s improved the impact of this factor in the ensuing period.

**Locational advantages of the country**

This article quantifies some country-specific advantages of India and discusses the relative advantages of TNCs in this respect.

*Skill intensity.* Owing to a vast reservoir of skilled manpower available at low wages, India has competitive advantage in industries characterized by skill intensity. Transnational corporations are far better placed to exploit it than their local counterparts because technologies developed by TNCs are intensive in the use of skilled labour (Magee, 1977), and because they develop more efficient managerial and organizational techniques (Enderwick and Buckley, 1983). Also, they can attract better personnel than their local counterparts by offering relatively higher salaries.\(^{13}\) Therefore, one can expect this factor to be significant in Indian manufacturing in both periods, and no substantial change in its importance is predicted.

*Market growth.* Growth in market demand is an important competitive advantage of a country (Porter, 1990). In general, fast-growing markets have a better chance of increased sales and profits. Fast-growing industries are constantly undergoing changes in technology, consumer behaviour and distribution channels. Transnational corporations may be better equipped to align themselves with these trends.\(^{14}\) It may therefore be predicted that TNCs are likely to appropriate large rent on their ownership advantages in industries in which markets are characterized by high growth rates. In the regulated regime, however, direct policy restrictions on the entry and growth of TNCs may have limited the importance of demand conditions. Therefore, one can predict a smaller relationship between market growth and foreign share in the restrictive regime.

*Past relative frequency of internalization.* The appropriability of intangible assets of TNCs is expected to be high in industries in which the incidence of internalization relative to other modes is high. Two reasons support this hypothesis. First, the first firm in an industry may spend large sums to establish property rights and precedents to prevent a loss of the appropriability of technologies. Subsequent firms do not share this cost, which is in the nature of a public good, but benefit from appropriability protection (Magee, 1977). Second, in a developing country, FDI may be subject to risks such as political and social hostility towards TNCs, inadequate infrastructural facilities and business problems, reducing appropriability on their investment. TNCs may hope to minimize some of these risks by internalizing in industries where the intensity of internalization relative to that of licensing has already been high. In the regulated regime, the Government of India curbed the growth of foreign companies. New foreign collaborations in industries in which foreign presence existed were discouraged. Instead, technology licensing to local firms was encouraged. The objective was to create local capabilities and curtail foreign dominance. These policies are expected to have weakened the impact of past relative

---

\(^{13}\) See for instance, Balasubramanyam (1984), for Indonesia; Kumar (1990), for India; and Willmore (1986), for Brazil.

\(^{14}\) The author is grateful to an anonymous referee for this point.
frequency of internalization in the restrictive regime.
International orientation. The competitive advantages of a country in trade depend upon the kind of economic orientation followed by the government. In a closed regime, TNCs may perceive opportunities for differential profits in import-substituting industries (Wheeler and Mody, 1992), because of the overvaluation of exchange rates and highly protected domestic markets that offer high profits. In the Indian case, the impact of anti-export bias (Bhagwati and Srinivasan, 1975) was likely to be accentuated by government policies that deliberately encouraged FDI in import-substituting industries to achieve the planning objective of self-reliance (Kumar, 1987). In a more liberal regime, the competitive advantages of the country are directed to the export sector. Possession of superior O-advantages, access to international information networks and the possibility of intra-firm trade may give TNCs an edge over their local counterparts in the export-oriented industries. Therefore, the present study predicts that the impact of export intensity on $FS$ is likely to be significantly higher in the post-reform period.

The variables

Dependent variable

$FS$: The share of TNCs in total industry sales. Following the Reserve Bank of India definition, TNCs are defined as companies with 25 per cent or more foreign holding.$^{15}$

Independent variables

Market concentration ($CR_4$): Share of top four firms in the total sales of an industry.$^{16}$

Capital intensity ($CI$): Plant and machinery value to sales ratio.

Product differentiation ($ADI, DCON$): Alternative variables are used to test the impact of this factor. These are:

$ADI$: Ratio of advertising expenditures to industry sales.

$DCON$: A dummy variable that takes the value = 1 if it is a consumer-good industry, and is = 0 otherwise.

Technology intensity ($HTECH$):

$HTECH$: A dummy variable that takes the value = 1 if the industry is classified as a high-technology industry,$^{17}$ and is = 0 otherwise. Correspondingly,

$LMTECH$: takes the value = 1 if the industry is low- and medium-technology, and is = 0 otherwise.

The classification of industries is based on the list of R&D-intensive products prepared by the Fraunhofer Institute for Systems and Innovation Research.$^{18}$ The classification was cross-checked with R&D intensities of United States industries and some adjustments were made accordingly.

---

$^{15}$ With effect from 1 April 1992, companies with 10 per cent or more foreign equity are defined as TNCs.

$^{16}$ See Vanlommel et al. (1977) for a discussion of alternative measures of concentration.

$^{17}$ As a standard practice (following Caves, 1974), R&D expenditure to sales ratio is used to measure the technology-intensity of an industry. In the Indian case, however, R&D does not necessarily measure the level of technological sophistication. It might reflect domestic capabilities in absorbing technologies and not in generating them. Therefore, the usual predictions applicable to technology intensity may not be valid in the case of local R&D (see Lall and Mohammad, 1983; Kumar, 1987).
Skill intensity (SKILL, USS): Alternative variables are used for proxying skill intensity. These are:

**SKILL**: The share of wages of highly paid workers in total wage income. Up till 1987-1988, high-income earners were defined as those earning Rs. 36,000 a year or more. In 1987-1988, owing to a general rise in wages, the threshold was revised to Rs 72,000 a year.

**USS**: The ratio of non-production to production workers in United States industries.

Market growth rate (MG): Proportionate changes in net sales in an industry over the past year.

Past relative frequency of internalization (FML): Two years moving average of the ratio of the intensity of FDI (proxied by FS) to the intensity of market transactions of technology. The latter is measured by the total expenditure incurred on the purchase of foreign technology as a ratio of industry sales.

Export intensity (EXP): Ratio of exports to sales.

Besides the above variables, one interactive variable - HPRO - was also tested.

**HPRO**: A dummy variable that takes value = 1 if the industry is a high-technology producer goods industry, and is = 0 otherwise.

Effects of deregulation: methodology for empirical test

The present study examines the effect of government policies on internalization patterns, using a method analogous to that used in testing for structural change in time series models (Johnston, 1984). A distinction is made between pre- and post-deregulation periods. The regression model adopted is:

\[
FS = A_2 + (A_1 - A_2) + B_2 X + (B_1 - B_2 ) DX + e \tag{1.1}
\]

where

- **D**: a dummy variable that takes the value = 1 for all observations for the period prior to de-regulation and = 0 for the post de-regulation period;
- **X**: a vector of independent variables - CR4, ADI/DCON, HTECH, HPRO, SKILL/USS, CI, MG, EXP, FML;
- **DX**: a vector of slope dummies, obtained by multiplying the dummy variable (D) by the respective variables. These are denoted by adding a prefix \(D\) to each variable-name;
- **e**: the error term.

In this model, \(A_2\) and \(B_2\) represent, respectively, the intercept and the slope coefficients in the post-reform period because \(D=0\) for these observations. The term \(A_1\) and \(B_1\) represents the coefficients for the regulated period. Thus, \(B_1 - B_2\) captures the changes in the relationship between foreign share and its determinants, while \(A_1 - A_2\) captures the changes in the intercept terms. Positive coefficients of the slope dummies show that the influence of the variable was higher in the period prior to deregulation. The reverse is true for the negative coefficients. The advantage of the equation is that the significance of a slope or intercept dummy shows its heterogeneity over time.

---

One may now summarize the hypotheses to be tested in the analysis (table 1).

**Table 1. A summary of hypotheses formulated in the study**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Expected sign</th>
</tr>
</thead>
<tbody>
<tr>
<td>DCR4</td>
<td>+</td>
</tr>
<tr>
<td>DHTECH</td>
<td>n.s.</td>
</tr>
<tr>
<td>DADI/DDCON</td>
<td></td>
</tr>
<tr>
<td>DHPRO</td>
<td>+</td>
</tr>
<tr>
<td>DCI</td>
<td></td>
</tr>
<tr>
<td>SDKILL/DUSS</td>
<td>n.s.</td>
</tr>
<tr>
<td>DMG</td>
<td></td>
</tr>
<tr>
<td>DFML</td>
<td></td>
</tr>
<tr>
<td>DEXP</td>
<td></td>
</tr>
</tbody>
</table>

n.s. = not significant.

For estimating equation (1.1), two panels of industry-level data were created in the analysis. These were cross-section data of 48 industries for 1982-1983 to 1984-1985; and cross-section data of 48 industries for 1987-1988 to 1989-1990. Pre-1985 years were defined as belonging to the pre-deregulation period, while post-1985 years were defined as belonging to the post-deregulation period. Both sets were pooled for an empirical testing of the model. While estimating the model, the *LIMDEP* statistical package was used. Multicollinearity was not found to be a serious problem. However, Breusch Pagan LM statistic and Wald statistic rejected the hypothesis of homoskedasticity. In the absence of *a priori* knowledge of the type of heteroskedasticity, maximum likelihood estimators based on the multiplicative heteroskedasticity model\(^\text{19}\) were estimated and reported.

**Empirical results**

Table 2 presents the empirical results. The first two equations used *ADI* and *DCON* alternatively. The third equation included *HPRO* and *LMTECH* (a control variable) to test the hypothesis regarding the shift from high-technology producer goods to high-technology consumer goods. The fourth equation replaced *SKILL* with *USS*. Wald test and likelihood ratio test statistics presented at the bottom of the table show the significance of structural change in the industrial patterns of foreign share between the two periods (see Greene, 1990).

The results, by and large, are consistent with the predictions.

**Market structure**

The coefficient of *CR4* emerged very small, while its slope dummy - *DCR4* - was positive and significant. Thus, as predicted, the significance of concentration as a determinant of *FS* declined between the pre- and post-deregulation period. In fact, *CR4* became insignificant in influencing *FS* as the economy moved from a restrictiveto a deregulated regime. Industrial licensing, the MRTP Act, the Foreign Exchange Act and trade barriers blocked both international and internal competition in Indian

---

\(^{19}\) This is a general model which is appropriate for several kinds of heteroskedasticity (Greene, 1990). See also Harvey (1976) on multiplicative heteroskedasticity.
manufacturing in the first period. In the absence of potential competition, TNCs enjoyed a monopolistic position in concentrated industries. Deregulation measures introduced competition, eroding monopolistic gains by TNCs. This could have reduced the impact of concentration on FS. However, it is quite possible that these are not results of a decline in the impact of concentration on FS but are due to a decline in the impact of FS on concentration. Causality between concentration and FS is ambiguous (Newfarmer, 1984; Caves, 1982, 1996, for surveys). Caves (1982) argued that concentration and TNCs resulted from common causes. While hypothesizing different directions of causation, many studies for (regulated) developing countries found a positive relationship between FS and concentration, even after controlling the effects of other common variables - FS and concentration (Lall, 1979; Blomström, 1986; Newfarmer and Marsh, 1981). Studies for (liberal) developed countries found, however, that although the relationship between concentration and foreign presence was positive, once the effect of other variables was controlled, it weakened. The results suggest that the independent relationship (after controlling the influence of other variables) between concentration and foreign share declined and became insignificant as the economy moved from a protected to liberal regime.

<table>
<thead>
<tr>
<th>Variables</th>
<th>(i)</th>
<th>(ii)</th>
<th>(iii)</th>
<th>(iv)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CR4</td>
<td>-.018</td>
<td>-.032</td>
<td>-.0173</td>
<td>.0213</td>
</tr>
<tr>
<td></td>
<td>(.320)</td>
<td>(.761)</td>
<td>(.367)</td>
<td>(.332)</td>
</tr>
<tr>
<td>HTECH</td>
<td>.171a</td>
<td>.176a</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(5.292)</td>
<td>(5.367)</td>
<td></td>
<td>(4.809)</td>
</tr>
<tr>
<td>ADI</td>
<td>8.744a</td>
<td></td>
<td></td>
<td>10.157a</td>
</tr>
<tr>
<td></td>
<td>(4.196)</td>
<td></td>
<td></td>
<td>(3.618)</td>
</tr>
<tr>
<td>DCON</td>
<td></td>
<td>.0662a</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(3.579)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HPRO</td>
<td></td>
<td></td>
<td>-.233a</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(-4.858)</td>
<td></td>
</tr>
<tr>
<td>LMTECH</td>
<td></td>
<td></td>
<td>-.391a</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(-6.997)</td>
<td></td>
</tr>
<tr>
<td>CI</td>
<td>.0451</td>
<td>-.008</td>
<td>.0253</td>
<td>.041</td>
</tr>
<tr>
<td></td>
<td>(1.089)</td>
<td>(-.202)</td>
<td>(.612)</td>
<td>(.796)</td>
</tr>
<tr>
<td>SKILL</td>
<td>.595a</td>
<td>.756a</td>
<td>.553a</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(5.662)</td>
<td>(7.439)</td>
<td>(5.319)</td>
<td></td>
</tr>
<tr>
<td>USS</td>
<td></td>
<td></td>
<td>.224a</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(3.066)</td>
<td></td>
</tr>
<tr>
<td>MG</td>
<td>.180b</td>
<td>.243a</td>
<td>.147b</td>
<td>.053</td>
</tr>
<tr>
<td></td>
<td>(2.35)</td>
<td>(3.176)</td>
<td>(2.140)</td>
<td>(5.35)</td>
</tr>
<tr>
<td>FML</td>
<td>.15E03a</td>
<td>.151E03a</td>
<td>.155E03a</td>
<td>.157E03a</td>
</tr>
<tr>
<td></td>
<td>(7.76)</td>
<td>(8.10)</td>
<td>(8.51)</td>
<td>(6.365)</td>
</tr>
<tr>
<td>EXP</td>
<td>.880a</td>
<td>1.354a</td>
<td>.956a</td>
<td>.607a</td>
</tr>
<tr>
<td></td>
<td>(2.788)</td>
<td>(4.022)</td>
<td>(2.992)</td>
<td>(1.683)</td>
</tr>
<tr>
<td>CONSTANT</td>
<td>-.081c</td>
<td>-.014c</td>
<td>-.080</td>
<td>.105</td>
</tr>
<tr>
<td></td>
<td>(-1.70)</td>
<td>(-1.77)</td>
<td>(-1.453)</td>
<td>(-1.599)</td>
</tr>
<tr>
<td>S</td>
<td>.176a</td>
<td>1.235a</td>
<td>1.498a</td>
<td>1.429b</td>
</tr>
<tr>
<td></td>
<td>(4.308)</td>
<td>(4.995)</td>
<td>(4.995)</td>
<td>(4.809)</td>
</tr>
<tr>
<td>D</td>
<td>-.0213</td>
<td>-.018</td>
<td>-.223p</td>
<td>-.020</td>
</tr>
<tr>
<td></td>
<td>(-.385)</td>
<td>(-.268)</td>
<td>(-2.414)</td>
<td>(-.268)</td>
</tr>
<tr>
<td>DCR4</td>
<td>.205a</td>
<td>.166b</td>
<td>.115c</td>
<td>.277a</td>
</tr>
<tr>
<td></td>
<td>(3.182)</td>
<td>(2.458)</td>
<td>(1.925)</td>
<td>(2.924)</td>
</tr>
<tr>
<td>DHTECH</td>
<td>-.0403</td>
<td>-.035</td>
<td></td>
<td>.022</td>
</tr>
</tbody>
</table>

With the exception of Newfarmer and Marsh (1981), all studies examined the causality from FS to concentration.

While Steur et al. (1973), Globerman (1979) and Fishwick (1982) tested the impact of FS on concentration, Pugel et al. (1996) examined the impact of 8-firm concentration ratio in United States industry on Japanese FDI.
Relative advantages of TNCs

As expected, the coefficient of \textit{HTECH} emerged positive and significant. \textit{FS} was thus significantly higher in high-technology industries than in low- and medium-technology industries in the post-reform period. Its slope dummy \textit{DHTECH}, which emerged insignificant in all equations, suggests that the impact of this variable was lower in the pre-1985 period. The sophisticated industrialization of the manufacturing sector and the limited technology-generating capabilities of local firms appear to have provided a competitive edge to TNCs over their local counterparts. The performance of \textit{HPRO} and \textit{DHPRO} also indicates that policy deregulation did influence the distribution of foreign ownership in high-technology industries where \textit{DHPRO} was significant and negative. It suggests that foreign presence in producer goods compared with that in consumer goods (with \textit{LMTECH} as a control variable) declined significantly once restrictions on TNCs entry and expansion were relaxed. Although India achieved near self-sufficiency in consumer goods under the protected regime, this achievement was not based on superior technology. Thus, in the post deregulation period, superior technology, complemented with internationally known brands, appear to have provided strong internalization incentives to TNCs in high-technology consumer goods, where product differentiation is believed to be the most appropriate. The result could also be attributed to the presence of large non-saturated domestic markets for consumer goods. It could also be that while imports of capital goods were deregulated considerably in the post-1980s period, making it possible for TNCs to serve these markets through imports, trade protection in consumer goods remained high, offering internalization advantages.

\begin{table}[h]
\centering
\begin{tabular}{lcccc}
\hline
 & (3.182) & (2.458) & (1.925) & (2.924) \\
\textit{DADI} & 4.594 & 12.164 & (2.703) \\
 & (1.174) & & & \\
\hline
\textit{DDCON} & - .051 & - .157 & - .208 & - .138 \\
 & (-1.73) & (-2.734) & (-3.926) & (-2.122) \\
\textit{DHPRO} & -1.75 & -1.57 & -2.08 & -1.38 \\
 & (-3.315) & (-2.734) & (-3.926) & (-2.122) \\
\textit{DLMTECH} & .243 & (2.950) & (2.857) & \\
 & (2.857) & & & \\
\textit{DCI} & -1.75 & -1.57 & -2.08 & -1.38 \\
 & (-3.315) & (-2.734) & (-3.926) & (-2.122) \\
\textit{DSKILL} & .882 & .922 & 1.3 & \\
 & (4.888) & (5.243) & (6.064) & \\
\textit{DUSS} & .054 & & & \\
\textit{DMG} & -1.65 & -2.24 & .130 & -0.35 \\
 & (-2.105) & (-2.873) & (-1.849) & (-3.46) \\
\textit{DFML} & -1.5E03 & -1.51E03 & -1.55E03 & -1.57E03 \\
 & (-7.759) & (-8.10) & (-8.51) & (-6.366) \\
\textit{DEXP} & -8.8 & -9.66 & -6.58 & -7.67 \\
 & (-2.228) & (-2.303) & (-1.699) & (-1.719) \\
\textit{L-L} & 113.90 & 102.86 & 105.58 & 74.051 \\
\textit{CHI-SQD} & 226.3 (6) & 203.73 (5) & 210.18 (6) & 147.04 (6) \\
\textit{Wald test} & 45.18 (9) & 40.55 (9) & 49.09 (9) & 37.82 (9) \\
\textit{LR test} & 64.71 (9) & 59.37 (9) & 56.51 (9) & 49.62 (9) \\
\hline
\end{tabular}
\caption{Table 1: Summary Statistics}
\end{table}

Note: figures in parentheses show t-statistic.
\begin{itemize}
\item \textit{a} Significant at 1 per cent.
\item \textit{b} Significant at 5 per cent.
\item \textit{c} Significant at 10 per cent.
\end{itemize}

22 See Schmalensee (1989) and note 8.
The impact of product differentiation on $FS$ increased as shown by an increase in the significance of $DCON$, although it is not reflected in the performance of $ADI$. As expected, the coefficient of $DCON$ increased and became significant and positive in the post-1985 period. The significance of product differentiation increased in the aftermath of policy reforms. The influence of $ADI$ was also expected to increase, but it did not happen. Though $ADI$ was significant at 1 per cent, with a positive sign in the post-reform period, it was not higher than in the pre-reform period. Two explanations may be offered for these results. Firstly, foreign companies had acquired a dominant position in advertisement-intensive low-technology consumer goods (tobacco, textiles etc.) in the early phase of development when the FDI regime had been comparatively liberal. Their share in these industries declined in the post-reform period. The slope dummy for $LMTECH$ also indicates that the significance of low- and medium-technology industries declined significantly in this second period. In high-technology consumer industries, where TNCs enjoy the advantage of internationally known brand names, their $ADI$ may not be as high as in many advertisement-intensive low-technology consumer goods industries, where technical barriers are not important. Secondly, average advertisement intensity increased sharply in Indian industry in the late 1980s. In the private sector, it almost doubled from 0.32 per cent in 1980-1981 to 0.60 per cent in 1989-1990. One may therefore say that advertising intensities might not be a significant discriminant between local and foreign firms in this period, reducing its impact on the inter-industry variations of foreign presence.

$CI$ turned out to be insignificant for the post-reform period in all the equations. However, its dummy, $DCI$, which was negative and significant at 1 per cent, indicates that the impact of this variable on $FS$ was lower in the pre-1985 period. Earlier studies (Lall and Mohammad, 1983; Kumar, 1987) on patterns of foreign share in India showed a negative impact of this variable in the late 1970s. Licensing policy and easy availability of capital led to the setting up of large excess capacities by local industrial enterprises, raising their capital intensities in the regulated regime. Incremental capital output ratio in the Indian industries was as high as 6.6 (see Government of India, 19__) in 1980-1981. The capital output ratio declined consequently. It appears that industrial and financial deregulation corrected somewhat the distortions created in the capital markets. These measures might have had a favourable impact on capacity utilization by large Indian firms, on the one hand, and increased the cost of capital to local producers, on the other. In the changing economic environment, therefore, the significance of capital intensities for $FS$ increased.

**Locational advantages**

The coefficient of $SKILL$ was significant at 1 per cent in the post-reform period. Change in the coefficient of this variable emerged contrary to theoretical expectations. However, the results may be attributed to a revision of the criteria for skilled labour, due to a general rise in wages in Indian manufacturing in the late 1980s. In turn, $USS$, an alternative skill intensity variable based on United States classification, turned out to be positive and significant at 1 per cent for the post-1985 period with insignificant slope. Thus, in line with the hypothesis, the impact of this variable did not change over the two periods.

---

23 Kumar (1990) also found $ADI$ to be significant and $DCON$ to be insignificant in determining foreign ownership in Indian manufacturing in the highly restrictive regime of the late 1970s.

24 Source: Department of Science and Technology, Ministry of Science and Technology, Government of India.

25 It had declined to less than 4 by 1989-1990.
MG turned out to be significant in the post-1985 period, while its dummy emerged negative and significant in all but one equation. The result, as expected, suggests that the coefficient and the t-statistic of MG increased in the post-1985 period. Since the problem of causality persists in such an exercise, the result may possibly be attributed to an increase in the growth rate of the industries where foreign ownership was substantial in this period.

FML was significant with a positive sign at 1 per cent in the post-1985 analysis. The increase in its impact (the slope dummy) was significant with a negative sign. The results suggest that foreign firms did respond to the relaxation in policy towards their expansion and growth. In a firm-level analysis, Davidson and McFetridge (1984) demonstrated that the probability of internalization in a given year in a given country is greater if firms (United States TNCs) have past experience of greater internalization vis-à-vis licensing in the country in question. They argued that this is because the incremental cost to internalization is small for firms. In India, the Government restricted the choice of TNCs by erecting direct barriers to their growth. However, once these barriers were relaxed, the impact of this variable increased as expected.

The effect of the EXP variable also increased sharply. It became significant at 1 per cent, supporting our predictions. Although strict export performance requirements were imposed on TNCs, various concessions were grant to the export-oriented industries in the highly restrictive regime. The relationship between FS and export intensities remained weak. In India, changes in development strategies and measures introduced to correct distortions in the trade sector appear to have had a favourable impact on the performance of this variable in the post-1985 period. This confirms the observation by Dunning (1993, p. 404) that a lowering of tariffs and a growing importance of free trade zones in many developing countries shifted FDI in favour of industries in which the revealed comparative advantages of the country were increasing. The sharp increase in the significance of EXP may not be so much the result of an expansion of TNCs in the export oriented sector, but rather of increased export intensity in industries. There is evidence that the export intensity of TNCs increased the same way in some of the Latin American and Asian countries (UNCTAD, 1995), as well.

Wald test and log likelihood tests are significant at the 1 per cent level in all the models, supporting the hypothesis that the structure of inter-industry FS changed significantly in the late 1980s, as compared with the early 1980s.

Conclusions

In India, major de-regulation measures were introduced in industry, finance and trade in the mid-1980s. The relaxation of the FDI regime was part of these measures, aimed at correcting distortions created by previous government policy interventions. Although these reforms were moderate compared with those introduced in the 1990s, they did influence the economic environment in India. This study has examined how these reforms and a changing economic environment affected the inter-industry determinants of foreign ownership in the manufacturing sector. It has been argued that changes in

26 In contrast, Kumar (1987) showed that the incidence of foreign ownership had been significantly high in import-substituting industries in the late 1970s. Wheeler and Mody (1992) argued that Latin American countries had attracted substantial FDI inflows in import-substituting industries behind trade barriers.

27 See also Koo (1985), for the Republic of Korea, and Fritsch and Gustavo (1991), for Brazil and Mexico, on the positive impact of liberalization on the export performance of TNCs. Cross-country evidence, however, is not unambiguous. See UNCTAD (1995) for discussion and evidence.
government policy may influence the relationship between foreign ownership and its determinants by giving firms greater freedom in their choice between internalization and arm's-length transactions and/or by changing the economic environment in which firms make their choice. Three sets of determinants of inter-industry patterns of foreign share have been identified; market structure, ownership advantages of TNCs relative to those of local firms, and locational advantages of the host country. The level of concentration has been used as a proxy to market structure. The role of ownership advantages of TNCs has been inferred through industry-specific factors such as technology intensity, advertising intensity and capital intensity. Country-specific advantages have been measured by the availability of skilled manpower, market growth rate, relative internalization intensity in the past and international orientation. In line with predictions, the study has found that the role of ownership advantages of TNCs and location-specific advantages of the country became more prominent after liberalization, while that of concentration declined. Since the causation may run from FS to other industry- and country-specific factors, it may be suggested that deregulation of the economy resulted in a greater role of FS in transferring resources and enhancing the competitive advantages of the country.

We cannot draw general conclusions on the efficacy and desirability of policy changes on the basis of this limited exercise. The results, however, have important policy implications. The economic environment in a host country shapes the structure of foreign investment. The government, through its development strategy and industrial and trade policies, can create economic conditions that may help channel foreign investment into certain industries and may favourably influence the consequences of FDI. The opening up of an economy to FDI may need to be accompanied by industrial and trade policies. While relaxations of only the FDI regime may result in a greater inflow of FDI, accompanying changes in industrial and trade policies may also affect the structure of FDI in the country.

References


Siddharthan, N. S. and B. L. Pandit (1992). Deregulations, entry and industrial performance: the impact of recent Indian policy changes @Indian Economic Review Special Issue in Honour of Prof. S. Chakravarty.


Globalization and labour markets in the Triad: different adjustment patterns

Erich Gundlach and Peter Nunnenkamp*

Globalization tends to result in a closer integration of worldwide labour markets. This article outlines a theoretical framework suggesting that the wage and employment prospects of low-skilled workers in industrialized countries will be affected negatively, unless there is a compensating change in the production structure. Then, the strikingly different labour market performances within the Triad of the European Union, Japan and the United States are compared. It is argued that economic policies in Europe have been inappropriate to deal with the challenges raised by globalization. While the European Union has become a major target of globalization strategies by foreign competitors, trade and foreign direct investment patterns reveal that the European Union has made relatively little use of the opportunities provided by globalization for cost saving and penetrating newly emerging markets. The article discusses alternative policy options, and concludes that a long-term strategy for tackling the causes of impaired competitiveness must focus on human capital formation.

Introduction

Globalization has become a catchword for a number of political, social, environmental and economic trends that are supposed to present challenges on a worldwide scale. In an economic sense, globalization can be best defined as an increase in the international division of labour, caused by a surge of international flows of foreign direct investment (FDI) accompanied by steadily increasing international trade flows (Nunnenkamp et al., 1994). A more stable international macroeconomic environment with a focus on monetary and fiscal discipline, the liberalization of trade initiated by successive GATT rounds, and the deregulation of financial markets and other business services such as banking and insurance have fostered the ongoing globalization of production and markets. Furthermore, thanks to the micro-electronics revolution, new communication technologies have evolved allowing for the international diffusion of new production and organization technologies at low cost. The bottom line is that globalization represents a substantial increase and a new role of the international division of labour as large countries such as China, India, and Indonesia become part of the world economy. Industrialized countries have adjusted differently to these new challenges.

In a global economy, free trade and capital flows between countries with different factor endowments tend to put adjustment pressures on the relatively scarce factors of production (Stolper and Samuelson, 1941). Especially in the Triad of the United States, Japan and the European Union, low-skilled labour is the relatively scarce factor of production, compared with physical and human capital. The adjustment pressures on low-skilled labour result from a fall in the price of goods which are produced by using intensively low-skilled labour. This price decline is the consequence of an increase in the supply of these goods in their markets, since developing countries are making use of their abundant labour supply and are exporting labour-intensive products. Hence, employment and

* The authors are respectively, Senior Research Fellows of Kiel Institute of World Economics. They thank three anonymous referees for helpful comments on an earlier version.
earnings of low-skilled labour in industrialized countries tend to be negatively affected in the era of globalization.

In industrialized countries, the ensuing adjustment needs have traditionally been contained by restricting labour-intensive imports and thereby protecting low-skilled workers. However, the effectiveness of such policies is increasingly reduced in an integrating world economy. First, the higher mobility of capital and the easier access to new technologies make it feasible for developing countries to upgrade their exports. Second, technological innovations as well as lower transaction and information costs allow for an international fragmentation of production processes. Moreover, trade barriers may be circumvented by relocating production, which in turn may increase trade and competition in domestic areas previously protected against international competition. That is, globalization largely destroys the natural protection of less mobile factors of production, which may have existed before owing to technological complementarities between skilled and low-skilled workers in advanced countries. Put differently, globalization means that more jobs are affected by international competition (Campbell, 1993).

This article first discusses the theoretical background to the presumed labour market implications of globalization. It compares recent labour market developments in the Triad, and presents some empirical evidence. Focusing on the European Union, it highlights the relative performance of the Triad with regard to international trade and FDI flows, and it explains the different adjustment patterns - and labour market experiences - of Europe, Japan and the United States. The article’s conclusions present and discuss alternative policy options.

Globalization, structural change and relative wages

The presumed effects of globalization result in a closer integration of worldwide labour markets (see UNCTAD, 1994, chapter IV). This development favours high-skilled workers in industrialized countries, who have relatively few foreign competitors. By contrast, low-skilled workers face an almost perfectly elastic supply of low-paid competitors around the world. For them, globalization tends to amplify the adjustment pressure that would have resulted from international trade alone. The net effect of globalization is likely to be positive for the economies involved, because of the additional gains to be realized from trade and investment relations. However, low-skilled workers may actually lose as a result of globalization, as long as there is no compensating change in the production structure of industrialized countries.

The theoretical framework underlying this reasoning can be outlined in a simple diagram (figure 1). The axes denote quantities of (physical and human) capital and (low-skilled) labour. The right angles represent so-called unit value isoquants, i.e., combinations of capital and labour that are required to produce, say, one dollar's worth of output. The unit value isoquants are drawn for three different sectors: the automobile industry which is assumed to be relatively human- and physical-

1 UNCTAD (1994, p. 206), notes that “the greater dispersal of TNC operations is what most distinguishes integrated international production from other forms of TNC strategies...and individual value-added activities are likely to become more dispersed transnationally”.
2 For a more sceptical view of the presumed positive welfare effects of globalization, see Renshaw (1993).
3 The following paragraphs draw on Leamer (1992).
4 The isoquants are drawn as right angles to indicate that the ratio of capital to labour is assumed to be technologically fixed. This assumption is immaterial for the qualitative results derived below.
capital-intensive; the chemical industry, which is assumed to be physical-capital-intensive; and textiles and clothing, which is assumed to be the most low-skilled labour-intensive industry in this illustrative example.

The figure also displays two unit isocost lines, which represent combinations of capital and labour that cost just one dollar to employ. In the initial situation, the isocost line is drawn tangential to the unit value isoquants of all three sectors. If this line falls below one of the unit value isoquants, the costs of production in this industry exceed the value of output and, hence, no output would be produced. By contrast, if the isocost line crosses a unit value isoquant, production costs are lower than the value of output in this industry; excess profits would attract a resource inflow, thereby either raising the factor prices or reducing the product prices so that, finally, the tangency condition would be restored.

**Figure 1. Hypothetical effects of globalization on the structure of production and wages in developed countries**

![Diagram](image)


The impact of globalization for advanced countries can be demonstrated by an outward shift of the unit value isoquants for textiles and clothing. Globalization means first of all an increase in the worldwide supply of relatively low-skilled labour and, second, the general availability of relatively ubiquitous technologies. According to the Rybczynsky theorem (Rybczynsky, 1955), this should lead to an increase in the supply of low-skilled labour-intensive goods and of goods that can be produced with standardized technologies. This increase in supply should reduce the relative price of such goods. A declining product price implies an increase in quantities of inputs to keep the unit value constant, and therefore the outward shift of the unit value isoquants. From the point of view of developed countries, this shift will be the strongest where the underlying supply effects can be expected to have the strongest effect on the relative product prices.

In the diagram, the strongest shift in relative prices has been assumed for textiles and clothing, which is the most low-skilled labour-intensive industry. The new theoretical equilibrium is
given by a new isocost line, which is tangential only to automobiles and chemicals. According to the
diagram, advanced countries would not produce textiles and clothing any longer, and instead
specialize in the more human- and physical-capital-intensive production such as that of automobiles
and chemicals. The new equilibrium implies a reduced wage for low-skilled labour, relative to the
factor reward for human and physical capital. This is indicated by the new intersection of the isocost
line with the labour axis at $1/w^*$.  

The upshot of all this is that the wage for low-skilled labour will tend to fall if globalization
reduces product prices in the labour-intensive industries relative to the prices in the (physical and
human) capital-intensive industries. In the absence of an exogenous source of productivity growth,
low-skilled workers in advanced countries would be worse off under conditions of globalization than
under conditions of nationally segmented production and markets, which is the basic message of the
Stolper-Samuelson theorem.

Some of the assumptions underlying this purely theoretical argumentation are that international
product prices are given, that there is a high elasticity of substitution between capital and labour, that
the developed countries’ factor supplies are actually in the high wage cone, and that labour-rich
developing countries are in the low-wage cone. In the absence of any barriers hindering international
transactions, there would be no output of low-skilled labour-intensive goods in developed countries,
and, correspondingly, no output of human-capital-intensive goods in developing countries. In reality,
transport costs, temporary economies of scale, and less than perfect substitution between capital
and labour due to immobile inputs all contribute to maintaining an industry structure that would be
obsolete otherwise. The message from theory to be stressed is that, in the presence of globalization,
there are economic forces at work which push for moving the production of low-skilled labour-
intensive (final and intermediate) goods to developing countries, with the consequence of a widening
wage gap between skilled and low-skilled workers in developed countries. Some support for this
argument comes from comparative analysis of the labour markets in developed countries.  

In search of globalization effects

Globalization, labour markets and relative prices

While the three major players in the world economy should have been confronted with similar
adjustment problems raised by the globalization of production and markets, the effects in the labour
markets were strikingly different in each country and region. The labour market situation in the
European Union economies differs significantly from that in Japan and the United States. In Europe,
unemployment rose sharply throughout the 1980s, while employment remained unchanged or fell. In
Japan and the United States, employment rose, while unemployment remained constant or even
decided. A similar pattern prevails for the structure of unemployment with regard to different skill
levels. The lower end of the spectrum of qualifications is conventionally assessed by proxies such as

5 The wage is given by the inverse of the intersection of the isocost line with the labour axis. The
equation for the isocost line reads $1 = wL + rK$, where $w$ is the wage for low-skilled labour $L$, and $r$ is the
factor reward for physical and human capital $K$. At the intersection of the isocost line with the labour axis, $K$
equals zero. Therefore, $L = 1/w$ at this point.

6 For a recent overview of different labour market experiences in OECD countries, see OECD, various
years (d).

7 The following observations refer to data provided by OECD, various years (b).
long-term unemployment and youth unemployment. These measures indicate that unemployment of low-skilled workers is a more severe problem in European Union economies than in Japan and the United States (figure 2). In addition, the increase in low-skilled unemployment since the early 1980s seems to be most pronounced in European Union economies, with the exception of Germany for the case of youth unemployment.8 Aside from its low level, there was also a relatively strong increase in low-skilled unemployment in Japan.

Changes in the distribution of earnings between low-skilled and high-skilled workers help to explain this puzzling picture, at least partly. It can reasonably be assumed that the higher end of the earnings distribution represents the wages of high-skilled workers, and the lower end represents the wages of low-skilled workers. Figure 3 then suggests a declining or unchanged wage gap in some European Union economies and in Japan. By contrast, the wage gap widened in the United Kingdom and particularly in the United States. This leads to the conclusion that rising unemployment of low-skilled workers is the price that continental Europe has to pay for insufficient relative wage flexibility. Japan seems to face the same problem, although at substantially lower levels of unemployment. The case of the United Kingdom is different - where wage flexibility apparently did not hinder an increase in low-skilled unemployment rates.

Changes in the structure of employment in manufacturing further support the proposition that economic policies in Europe were inappropriate to deal with the challenges raised by globalization (figure 4). The European Union experienced a drastic cut in employment in textiles and clothing, even relative to overall declining manufacturing employment. This contrasts sharply with the situation in the United States, where the increase in wage dispersion helped to secure more employment in textiles and clothing. At the same time, employment creation in capital (chemicals) and skill-intensive (automobiles) industries remained small in the European Union as compared with that in Japan and the United States. It seems that structural change in employment required by fiercer worldwide competition was handled most successfully in Japan, where economy-wide employment problems were largely avoided. The average figures employed for the European Union disguise the fact that the structural pattern of the labour market in Germany is very similar to that in Japan, but the major difference is that Japan's manufacturing employment increased by about 0.4 per cent per year in 1979-1996, while Germany's manufacturing employment declined by about 1.2 per cent per year in 1979-1994 (OECD, various years). Labour markets in the United States have responded to increasing globalization with remarkably flexible wage policies. However, the labour market in the United States was less prone to employment restructuring towards capital- and skill-intensive industries than in Japan. Europe ranks only third within the Triad in terms of successful structural adjustment. The labour markets in the European countries are characterized by larger relative employment losses in labour-intensive industries, smaller relative employment gains in capital-intensive industries, and relative losses in skill-intensive industries where other countries report relative employment gains.

---

8 The reported increase in youth unemployment rates is most likely to be underestimated for the case of Germany, Italy, the United Kingdom and the United States because the data include a break in the series.
Figure 2. Changes in the structure of unemployment, 1979-1995
(Percentage)

Long-term unemployed

Youth unemployment rate

Source: OECD (various years) (b).

a Percentage of total unemployment, 12 months and over.

b Age 20-24, data for Germany, Italy, the United Kingdom and the United States include a break in the series.
Figure 3. The changing wage gap

Source: OECD (various years) (b).

a  Percentage change in the earnings of high paid workers (decile 9) relative to the earnings of low paid workers (decile 1).
e  1979-1995, males only.

Figure 4. Changing patterns of employment in manufacturing in the Triad, 1979-1996

Source: OECD (various years) (b).

a  For each industry, annual rate of change of employment minus annual rate of change of employment in total manufacturing (per cent); International Standard Industrial Classification of all Economic Activities categories; values for 1996 partly based on first three quarters.
Although the observed labour market outcomes are in line with the hypothesis of an increasing globalization of markets and production, other explanations such as exogenous labour-saving technological progress are also compatible with the observed empirical facts. But technological change itself may be driven by the trend towards globalization which may affect the labour market either directly, or indirectly through technological change. According to figure 1, the impaired wage and employment prospects of low-skilled labour in advanced economies are caused by a fall in the relative price of labour-intensive products. A comparison of the relative prices of a low-skilled labour-intensive sector such as clothing with the relative prices for other sectors may throw some light on the relevance of globalization effects on the labour market, despite a certain degree of ambiguity in classifying products as physical- or human-capital-intensive. For example, chemicals may be considered as a skill-intensive industry, whereas iron and steel as well as textiles are fairly standardized physical-capital intensive industries.

Table 1 presents changes in United States producers’ price indexes between 1982 and 1995. Since the United States constitutes a relatively large and open market, prices can be interpreted as rough indicators of relative world market prices. The entries show that the relative price of clothing has indeed fallen, compared with the prices of goods here classified as human-capital-intensive. The evidence with respect to physical-capital-intensive goods is mixed. However, data for the United States tend to support the relative price changes predicted by the Stolper-Samuelson theorem, given that iron and steel as well as textiles are more standardized goods than chemicals, the production of which requires relatively more human capital. This result is not confined to a specific recent year, as is shown by the fairly steady changes in 1993-1995 and by a comparison with data taken from Lücke (1993) for 1978-1987.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Human-capital-intensive</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial machinery and equipment</td>
<td>143.7</td>
<td>146.2</td>
<td>149.8</td>
<td>5.08</td>
</tr>
<tr>
<td>Transport equipment</td>
<td>133.7</td>
<td>137.2</td>
<td>139.7</td>
<td>5.50</td>
</tr>
<tr>
<td>Motor vehicles</td>
<td>134.2</td>
<td>131.4</td>
<td>140.3</td>
<td>.</td>
</tr>
<tr>
<td>Physical-capital-intensive</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemicals</td>
<td>128.2</td>
<td>132.1</td>
<td>142.5</td>
<td>4.31</td>
</tr>
<tr>
<td>Iron and steel</td>
<td>116.0</td>
<td>122.0</td>
<td>128.8</td>
<td>3.88</td>
</tr>
<tr>
<td>Textiles(^{b})</td>
<td>115.3</td>
<td>114.8</td>
<td>118.6</td>
<td>3.11</td>
</tr>
<tr>
<td>Labour-intensive</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clothing</td>
<td>123.2</td>
<td>123.5</td>
<td>124.2</td>
<td>3.67</td>
</tr>
</tbody>
</table>

Source: Lücke (1993); US Department of Labor (various years).

Note: 1982 = 100.
\(^{a}\) United States commodity code.
\(^{b}\) Average of code numbers 032-034.

9 On the relevance of trade and technological progress for determining labour market outcomes, see, for example, Krugman and Lawrence (1994), Lawrence and Slaughter (1993) and Wood (1994).
Globalization, trade and FDI

The relevance of the globalization hypothesis can also be assessed by an empirical analysis of international trade and FDI flows. If the globalization hypothesis holds, FDI outflows of investor countries should be positively correlated with both exports to, and imports from, host economies. This is because globalization encourages an international fragmentation of production, so that firms may place their production around the world, sourcing a production component from one country and another component from a different country. The direction of sourcing may change continuously owing to changes in "kaleidoscopic" comparative advantage (Bhagwati and Dehejia, 1994), as small changes in costs can cause comparative advantage to shift suddenly from one country to another. Put differently, new production locations are equally likely to export to, and import from, investor countries once these locations become integrated into the international division of labour through FDI, which drive technology transfer.

An alternative hypothesis would be that FDI flows to host economies are just a substitute for trade flows in order to circumvent trade barriers. If this was the case, FDI flows should be negatively correlated with exports of investor countries. Moreover, FDI flows should be by and large uncorrelated with imports by investor countries from host countries, if aiming exclusively at the local market in host economies.

Table 2 presents simple cross-section correlation coefficients for bilateral trade and FDI flows for Germany, Japan and the United States in recent years. German and Japanese FDI flows to host countries, including developing and industrialized countries, are positively correlated in a statistically significant way with trade flows (both exports and imports); and the same broad picture holds for lagged FDI flows (one and two years, respectively). Hence the higher the contemporary and past FDI flows to foreign countries in absolute value, the higher the German and Japanese exports to the host countries and the higher the German and Japanese imports from these countries. This finding contradicts the argument that FDI simply replaces trade, whereas it supports the globalization hypothesis. The correlation between bilateral trade and FDI flows is much weaker for the United States. This can be attributed to some peculiarities with respect to the sectoral and regional distribution of United States FDI outflows.10 The primary sector, in which globalization strategies play a minor role, accounted for a relatively high share of United States FDI outflows.11 Furthermore, United States FDI is large in Latin America, where market-seeking FDI predominated over efficiency-seeking FDI (Agarwal et al., 1991).

The robustness of the trade-FDI correlations reported in table 2 can be tested by introducing market size of host countries as an additional explanatory variable to determine whether market size, as measured by gross domestic product (GDP) in the host country, or FDI flows have a larger statistical impact on trade flows. Market size should not dominate the statistical impact of FDI, if globalization strategies explain the positive link between FDI and trade flows. Table 3 presents beta coefficients which were derived from a cross-country

---

10 For a detailed discussion of these peculiarities, see Nunnenkamp et al. (1994, pp. 82-88).
11 A more appropriate test of the globalization hypothesis would be to correlate trade flows with bilateral FDI flows for manufacturing industries, rather than with total FDI flows. Yet sectorally disaggregated data on FDI flows by host countries are not available from official statistical sources. OECD statistics report FDI flows by either regional or sectoral disaggregation; United States statistics report disaggregated FDI stocks, but not FDI flows.
Table 2. Trade and FDI flows: Pearson correlation coefficients\textsuperscript{a,b}

<table>
<thead>
<tr>
<th>Year</th>
<th>Foreign direct investment vs. exports</th>
<th>Foreign direct investment vs. imports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>t</td>
<td>T+1</td>
</tr>
<tr>
<td>1. Germany</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1989</td>
<td>0.67**</td>
<td>0.66**</td>
</tr>
<tr>
<td></td>
<td>(34)</td>
<td>(34)</td>
</tr>
<tr>
<td>1990</td>
<td>0.70**</td>
<td>0.67**</td>
</tr>
<tr>
<td></td>
<td>(34)</td>
<td>(34)</td>
</tr>
<tr>
<td>1991</td>
<td>0.59**</td>
<td>0.60**</td>
</tr>
<tr>
<td></td>
<td>(34)</td>
<td>(34)</td>
</tr>
<tr>
<td>1992</td>
<td>0.72**</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>(31)</td>
<td></td>
</tr>
<tr>
<td>2. Japan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1989</td>
<td>0.96**</td>
<td>0.95**</td>
</tr>
<tr>
<td></td>
<td>(40)</td>
<td>(40)</td>
</tr>
<tr>
<td>1990</td>
<td>0.94**</td>
<td>0.93**</td>
</tr>
<tr>
<td></td>
<td>(42)</td>
<td>(42)</td>
</tr>
<tr>
<td>1991</td>
<td>0.93**</td>
<td>0.93**</td>
</tr>
<tr>
<td></td>
<td>(44)</td>
<td>(44)</td>
</tr>
<tr>
<td>1992</td>
<td>0.93**</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>(42)</td>
<td></td>
</tr>
<tr>
<td>3. United States</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1989</td>
<td>0.19</td>
<td>0.20</td>
</tr>
<tr>
<td></td>
<td>(37)</td>
<td>(37)</td>
</tr>
<tr>
<td>1990</td>
<td>0.41**</td>
<td>0.43**</td>
</tr>
<tr>
<td></td>
<td>(39)</td>
<td>(39)</td>
</tr>
<tr>
<td>1991</td>
<td>0.35*</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>(38)</td>
<td></td>
</tr>
</tbody>
</table>

*Source: Nunnenkamp et al. (1994). 
** indicates statistical significance at the 5 per cent (1 per cent) level.

\textsuperscript{a} In parentheses: number of countries.
\textsuperscript{b} t refers to contemporary trade and FDI flows; t+1 (t+2) refers to lagged (one and two periods) FDI flows.

Regression of bilateral exports (imports) on bilateral FDI flows and GDP in the host country.\textsuperscript{12} Since beta coefficients are independent of the units of measurement, they can be used to compare the relative impact of the explanatory variables. The results are largely in line with a priori expectations. For a statistical explanation of bilateral Japanese trade data, FDI flows seem to be more important than market size. For Germany, both market size and FDI flows seem to be important statistical determinants of trade, but the weight of FDI has increased in recent years. These findings confirm the globalization hypothesis. Not surprisingly, market size seems to be more important than FDI flows for the United States. The globalization hypothesis can neither be confirmed nor rejected for the United States but it cannot be concluded that globalization is irrelevant for United States investors, since the results still point to a positive correlation of FDI and trade flows.

\textsuperscript{12} Beta coefficients measure the change in exports (imports) in standard deviation units for a unit change in each explanatory variable in standard deviation units, holding constant the other variable.
All in all, these findings support the consensus result of empirical research in this field: FDI and trade flows are positively correlated,\textsuperscript{13} which supports the globalization hypothesis.\textsuperscript{14} Rather than FDI causing trade, or trade causing FDI in a unidirectional way, the direction and extent of trade and FDI flows seem to be simultaneously determined by globalization strategies. As a consequence, FDI is positively correlated not only with exports of investor countries to host countries, but also with exports of host countries to investor countries.

Table 3. The statistical impact of FDI and GDP on trade (beta coefficients)\textsuperscript{a}

<table>
<thead>
<tr>
<th>Year</th>
<th>1. Germany</th>
<th>2. Japan</th>
<th>3. United States</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exports GDP</td>
<td>FDI GDP</td>
<td>Imports FDI</td>
</tr>
<tr>
<td></td>
<td>Exports GDP</td>
<td>FDI GDP</td>
<td>Imports FDI</td>
</tr>
<tr>
<td></td>
<td>Exports GDP</td>
<td>FDI GDP</td>
<td>Imports FDI</td>
</tr>
<tr>
<td>1989</td>
<td>0.50* 0.44*</td>
<td>0.55* 0.37*</td>
<td>0.25* 0.68*</td>
</tr>
<tr>
<td>1990</td>
<td>0.50* 0.48*</td>
<td>0.54* 0.40*</td>
<td>0.22* 0.64*</td>
</tr>
<tr>
<td>1991</td>
<td>0.40* 0.55*</td>
<td>0.40* 0.53*</td>
<td>0.30* 0.59*</td>
</tr>
<tr>
<td>1992</td>
<td>0.31* 0.72*</td>
<td>0.30* 0.70**</td>
<td>0.59*</td>
</tr>
</tbody>
</table>


\* Indicates statistical significance at the 5 per cent level.
\textit{a} Beta coefficients computed from a regression of exports (imports) on Gross Domestic Product and FDI flows; all variables in logs; annual data.

Trade and foreign direct investment performance of Triad members

Globalization represents a substantial increase and a new quality in the international division of labour, largely because of the integration of various developing and transition economies into the world economy. All members of the Triad faced similar challenges involving trade and FDI flows, not confined to wages and employment. The relative performance of Triad members reveals interesting differences.

\textsuperscript{13} This result is also confirmed by a recent empirical analysis which focuses on extra-European Union trade and investment flows (Greenaway 1993).

\textsuperscript{14} However, the regression results also demonstrate that there is no clear-cut pattern regarding trade and investment flows that can be identified by a simple cross-section analysis. The different results for the three major investor countries indicate that the positive correlation between FDI and trade flows should be carefully interpreted. Obviously, other variables such as different productivity levels, different sectoral and regional preferences of investors, and the sometimes volatile character of FDI flows should be taken into account for a more comprehensive analysis of cross-country trade flows.
The following discussion indicates that the European Union has made relatively little use of the opportunities for cost savings through global sourcing, and of profit chances through penetrating newly emerging markets. At the same time, the European Union has become a major target of globalization strategies by foreign competitors. On world markets, the European Union has been outperformed by both Japan and the United States. The share of European Union exports (excluding intra-European Union trade) in world manufacturing exports declined by 5 percentage points to 17.1 per cent in the period 1980-1994 (United Nations, various years). By contrast, the corresponding loss was only about one percentage point for the United States, while Japan increased its market share from 10.8 per cent in 1980 to 12.1 per cent in 1994. On the import side, the European Union has become a major target of trade expansion and globalization strategies by traditional and newly emerging competitors. Since the 1980s, the European Union's trade balance for high-tech products has worsened progressively (Commission of the European Communities 1993); the growth rate of European Union imports of high-technology products was nearly twice the growth rate of the corresponding European Union exports. Arguably, European integration has retarded the globalization of European Union investors, which tend to prefer regionalization strategies.

New competitive suppliers

The Single Market programme, launched by the European Commission in 1985, represented a major step towards the deepening of European Union integration, and was widely expected to stimulate intra-European Union trade. However, European Union imports of manufactures from non-member countries increased at a higher rate than intra-European Union imports between 1980 and 1994; the share of intra-European Union imports in total European Union imports declined from 63 to 57 per cent (table 4). In addition to the United States and Japan, developing countries have established themselves as strong competitors in European Union markets. All non-OECD countries taken together increased their import market share by nearly five percentage points to about 17 per cent in 1994. The share of all non-OECD countries in extra-European Union imports (40 per cent in 1994) was comparable with the share in total imports of Japan and the United States in 1994, while the increase in their import shares since 1980 was clearly more pronounced in the two latter markets than in the European Union.

The case of manufacturing exports by developing countries to the European Union, the first generation of newly industrializing economies (NIEs) in Asia (Hong Kong, China; Republic of Korea; Singapore; and Taiwan Province of China) still figures most prominently (table 4). However, other Asian developing countries are catching up quickly. Especially since the mid-1980s, booming market shares are recorded for China and ASEAN countries. China and ASEAN countries have not only emerged as new competitors in the European Union, but even more so in Japan and the United States markets. Competition from developing countries is likely to gain further momentum as many Latin American countries have recently stabilized and liberalized their economies. Those countries are thus better prepared to participate in the international division of labour and have succeeded in increasing their share in United States imports. Likewise, additional

15 United Nations data shows that the share of intra-European Union imports in total European Union imports of manufactures declined particularly between 1990 and 1993, and recovered somewhat in 1994 (United Nations, various years).

16 China and the ASEAN(4) together accounted for 10 per cent of extra-European Union imports in 1994, as compared with 23 per cent of Japan's imports and 14 per cent of United States imports (table 4).
import pressures will result from the ongoing integration of Central and Eastern Europe into the world economy. This will affect especially the European Union, which can be considered the "natural" trading partner of Central and Eastern Europe.

Table 4. Regional structure of manufactured imports of the European Union, Japan and the United States, 1980 and 1994

(Percentage and billions of dollars)

<table>
<thead>
<tr>
<th>Importing Country/ Year</th>
<th>European Union (12)</th>
<th>United States</th>
<th>Non-OECD countries</th>
<th>Asian NIEs a</th>
<th>ASEAN (4) b</th>
<th>China</th>
<th>Latin America</th>
<th>Total imports ($ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>European Union (12)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1980</td>
<td>63.0</td>
<td>4.8</td>
<td>9.8</td>
<td>12.3</td>
<td>3.0</td>
<td>0.4</td>
<td>0.4</td>
<td>0.7</td>
</tr>
<tr>
<td>1994</td>
<td>56.9</td>
<td>6.0</td>
<td>9.2</td>
<td>17.2</td>
<td>3.9</td>
<td>1.9</td>
<td>2.5</td>
<td>0.7</td>
</tr>
<tr>
<td>Japan</td>
<td>26.3</td>
<td>-</td>
<td>38.4</td>
<td>27.2</td>
<td>15.4</td>
<td>2.2</td>
<td>3.6</td>
<td>1.9</td>
</tr>
<tr>
<td>1994</td>
<td>21.7</td>
<td>-</td>
<td>29.0</td>
<td>43.0</td>
<td>15.8</td>
<td>8.8</td>
<td>14.1</td>
<td>0.7</td>
</tr>
<tr>
<td>United States</td>
<td>25.0</td>
<td>24.5</td>
<td>-</td>
<td>27.8</td>
<td>14.9</td>
<td>2.2</td>
<td>0.6</td>
<td>5.7</td>
</tr>
<tr>
<td>1994</td>
<td>17.3</td>
<td>22.3</td>
<td>-</td>
<td>40.9</td>
<td>13.4</td>
<td>6.1</td>
<td>7.5</td>
<td>10.1</td>
</tr>
<tr>
<td>European Union (12)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1980</td>
<td>64.4</td>
<td>7.8</td>
<td>12.6</td>
<td>6.7</td>
<td>1.7</td>
<td>0.2</td>
<td>0.0</td>
<td>0.4</td>
</tr>
<tr>
<td>1994</td>
<td>57.1</td>
<td>9.6</td>
<td>11.7</td>
<td>12.9</td>
<td>4.9</td>
<td>1.7</td>
<td>1.2</td>
<td>0.5</td>
</tr>
<tr>
<td>Japan</td>
<td>27.0</td>
<td>-</td>
<td>50.7</td>
<td>14.6</td>
<td>8.7</td>
<td>1.4</td>
<td>0.1</td>
<td>2.2</td>
</tr>
<tr>
<td>1994</td>
<td>21.3</td>
<td>-</td>
<td>40.3</td>
<td>33.7</td>
<td>18.4</td>
<td>9.9</td>
<td>4.7</td>
<td>0.4</td>
</tr>
<tr>
<td>United States</td>
<td>25.5</td>
<td>34.9</td>
<td>-</td>
<td>16.1</td>
<td>8.2</td>
<td>2.4</td>
<td>0.0</td>
<td>4.5</td>
</tr>
<tr>
<td>1994</td>
<td>15.6</td>
<td>30.8</td>
<td>-</td>
<td>32.6</td>
<td>13.4</td>
<td>6.0</td>
<td>3.0</td>
<td>9.5</td>
</tr>
<tr>
<td>European Union (12)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1980</td>
<td>71.1</td>
<td>1.4</td>
<td>10.1</td>
<td>8.4</td>
<td>0.2</td>
<td>0.1</td>
<td>0.4</td>
<td>0.8</td>
</tr>
<tr>
<td>1994</td>
<td>69.7</td>
<td>2.3</td>
<td>8.0</td>
<td>8.5</td>
<td>0.7</td>
<td>0.2</td>
<td>0.8</td>
<td>0.7</td>
</tr>
<tr>
<td>Japan</td>
<td>28.8</td>
<td>-</td>
<td>42.8</td>
<td>17.7</td>
<td>7.0</td>
<td>1.7</td>
<td>2.9</td>
<td>2.7</td>
</tr>
<tr>
<td>1994</td>
<td>36.6</td>
<td>-</td>
<td>31.7</td>
<td>20.0</td>
<td>7.4</td>
<td>3.1</td>
<td>4.4</td>
<td>1.7</td>
</tr>
<tr>
<td>United States</td>
<td>39.9</td>
<td>8.3</td>
<td>-</td>
<td>14.4</td>
<td>1.4</td>
<td>0.4</td>
<td>1.3</td>
<td>6.7</td>
</tr>
<tr>
<td>1994</td>
<td>38.8</td>
<td>12.5</td>
<td>-</td>
<td>20.6</td>
<td>4.1</td>
<td>1.0</td>
<td>2.2</td>
<td>7.2</td>
</tr>
<tr>
<td>European Union (12)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1980</td>
<td>60.2</td>
<td>1.1</td>
<td>3.9</td>
<td>27.7</td>
<td>9.6</td>
<td>1.3</td>
<td>1.6</td>
<td>1.6</td>
</tr>
<tr>
<td>1994</td>
<td>47.2</td>
<td>0.8</td>
<td>1.9</td>
<td>40.9</td>
<td>5.5</td>
<td>4.5</td>
<td>6.6</td>
<td>0.7</td>
</tr>
<tr>
<td>Japan</td>
<td>22.3</td>
<td>-</td>
<td>6.7</td>
<td>67.4</td>
<td>43.0</td>
<td>3.0</td>
<td>16.4</td>
<td>0.7</td>
</tr>
<tr>
<td>1994</td>
<td>13.8</td>
<td>-</td>
<td>5.9</td>
<td>79.2</td>
<td>17.6</td>
<td>6.6</td>
<td>48.5</td>
<td>0.2</td>
</tr>
<tr>
<td>United States</td>
<td>11.7</td>
<td>6.4</td>
<td>-</td>
<td>79.5</td>
<td>50.8</td>
<td>4.3</td>
<td>4.5</td>
<td>9.2</td>
</tr>
<tr>
<td>1994</td>
<td>8.3</td>
<td>1.6</td>
<td>-</td>
<td>84.4</td>
<td>23.5</td>
<td>11.0</td>
<td>16.1</td>
<td>17.1</td>
</tr>
</tbody>
</table>

Source: OECD (a).

a Hong Kong, China; Republic of Korea; Singapore; Taiwan Province of China.
b Indonesia, Malaysia, Philippines, Thailand.
c Standard International Trade Classification (SITC) 5 + 6 + 7 + 8 - 67 - 68.
d SITC 7.
e SITC 5.
f SITC 65 + 84.
Table 4 further reveals that the growth of developing countries' exports to the European Union, Japan and the United States was not limited to traditional industries such as clothing and textiles. Competitive pressure was strong also in human-capital-intensive sectors such as machinery and transport equipment. Asian developing countries have moved rapidly into sophisticated segments of manufacturing. This development has been indirectly supported by trade policies of industrialized countries, notably in the European Union. Market access for low-cost suppliers was restricted for products considered "sensitive" (e.g., textiles and clothing, iron and steel), so that different factor endowments were partly denied their role in shaping the international division of labour. Developing countries were more or less forced to compete on markets for more sophisticated products. Their chances to do so were enhanced by greater mobility of financial capital and easier access to new technologies since the early 1980s. The changing pattern of imports of the Triad thus provides indications as to the limited effectiveness of trade policy in restricting import competition. As a result of protection granted to ailing industries, part of the adjustment burden has been shifted towards sectors in which advanced economies should possess comparative advantages.

The European Union as a target of globalization strategies

In the era of globalization, worldwide sourcing and marketing have become major parameters of competitiveness by offering cost savings and new sales outlets. The European Union figured as a prominent target in globalization strategies by international investors. The region attracted nearly half of world FDI inflows in 1989-1991, and about 36 per cent in 1992-1995 (table 5). Foreign direct investment stocks held by United States and Japanese investors in the European Union increased relative to their overall outward FDI stocks. The European Union's attractiveness for foreign risk capital was largely because international investors anticipated the completion of the Single Market and its extension to other member countries (Hiemenz et al., 1994). Fears of restrictive European Union trade policies may have induced FDI in some instances, e.g., Japanese investment in the automobile industry, as FDI provided a means to circumvent protectionist fences. However, the main determinant of FDI was one-market integration (both in manufacturing and services) and cost advantages in countries at the European Union periphery - which benefited not only European Union producers but also outside investors. Somewhat ironically, European integration has strengthened the globalization of its major competitors. FDI flows to the European Union should have contributed to the creation of new jobs in European Union economies. However, earlier expectations about the Single Market programme’s role in gaining competitive advantages for domestic industries were not well founded. Opposite effects may happen, if policy makers and entrepreneurs in the European Union consider regional integration to be an alternative to globalization and ignore the effects of fiercer competition on labour markets.

17 For the case of the EU, see also Commission of the European Commission (1993).
18 Comparing 1984 and 1994, the European Union's share in United States FDI stocks increased from 34 to 42 per cent; the respective shares in Japanese FDI stocks amounted to 9 and 18 per cent (OECD (various years) (c)).
19 Hamill (1993, p. 92), however, expects major job losses in Europe as a consequence of TNC restructuring. For a comprehensive assessment of the role of TNCs in generating, displacing or relocating jobs, see UNCTAD-DTCI (1994, chapter IV).
Table 5. Regional distribution of foreign direct investment inflows, 1983-1995
(Percentage)

<table>
<thead>
<tr>
<th>Host countries</th>
<th>1983-88&lt;sup&gt;a&lt;/sup&gt;</th>
<th>1989-91&lt;sup&gt;a&lt;/sup&gt;</th>
<th>1992-94&lt;sup&gt;a&lt;/sup&gt;</th>
<th>1995&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>European Union (15)</td>
<td>30.0</td>
<td>47.0</td>
<td>36.3</td>
<td>35.5</td>
</tr>
<tr>
<td>Japan</td>
<td>0.4</td>
<td>0.7</td>
<td>0.8</td>
<td>0.0</td>
</tr>
<tr>
<td>United States</td>
<td>37.6</td>
<td>24.1</td>
<td>18.0</td>
<td>19.1</td>
</tr>
<tr>
<td>Central and Eastern Europe</td>
<td>0.0</td>
<td>0.5</td>
<td>2.5</td>
<td>3.8</td>
</tr>
<tr>
<td>Developing countries</td>
<td>21.6</td>
<td>18.3</td>
<td>35.0</td>
<td>31.6</td>
</tr>
<tr>
<td>Memorandum:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>World inflows (US$ billion)</td>
<td>91.6</td>
<td>190.2</td>
<td>200.6</td>
<td>314.9</td>
</tr>
</tbody>
</table>

<sup>a</sup> Annual average.
<sup>b</sup> Estimates.

Regionalization versus globalization of European Union investors

The Internal Market programme provoked unprecedented FDI flows among European Union member countries. The intra-European Union share of overall European Union FDI outflows soared from less than one-third in 1985-1987 to more than half in 1991-1994 (table 5). Non-European Union hosts within Europe, also, attracted rising shares in European Union FDI outflows, which can be attributed to the pending widening of European integration. The regional distribution of FDI outflows is consistent with the view that European Union investors focused their attention on the emerging single market.

The increasing regional concentration of FDI outflows of the European Union took place mainly at the expense of the European Union's engagement in North America, whose share in FDI outflows dwindled to 18 per cent in 1991-1994 (table 6). The absolute amount of European Union FDI outflows to North America was cut by half in the early 1990s, as compared with annual average outflows in 1985-1989 (OECD (various years)(c)). Significantly reduced FDI outflows to North America have also been reported by Japan since 1991. In contrast to the European Union, however, the share of North America in Japanese FDI outflows consistently exceeded 40 per cent (table 6).

To some extent, the drastic decline in European Union FDI in North America may be a cyclical phenomenon. However, it could be that European integration has retarded the globalization of European Union investors. By the same token, European Union FDI in Asia remained relatively low, although the economies in this region represented the world economy's growth pole and had emerged as the most competitive suppliers of goods and services. Especially in the dynamic Asian economies, European Union investors have traditionally been underrepresented as compared with Japanese and United States investors. In 1988-1990, for example, South and East Asian economies received less than 2 per cent of total European Union FDI outflows, whereas their share in Japanese and United States FDI outflows amounted to 6.3 and 12.2 per cent (table 6). Although the share of South and East Asian economies in European Union FDI outflows increased in 1991-1994, it remained far below that of Japan and the United States. In absolute terms, annual average FDI flows from the European Union to South and East Asian economies amounted to $4 billion.

---

20 For a detailed analysis, see European Commission and UNCTAD (1996).
which fell considerably short of absolute flows from the United States ($5.3 billion) and Japan ($7.2 billion) (OECD, various years(c)).

Table 6. Regional distribution of FDI outflows of the EU, Japan and the United States,1985-1994
(Percentage and billions of dollars)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrialized countries</td>
<td>87.7</td>
<td>88.9</td>
<td>81.9</td>
<td>67.9</td>
<td>77.1</td>
<td>68.5</td>
<td>64.3</td>
<td>65.9</td>
<td>60.4</td>
</tr>
<tr>
<td>European Union (12)</td>
<td>30.3</td>
<td>51.1</td>
<td>54.3</td>
<td>16.9</td>
<td>20.8</td>
<td>18.6</td>
<td>38.8</td>
<td>41.1</td>
<td>42.6</td>
</tr>
<tr>
<td>Other Europe</td>
<td>3.3</td>
<td>4.2</td>
<td>12.0</td>
<td>0.8</td>
<td>1.3</td>
<td>0.9</td>
<td>5.4</td>
<td>6.5</td>
<td>6.4</td>
</tr>
<tr>
<td>United States and Canada</td>
<td>50.5</td>
<td>29.7</td>
<td>18.0</td>
<td>46.1</td>
<td>48.6</td>
<td>43.5</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Japan</td>
<td>0.6</td>
<td>0.9</td>
<td>0.1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3.1</td>
<td>2.7</td>
<td>2.2</td>
</tr>
<tr>
<td>Central and Eastern Europe</td>
<td>0.1</td>
<td>0.2</td>
<td>3.1</td>
<td>0.0</td>
<td>0.0</td>
<td>0.4</td>
<td>-</td>
<td>-</td>
<td>1.6</td>
</tr>
<tr>
<td>Developing countriesc</td>
<td>9.5</td>
<td>9.1</td>
<td>12.1</td>
<td>32.1</td>
<td>22.9</td>
<td>31.5</td>
<td>36.9</td>
<td>33.7</td>
<td>37.6</td>
</tr>
<tr>
<td>Africa</td>
<td>0.7</td>
<td>1.1</td>
<td>10.0</td>
<td>1.1</td>
<td>1.1</td>
<td>1.2</td>
<td>-0.1</td>
<td>-1.8</td>
<td>0.5</td>
</tr>
<tr>
<td>Latin America</td>
<td>5.6</td>
<td>4.9</td>
<td>5.8</td>
<td>17.9</td>
<td>8.9</td>
<td>10.0</td>
<td>33.0</td>
<td>29.2</td>
<td>35.1</td>
</tr>
<tr>
<td>Middle East</td>
<td>0.6</td>
<td>0.6</td>
<td>0.3</td>
<td>0.2</td>
<td>0.2</td>
<td>0.9</td>
<td>0.4</td>
<td>-0.3</td>
<td>1.3</td>
</tr>
<tr>
<td>South and East Asia</td>
<td>2.2</td>
<td>1.7</td>
<td>4.6</td>
<td>12.7</td>
<td>12.2</td>
<td>18.8</td>
<td>3.5</td>
<td>6.3</td>
<td>10.3</td>
</tr>
<tr>
<td>DAEsd</td>
<td>1.8</td>
<td>1.1</td>
<td>3.0</td>
<td>8.3</td>
<td>9.7</td>
<td>10.0</td>
<td>3.2</td>
<td>5.4</td>
<td>8.0</td>
</tr>
<tr>
<td>Othered</td>
<td>0.5</td>
<td>0.6</td>
<td>1.6</td>
<td>4.4</td>
<td>2.5</td>
<td>8.8</td>
<td>0.4</td>
<td>1.0</td>
<td>2.3</td>
</tr>
<tr>
<td>World ($ billion)</td>
<td>42.8</td>
<td>90.8</td>
<td>87.4</td>
<td>22.6</td>
<td>57.2</td>
<td>38.2</td>
<td>19.8</td>
<td>28.8</td>
<td>51.4</td>
</tr>
</tbody>
</table>

Source: OECD (various years) (c).

- a Annual average.
- b Without Greece and Ireland.
- c Including Mexico and Turkey. Data for particular groups of developing countries are sometimes incomplete.
- d The following countries are included in the source under "dynamic Asian economies": Hong Kong, China; Malaysia; Republic of Korea; Singapore; Taiwan Province of China; Thailand.
- e Including China, India, Indonesia and the Philippines.

Other developing regions, such as Latin America, also, attracted a relatively small share of European Union FDI outflows, as compared with their share in Japanese and United States FDI. In other words, developing countries as a whole received less attention from European Union investors than from major competitors within the Triad. This suggests that the latter made better use of the chances for cost savings through global sourcing, and of profit opportunities through penetrating newly emerging markets.

Relatively weak efforts towards globalization by European Union companies, measured by Japanese and United States standards, can be attributed at least partly to economic policies in the

---

21 This is also true when absolute FDI outflows to all developing countries are compared. In 1985-1994, absolute flows from the European Union were consistently below flows from either Japan or the United States. All members of the Triad have in common, however, that absolute FDI outflows to all developing countries were higher in 1991-1994 than in 1985-1987. This indicates that the increased share of European Union hosts in overall FDI outflows of the European Union, Japan and the United States was due to additional FDI, rather than FDI diversion at the expense of developing countries.
European Union. Direct government involvement, e.g., in the automobile industry, and financial incentives to locate production facilities in backward regions of European Union member countries have discouraged globalization. Trade restrictions, e.g., the export restraint agreement on Japanese cars, have delayed the adjustment and restructuring of European Union companies. At the same time, such restrictions provided a further stimulus to globalization of foreign competitors, as FDI offered a means to circumvent export restraints.

Recent policy initiatives by the European Commission cannot solve this dilemma. The attempt to support coordinated efforts by European Union manufacturers and input suppliers to strengthen their innovative capacity and competitiveness through joint R&D projects, training programmes and the dissemination of new production techniques is likely to remain ineffective for two reasons. First, the targeting of policy incentives is becoming increasingly difficult. As more non-European Union competitors are operating in the European Union, the number of interlinkages among producers of different origin grows. Second, closer cooperation among European Union companies is insufficient to meet the global challenge of fiercer competition on European Union markets. Regionalization is no promising alternative to going global in view of the greater cost efficiency and innovativeness of traditional competitors, notably of Japanese producers, and the emergence of new competitors, especially in Asia.

**Conclusion: what policies may work?**

Economic policy makers are facing a major dilemma in the era of globalization. Competitive pressures are mounting as international investors benefit from an increasing number of options to realize cost savings and to exploit profit opportunities on a worldwide scale. The implication of enterprises being less constrained in their strategic choices is that the economic autonomy of governments is shrinking; the scope of economic policy making declines. In particular, the effectiveness of traditional means to protect non-competitive factors of production is seriously eroded. The exceptionally high unemployment in the European Union, especially of low-skilled workers, indicates that policy constraints are binding not only at the national level, but also at the level of large regional integration schemes. It follows that regionalization is insufficient to meet the competitive challenges stemming from low-cost labour areas and advanced economies striving for technological leadership.

There appears to be a growing awareness that an impaired competitiveness of European Union industries and the failure to adapt satisfactorily to structural change are at the heart of labour market problems. The European Union Commission's White Paper "Growth, Competitiveness, Unemployment", published in December 1993, and the OECD Jobs Study (OECD (various years) 2000). It can, of course, be argued that the targeting of incentives on European Union companies is unreasonable in any case. Rather than supporting the competitiveness of European Union companies, economic policy should aim at improving the European Union's attractiveness for domestic and foreign investors. FDI inflows may well contribute to an improved world market performance of European Union economies.

---

22 It can, of course, be argued that the targeting of incentives on European Union companies is unreasonable in any case. Rather than supporting the competitiveness of European Union companies, economic policy should aim at improving the European Union's attractiveness for domestic and foreign investors. FDI inflows may well contribute to an improved world market performance of European Union economies.

23 For example, the average productivity of assembly plants of European car producers was only half the productivity of their competitors in Japan (Womack et al. 1990). The unit cost reductions of about 5 per cent expected from the Internal Market programme were thus insufficient to restore competitiveness.

24 The loss of national economic autonomy is also mentioned by UNCTAD (1994) and in several contributions to the volume edited by Bailey et al. (1993). Renshaw (1993, p. 314), for example, notes a "'regulatory deficit' in the sense that national labour market legislation and institutions are becoming increasingly emasculated".
Protectionist "innovations": a counterproductive strategy

The limited effectiveness of conventional protectionist measures has led to an increasing demand for stricter and more sophisticated protection. Examples include trade-related investment measures (TRIMs) such as local content requirements imposed on foreign investors, and a multilateral harmonization of production standards (e.g., with respect to social and ecological production conditions). But these measures are counterproductive, because:

- Although TRIMs may render the globalization of foreign competitors more difficult and costly, the experience with fairly restrictive local content requirements in the case of FDI of Japanese car manufacturers in the European Union indicates that TRIMs cannot halt the trend towards globalization. Rather, they may induce follow-up FDI by foreign input suppliers. Even if the restrictions imposed on FDI were prohibitive, evasion would be possible by referring to non-equity arrangements such as licensing, cooperation agreements and research and development partnerships.

- Common production standards may impede lower-income countries’ process of catching up, if developing countries are required to adhere to the more demanding social and ecological standards of industrialized economies. This may ease the adjustment burden of ailing industries for a while, but only at the cost of technologically more advanced industries. The latter will suffer from lower demand for their products in newly emerging markets and from upgrading of developing countries' exports if locational characteristics are denied their role in shaping the international division of labour.

In summary, innovative protectionist measures resemble more traditional means: they lead to allocative inefficiency and structural rigidity in the protected economies, while the incentives to increase productivity through technological innovation are weakened.

Industrial policy: high costs, uncertain returns

Governments are inclined to tackle unemployment and insufficient innovativeness by selective industrial policies. The drawbacks of high and persistent subsidies granted to ailing industries are similar to those mentioned in the context of protectionism: non-favoured sectors have to pay the bill and their competitiveness deteriorates owing to higher input prices or rising taxes. These costs should no longer be ignored.

The more recent experience of the European Union with industrial targeting at high-technology industries is not encouraging either. Typically, huge fiscal outlays failed to produce a significantly improved world market performance of the industries promoted.25 This suggests that the underlying assumption, namely that the technological leadership of Japanese competitors is due to the fact that they enjoy the advantages of an unlevel playing field, is not valid. Contrary to conventional wisdom, a disproportionate amount of Japanese industrial policy targeting obviously occurred in low-growth

---

25 For a more detailed discussion of this issue, see Nunnenkamp et al. (1994).
sectors, and productivity was not enhanced as a result of industrial policy measures (Beason and Weinstein, 1996).

Government attempts at picking the winners are inherently flawed for various reasons: governments face serious constraints in identifying future growth industries; the targeting of support schemes becomes increasingly difficult under conditions of globalized production; lobbying by large companies is encouraged, while small innovative enterprises will typically suffer from discrimination; and, finally, retaliation by foreign trading partners is possible.

**Wage flexibility: buying time efficiently**

What can policy makers do about unemployment if trade and industrial policy interventions are counterproductive? In the short run, there is no alternative but to accept that the trade-off between employment and wages has become much more pronounced in the era of globalization. The United States example shows that the employment chances of low-skilled workers improve considerably if relative wages are flexible. Trade unions, especially in the European Union, have to agree to higher wage flexibility and more wage differentiation. Governments have a major role to play in order to overcome incentive problems that have characterized wage bargaining in the past:

- Generous unemployment benefits need to be revised to the extent that they provide strong disincentives to accept offers of lower-paid job.

- Governments must be credibly committed not to make up for adverse employment effects of collective wage agreements.

  Flexible wage policies help to ease employment problems in industries under heavy competitive pressure. They cannot halt globalization and the ensuing devaluation of low-skilled labour in advanced economies, but they provide a cushion until a long-term strategy becomes effective.

**Human capital formation: the long-term therapy**

Low-skilled labour having been identified as the major issue, it follows that a long-term strategy of tackling the causes of impaired competitiveness must focus on human capital formation. Advanced economies have to strengthen their comparative advantage in skill-intensive sectors by improving the qualifications of the workforce. As globalization implies a permanent change of job requirements, human capital has to be built in a way that allows for flexibility and mobility of the workforce. For example, existing systems of vocational training, including the widely admired German apprenticeship system, may need major revisions, as the lifecycle of vocational skills is shortened by globalization.

While specific training may be largely left to the market, there is reason for governments to support human capital formation, especially by improving the quality of basic education, where the social returns are particularly high (Psacharopoulos, 1993). A larger stock of skilled labour delivers social benefits in terms of greater flexibility in responding to economic change. However, reforming the system of education and training takes considerable time to strengthen the competitive position in skill-intensive sectors. It is exactly because of these time lags that reforms should no longer be postponed.
References


— (various years) (e). Indicators of Industrial Activity (Paris: OECD).


The Multilateral Agreement on Investment: the case for a multi-speed convergence approach to liberalization

Heinz-Josef Tüselmann*

With particular reference to the rollback of restrictive measures, this article proposes a new liberalization approach to the Multilateral Agreement on Investment (MAI). It develops a multi-speed convergence model which should bring about higher levels of liberalization and a more level playing field compared with the traditional OECD rollback approach. In the light of countries’ variations in approaches to FDI policy, the model incorporates a twin-track negotiation process, the combination of several negotiation procedures and a multi-speed implementation mechanism in order to raise rollback packages above the lowest common denominator. At the same time, it entails incentives to encourage rollback beyond the agreed packages, especially in countries with more liberal FDI approaches. However, these incentives are designed in such a way that the resulting knock-on and feedback effects on other members set in motion a convergence process. In the long run, this process culminates in the highest feasible degree of liberalization in all MAI countries and a level playing field across the MAI area. Furthermore, the article points out caveats, outlines possible avenues to accommodate provisions in other international agreements and maps out areas for further research.

Introduction

In terms of liberalization, a fundamental objective of the Multilateral Agreement on Investment (MAI) -- a free-standing agreement being negotiated in the Organisation for Economic Co-operation and Development (OECD) -- is to set the highest possible standards, with the ultimate aim of free market access and full de facto national treatment (pre- and post-establishment level). The terms of reference of the MAI call for a top-down approach to liberalization, according to which the only non-conforming measures permitted should be those listed by the contracting parties when adhering to the Agreement. They also envisage that these measures be subject to broad rollback commitments. This raises the issue of which rollback approach would be the most effective for achieving progressive liberalization. The views of OECD countries regarding this matter are still divided. However, it seems questionable whether the OECD’s multilateral approach, which promotes rollback by means of country examination, peer pressure and non-binding recommendations, would constitute a state-of-the-art liberalization mechanism. A somewhat more sophisticated approach may be required, based on best practices in international forums (including aspects of the OECD’s

---

* The article is based on a research project undertaken during the author’s secondment to the Foreign Direct Investment Division of the German Ministry of Economics. The author is grateful to R. Zimmer and J. Karl, Head and Deputy Head, respectively, of the Foreign Direct Investment Division of the German Ministry of Economics for their comments and constructive criticism.

1 For an overview on the elements and features of the MAI, see OECD Report (1996b) and Witherell (1996). For details on the liberalization elements and features, see Ley (1996) and OECD (1996d).
approach) and supplemented by fresh components beyond those found in international agreements. The aim of this article is to contribute to the ongoing debate in this respect.

After outlining basic rollback models, summarizing the current OECD rollback provisions and evaluating the success of the OECD rollback approach, this article examines the rationale for a new approach and highlights the options currently being discussed. With particular reference to the rollback of non-conforming measures, a multi-speed convergence model that would contribute to the highest feasible degree of liberalization across the MAI area is developed. As some of its elements may be at temporary variance with provisions of other international agreements, possible avenues to accommodate such provisions are outlined. The concluding part highlights caveats and problems in adapting the model to the MAI framework.

**The current OECD rollback approach: features and experience**

There are several basic models for the rollback of restrictive measures. These contain a number of variations. One basic pattern is based on a top-down approach to liberalization (as, for instance, in the OECD). The contracting parties subscribe to the ultimate liberalization objectives of the agreement and enter into undertakings concerning the elimination of restrictive measures. They are, however, allowed to qualify these undertakings by lodging reservations and exceptions. These are gradually to be removed through a multilateral process of regular reviews and country examinations in the intergovernmental committees of the OECD. Under this approach, country examinations do not involve negotiations in the sense of exchanging concessions, but rely on interaction through consultation and peer pressure. Conversely, a bottom-up approach to liberalization (as, for instance, in the World Trade Organization (WTO)) starts with an initial agreement that contains a few general obligations, such as most-favoured-nation (MFN) treatment, and provides the benchmark towards which the contracting parties agree to proceed. Each country makes an offer and negotiates the liberalization obligations it will undertake in its “schedules”. The content of these schedules is the result of trade-offs and exchanges of concessions on a bilateral request/offer basis, but are applicable to all members as a result of the MFN treatment obligation. Negotiation rounds are conducted at regular intervals during which the contracting parties exchange their offers for further advances towards the elimination of restrictive measures.

Although the OECD’s National Treatment Instrument (NTI) is not legally binding, in contrast to the OECD Codes, and the commitments under the Codes and the NTI are of a different nature, together they uphold the broad policy aims of right to establishment, free transfer of funds, national treatment and non-discrimination/MFN treatment (for a critical assessment, see Brewer and Young, 1996). The OECD instruments have an institutional obligation for progressive liberalization, with specific rules and procedures to promote the gradual rollback of existing reservations (Codes) and exceptions (NTI). Reservations/exceptions by countries are continuously monitored and scrutinized. The Joint Working Group of the Committee on Capital Movements and Invisible Transactions (CMIT) and the Committee on International Investment and Multinational Enterprises (CIME) conduct unified periodic country examinations under both the Codes and the NTI. During this process, reservations/exceptions by a country are subject to critical assessment by its peers. The examination concludes with a report to the OECD Council. On the basis of that report, the Council
may issue a recommendation for removal or reduction of the scope of measures which, in the opinion of the country’s peers, are seen as unjustified or unnecessarily broad. However, a Council recommendation is non-binding and cannot be adopted against the wishes of the country directly concerned. Furthermore, there are no enforcement procedures regarding the implementation of the recommendations. Thus, the success of this rollback approach depends to a large extent on shared perspectives, informal persuasion and the strength of the members’ commitments.

Although there has been a significant rollback of restrictive measures over the years (Houde, 1992; Ley, 1996; UNCTAD, 1996, chap. VII), it is not possible to ascertain to what degree this has been achieved as a direct result of the OECD’s rollback mechanism. To an extent, this rollback may have been a concomitant of the general reorientation of national economic policies along a trajectory of deregulation, privatization and demonopolization (Fatouros, 1996; Robertson, 1996). Thus the outcomes of the OECD multilateral approach may have institutionalized, in part, what countries have been willing to liberalize anyway, rather than being a reflection of the strength of peer pressure. Nevertheless, progress in the rollback of restrictive measures varies across countries and industries (see Brewer and Young, 1996; UNCTAD, 1996, chap. VII). By the end of 1996, some 500 exceptions, reservations and reciprocity measures were operational throughout the OECD area. Of these, fewer than 10 per cent were horizontal measures and more than 90 per cent were industry-specific measures. Whereas most countries apply relatively few measures in the manufacturing sector, the services sector accounted for approximately two-thirds of all industry-specific measures. Of these, over half were employed in transport industries (especially in air and maritime transport) and one-third in financial services (especially in banking and insurance). Roughly one-sixth of all industry-specific measures were found in the primary sector and natural resources. Furthermore, one-tenth of the industry-specific measures were of a reciprocal nature, and half of these were applied in banking and insurance. Thus, despite the rollback that has occurred, there remains a substantial volume of restrictive measures that have to be removed. This is especially true in industries in which foreign-direct-investment (FDI) flows are of greatest significance -- either currently or potentially -- such as banking, insurance and air transport (Brewer and Young, 1996, p. 30).

Rationale for a new approach and options

A number of factors raise doubts about the effectiveness of relying solely on the current OECD rollback provisions:

- The MAI has a broader coverage as compared with the current legally binding OECD instruments (OECD Codes). The extension of the MAI into new areas of liberalization by the transformation of the NTI into legally binding obligations and the inclusion of certain provisions on the “new issues” (monopolies, performance requirements etc.) that currently fall partially or totally outside the purview of the OECD instruments enhances the objective of liberalization. However, this would probably also lead to broad country-specific reservations, which in turn would be subject to the MAI disciplines, including the rollback of such non-conforming measures over time. Consequently, there will be a need to deal with an increase in the volume and complexity of non-conforming measures. However, the number and intensity of reservations that may be entered depend inter alia on the extent to which the MAI curtails the scope for entering

---

3 Based on the author’s analysis of an inventory compiled by the OECD for the MAI negotiations.
reservations, the degree to which it strengthens commitments at the sub-national level in federal States, and the definition of investment adopted.

- The openness of accession to the MAI by non-OECD countries raises the prospect of an increased future membership, although the extent remains speculative at this juncture (Brewer and Young, 1995). It could result in a more heterogeneous membership in terms of economic development and FDI policy orientations, a trend already apparent since the OECD accessions of the 1990s. The relative success of the peer-pressure approach in the past can, at least in part, be attributed to a relatively confined and homogeneous OECD membership. But in the future this method in its current form may be too weak to prevent lowest common denominator outcomes, especially in conjunction with an increased volume and complexity of non-conforming measures.

- Increased competition for FDI and global economic integration at macro and micro levels have inevitably accentuated the differences in FDI policy regimes among countries and have contributed to the liberalization of FDI policies (OECD, 1996; UNCTAD, 1995, chap. IV). Although a country’s rollback of restrictive measures is normally captured in the multilateral framework via the MFN treatment discipline, this does not ensure a level playing field in the form of rollback of such measures across the MAI area. Despite more widespread liberalization in recent years, the remaining imbalances in FDI regimes seem to have reduced the tolerance of certain countries as regards persisting restrictions. A tendency to resort to unilateral measures, including reciprocity and conditional national treatment, has been observed (OECD, 1992; Witherell, 1995). Nevertheless, even stronger disciplines and a narrower area of discretion in the MAI, as compared with the OECD instruments, may not be sufficient to entirely prevent such measures unless coupled with a rollback mechanism that ensures a more level playing field in the long run.

- There is no guarantee that the process of increasingly liberalized FDI policies observed since the mid-1970s will continue in the future (Houde, 1992; Witherell, 1996). In the light of the structural adjustments engendered by increasingly global economic activities, the initial effect of inward FDI may be negative (temporary displacement of capital and labour), whereas the dynamic benefits (increased competitiveness of indigenous resources and capabilities, enhanced productivity growth etc.) will only be reaped in the longer term (Alter, 1995; Dunning, 1994; UNCTAD/World Bank, 1994, chap. II). Hence, governments may, for political reasons, become less willing to submit remaining restrictions to rollback disciplines if not offered some trade-offs to make this politically more acceptable to their domestic constituencies (voters, domestic business community).

In sum, these developments would call for a new rollback approach, capable of:

- ensuring balanced rollback commitments beyond the lowest common denominator, but simultaneously allowing for a degree of flexibility with respect to rollback implementation within the defined limits of formal implementation machinery;
- promoting unilateral rollback beyond agreed commitments, whilst capturing it in the multilateral framework in such a way that the knock-on effects of unilateral liberalization translate progressively into multilaterally agreed rollback commitments, thus achieving a high degree of convergence across the MAI area.
Rollback may be achieved in various ways (see the previous section; Ley, 1996; Smith, 1996), including through:

- agreed timetables contained in country reservations, specifying a future date when non-conforming measures are to be removed or made more limited (“sunset” of “phase-out” clauses);
- obligations to adjust country-specific reservations to reflect any new liberalization measures;
- the OECD’s multilateral peer pressure approach;
- successive rounds of negotiations in which rollback results from trade-offs and exchanges of concessions on a bilateral request/offer basis.

Whereas most European countries favour an improved multilateral peer-pressure approach, the United States and some other countries, such as Canada, press for the request/offer method. This is resisted by the former group because it may put smaller countries in particular in a relatively weak bargaining position. However, the above approaches are not mutually exclusive and can be combined in different ways. It may thus be possible to select certain elements from the several approaches that are deemed beneficial to promote liberalization, and, if necessary, improve them. New components can also be added or combined with a rollback mechanism that would best satisfy the requirements of an effective rollback approach (specified above).

A multi-speed convergence model

The model developed in accordance with the findings of the preceding analysis is based on the following elements:

- successive liberalization rounds;
- combination of several negotiation procedures;
- commonly agreed liberalization packages extending beyond lowest common denominator outcomes;
- multi-speed implementation phases (“convoy” principle);
- temporary MFN exemptions for a limited period of time and a defined set of measures.

Figure 1 provides a diagrammatic presentation of the model.

The analysis that follows is subject to a number to qualifications:

- The discussion on non-conforming measures and rollback packages refers only to quantitative aspects. Qualitative issues, such as national variations and the comparability of the normative intensity, or the stringency of non-conforming measures, are left out. However, these important issues warrant future research, with a view to refining the model.

- The outcome of a rollback negotiation is profoundly influenced by the bargaining power and strategies of the parties involved. These issues call for a detailed examination and will not be addressed here. They form an agenda for future research.
Figure 1. Multi-speed convergence model

The clustering of countries into categories, such as “very liberal” or “less liberal”, refers to relative degrees of liberalization and industry-specific terms. Whether a country’s FDI policy approach is considered to be very liberal or less liberal is contingent on the approaches of the other MAI parties. Furthermore, a country’s classification may vary according to the industry under consideration, reflecting the fact that a country may have a very liberal FDI policy approach in one industry, but a less liberal one in another industry. Future research will have to address the issues connected with the operationalization of such clustering within the context of the MAI.

Notes
LR1, LR2, LR3 = Liberalisation Round (Agreed Set of Measures).
A = shortened implementation period, B = standard implementation period, C = longer implementation period.
Temporary MFN exemption after shortened implementation period until the end of standard implementation period.
Temporary MFN exemption for additional liberalization (beyond Agreed Set of Measures) applicable beyond standard implementation period.
Degree of liberalization concerning Agreed Set of Measures corresponds with that of Median Liberal Countries after the end of longer implementation period.
Increasing liberalization dynamic.
Decreasing liberalization dynamic.
Acceleration of catching-up process.
Convergence trend of Very Liberal Countries towards Median Liberal Countries.
Convergence trend of Less Liberal Countries towards Median Liberal Countries.

- The clustering of countries into categories, such as “very liberal” or “less liberal”, refers to relative degrees of liberalization and industry-specific terms. Whether a country’s FDI policy approach is considered to be very liberal or less liberal is contingent on the approaches of the other MAI parties. Furthermore, a country’s classification may vary according to the industry under consideration, reflecting the fact that a country may have a very liberal FDI policy approach in one industry, but a less liberal one in another industry. Future research will have to address the issues connected with the operationalization of such clustering within the context of the MAI.
Liberalization rounds and negotiations

Rollback is accomplished via liberalization rounds. These start with cross-sectoral measures and continue thereafter on a sectoral basis (e.g., services), with each sectoral round structured along sub-sectoral/industry lines (e.g., insurance). (To reduce complexity, the model is presented with reference to sectoral rounds only.) Rounds subsequent to the initial ones seek to ensure progressive liberalization (see below). In contrast to the OECD’s modus operandi of dealing with non-conforming measures across the board on a country-by-country basis, negotiations here centre on the liberalization of specific measures across the MAI area. The objective is to arrive at a commonly agreed, binding rollback package on non-conforming measures to be removed, or made more limited, for each industry covered in the sectoral round in question. The result should be a level playing field among MAI members with regard to the measures encompassed in the accord, although the scope of such a level playing field will be determined by the volume of measures covered. Whether a particular measure is included in the package depends on the consent of each of the countries that apply this measure. Thus, a complex configuration of negotiation procedures, implementation mechanism, trade-offs and incentives will be necessary not only to create a level playing field for certain measures, but also to attain the most extensive liberalization package feasible.

Rollback negotiations are conducted on a two-tier track. Firstly, in plenary sessions, members’ non-conforming measures in the industry concerned are reviewed, with liberalization commitments resulting from peer pressure being translated into commonly agreed rollback obligations. Succeeding the multilateral venue, the remaining restrictions are then subject to rollback negotiations on a request/offer basis, with the objective of increasing the volume of measures to be liberalized. The outcome of these bilateral (or even plurilateral) structured negotiations will be reconsidered in plenary sessions, with a view to their incorporation into the final commonly agreed package. However, it will be important to strike the right balance between these negotiation approaches in order to reconcile the divergent positions of the MAI contracting parties on this issue.

Alongside the negotiations on the rollback package, a timetable for implementation (in each industry) is to be agreed. Because of the binding character of the package, the failure of a country to meet its liberalization obligations within the predetermined time limit would be subject to the dispute-settlement mechanism of the MAI. Succeeding rounds for progressive liberalization are to take place at the end of the implementation phase of the preceding round.

Commonly agreed liberalization packages and multi-speed liberalization

Despite improved peer pressure and the incorporation of request/offer methods, the result of negotiations may still not go beyond the lowest common denominator, implying a significantly underutilized liberalization potential. This is because the rollback package ultimately includes only unanimously agreed measures. Although it may be unfeasible to attain a rollback package (Ideal Set of Measures) that reflects the potential liberalization commitment of countries with very liberal FDI policy approaches (Very Liberal Countries (VLCs)), it should be possible to arrive at a package that goes beyond a lowest common denominator package (Minimum Set of Measures) as expressed by the liberalization commitment of countries with more restrictive FDI policy approaches (Less Liberal Countries (LLCs)). By encompassing countries’ variations in their willingness to liberalize in trade-offs between flexibility as regards the implementation phase and increases in liberalization
commitments, it should be feasible to conclude a more extensive rollback package. This package (Agreed Set of Measures) reflects the liberalization commitment of the majority of countries whose FDI policy approaches fall between the VLC and LLC clusters, namely, the Median Liberal Countries (MLCs). In the absence of such trade-offs, several of the measures on which the MLCs would have been able to agree would not be covered by the Agreed Set of Measures rollback package because of the resistance of LLCs. At the same time, incentives would be provided to entice VLCs to liberalize their measures covered by the Agreed Set of Measures package ahead of schedule, and to carry out unilateral liberalization of those measures that have not been incorporated into the Agreed Set of Measures package. These measures are the ones that VLCs might have been willing to submit to the rollback disciplines if all MAI members had been able to agree on an Ideal Set of Measures package.

To ensure that the negotiations conclude with an Agreed Set of Measures package, the agreement would provide for multi-speed implementation. For each group of countries there would be agreement on distinct implementation periods (figure 1). The standard implementation phase would apply to the MLCs, that is the majority of countries which are the focal point and core group in this model and which would have been able to agree on all the measures in the package even in absence of temporal concessions.

In order to increase the liberalization commitments of LLCs beyond the lowest common denominator, they would be granted a longer implementation phase as a *quid pro quo* for agreeing to the inclusion of measures in the liberalization package that they would have resisted otherwise (figure 1). Temporal concessions may help to reduce protectionist pressures on their governments from special interest groups and offset asymmetries in national FDI policy processes. Subscribing to an Agreed Set of Measures package -- resulting in greater FDI liberalization in LLCs than might have otherwise occurred -- could provide an additional stimulus for liberalization and deregulation in other economic policy areas, which in turn would enhance the economic benefits of FDI (UNCTAD, 1996, chap. V; UNCTAD and World Bank, 1994, chap. II). Additionally, between the end of the standard implementation phase and the end of the longer implementation phase, LLCs would enjoy a temporary “free-ride”, since the benefits of other countries’ liberalization (VLCs and MLCs) would be extended to them on the basis of the MFN treatment obligation of the MAI. However, at the end of the longer implementation phase, LLCs would have reached the same level of liberalization as MLCs as regards the measures covered in the Agreed Set of Measures package (figure 1). Hence, the degree of liberalization in the whole MAI area will, at that juncture, be higher than in the absence of a multi-speed provision.

The longer implementation phase overlaps with negotiations of successive rounds for further liberalization (figure 1). Though still in the process of implementing the rollback of measures covered by the Agreed Set of Measures package of the preceding round, LLCs have yet to enter the present round’s negotiations for new rollback commitments. Therefore, LLCs would have to commit themselves not to hamper the conclusion of the Agreed Set of Measures package in the present round on grounds of an implementation backlog. Although conformity with such commitment is difficult to ascertain, peer pressure in the negotiation process should ensure, at least, some compliance.

The potential liberalization commitments of VLCs, in terms of volume of measures covered and speed of implementation, remain underutilized in the Agreed Set of Measures package and the
standard implementation period, as these are geared to the core group (MLCs). Very liberal countries may have been willing to agree on an Ideal Set of Measures package, and thus concede a further narrowing down of the non-conforming measures that are subject to partial rollback and the submission of additional measures to the liberalization package. Furthermore, they may have been willing to rollback their measures covered by the Agreed Set of Measures package more swiftly. Concerning the latter, a shortened implementation period could be established (figure 1). However, countries may shy away from this avenue because of the free-rider problem after the shortened period. At the end of that period, VLCs would have completed the rollback of their restrictive measures in the Agreed Set of Measures package, thus implying that these measures have been liberalized between the countries in this group. But, the MFN treatment obligation requires them to extend the benefits of their liberalization to all other MAI members as well, which will complete the rollback of their measures only at a later stage. Thus, other MAI countries enjoy a temporary “free-ride”. Very liberal countries may therefore choose to implement their liberalization obligations within the standard implementation phase and thus adopt a *de facto* MLC “status”. To encourage countries to opt for the fast lane, such a move would be coupled with the granting of a temporary exemption from the MFN treatment obligation after the end of the shortened implementation phase until the end of the standard implementation phase (figure 1). Because of the potential free-rider problem as regards non-MAI countries, the benefits of the VLCs’ liberalization during this time span would not have to be extended to either non-VLC MAI members or non-MAI countries. Of course, the rollback of reciprocity measures is not exempted, since that would nullify the rollback. The MFN treatment exemption would automatically expire at the end of the standard implementation phase, since MLCs would have reached by then the same degree of liberalization (in relation to the Agreed Set of Measures) as VLCs (figure 1). The controversy regarding the free-rider issue and the conflicts with MFN treatment provisions in other international agreements is not discussed until the model has been presented.

To spur the rollback of measures not captured by the Agreed Set of Measures package -- in the light of the free-rider problem -- an exemption to the MFN treatment obligation would also be granted for countries’ unilateral liberalization of restrictive measures (excluding reciprocity measures) that fall outside the Agreed Set of Measures package (figure 1). It would be aimed in particular at facilitating a fuller exploitation of VLCs’ potential liberalization commitments. It would expire automatically once the measures have been included in the Agreed Set of Measures liberalization packages of succeeding rounds, and have consequently been rolled back throughout the MAI area. However, until then, the benefits of unilateral liberalization would only have to be extended on a reciprocal basis to other MAI members and non-MAI countries. Since the provisions for unilateral liberalization are applicable to all measures beyond the current Agreed Set of Measures package, the definition of VLCs has to be broadened to include countries that are not operating any measures contained in the current rollback package, but apply non-conforming measures that fall outside the coverage of that package. Furthermore, the provision for MFN treatment exemption may prompt some MLCs into unilateral liberalization. Figure 2 summarizes the process of country classification.
Figure 2. Country classification

Agreements on rollback of restrictive measures

- Liberalization package: measures subject to full or partial rollback
  - Multilaterally agreed measures
  - Liberalization potential
    - Multilateral: For successive liberalization rounds
    - Unilateral: For additional liberalization beyond multilaterally agreed measures
  - Implementation position
    - Countries applying restrictive measures that have been covered by the Agreed Set of Measures rollback package
    - Countries without rollback obligations but which operate restrictive measures not covered by the Agreed Set of Measures rollback package
    - Countries without any non-conforming measures in the industry concerned

- Measures not covered in liberalization package
  - Measures covered in liberalization package, but remaining restrictions as result of partial rollback

- Measures covered in liberalization package

Liberalization potential

Implementation of the Agreed Set of Measures

Unilateral liberalization beyond the Agreed Set of Measures package
Convergence dynamic

The inherent soft pressure/knock-on effects of this model and the consequent feedback effects (figure 1) should result in:

- all countries belonging to the core group;
- the attainment of the highest feasible degree of liberalization;
- the obsolescence of provisions for temporary exemptions from the MFN treatment obligation.

The Agreed Set of Measures packages and unilateral liberalization, mainly carried out by VLCs are interlinked in a dynamic manner. The possibility of invoking an exemption from the MFN treatment obligation for countries’ unilateral liberalization of measures which are not covered by the Agreed Set of Measures package, implies that these countries can discriminate against those countries that maintain such measures as long as these measures are not included in future rollback packages. This will exert pressure on the latter countries (in particular, MLCs) to increase their willingness to liberalize, and to submit these measures to the liberalization package of the succeeding negotiation round so that they are rolled back across the MAI area. This would then lead to the automatic expiry of the exemptions from the MFN treatment obligation enjoyed by countries that had previously rolled back these measures on a unilateral basis. The extent to which unilaterally liberalized measures are captured in the multilateral framework would also depend on the previously outlined trade-offs for those LLCs that apply these measures. However, it can be assumed that not all unilaterally liberalized measures will be immediately covered by the Agreed Set of Measures package of the succeeding round, and VLCs in particular may carry out further unilateral liberalization after the succeeding round. This will exert pressures particularly on MLCs to further enhance their liberalization commitments in successive rounds (figure 1). The resulting Agreed Set of Measures packages cover increasingly the rollback of measures which originally would have had been attributed to the potential liberalization commitment of VLCs, rather than MLCs. Thus, the Agreed Set of Measures packages will increasingly incorporate Ideal Set of Measures.

On the one hand, the liberalization dynamic of MLCs is set to increase during this process. On the other hand, the liberalization dynamic of VLCs may tend to decrease. Since the Agreed Set of Measures packages of each successive round bring about an increasingly higher level of liberalization across the MAI “area”, the scope for VLCs to carry out unilateral liberalization (and invoke exemptions from the MFN treatment obligation) is reduced during this process from round to round. The increasing liberalization dynamic of MLCs and the decreasing liberalization dynamic of VLCs set in motion a convergence process during which Agreed Set of Measures packages progress gradually to Ideal Set of Measures packages. Thus, at the end of the process, the MLCs’ degree of liberalization (with regard to non-conforming measures) will have converged with that of the VLCs.

The commonly agreed Agreed Set of Measures rollback packages, the successive incorporation of unilateral liberalization into these packages, as well as the liberalization pace of MLCs, all exert pressures on LLCs that lead to a catching-up process of the latter relative to MLCs (figure 1). Amongst others, the following effects are of particular relevance:

- The previously discussed implementation backlog of LLCs at the start of a successive liberalization round may spur their efforts to complete the implementation of the rollback obligations before the end of the longer implementation phase.
• The psychological effect of exclusion from the dynamic core and being clustered at the periphery of the MAI group may encourage an increased willingness to liberalize in order to “qualify” as MLC. This effect is more or less comparable with the endeavours of those European Union countries that do not fulfil the Maastricht criteria, and are currently not considered as belonging to the hard core of countries that will form the prospective European Monetary Union.

• The knock-on effect of VLCs’ unilateral liberalization on MLCs to capture these measures in future Agreed Set of Measures packages will also feed back to LLCs. During the rollback negotiations, MLCs will heighten their pressure on LLCs to submit such measures to the liberalization package. The MLCs’ increased willingness to liberalize, and the subsequent endeavours to incorporate the VLCs’ unilaterally liberalized measures in the Agreed Set of Measures package, will thus have a knock-on effect on LLCs, causing them to increase their liberalization commitments.

• As discussed previously, the temporal concessions and the subscription to an Agreed Set of Measures package may provide an additional stimulus for the deregulation/liberalization process in the domestic economies of the LLCs, which in turn may yield greater economic benefits from FDI. This may encourage LLCs to accelerate the liberalization of their FDI regimes within the multilateral framework.

The combination of these effects gives rise to a convergence of the degree of liberalization by LLCs and MLCs. However, since the MLCs’ degree of liberalization would be converging with that of VLCs, LLCs would actually be converging with the liberalization level of VLCs. Compared with the original scenario under which MLCs represent the core, and the rollback package (Agreed Set of Measures) reflects their willingness to liberalize, the convergence process culminates in all three groups configuring the core group. However, the rollback package reflects the VLCs’ willingness to liberalize (Ideal Set of Measures). In the long run, the soft pressure/knock-on and feedback effects may bring about the highest feasible degree of liberalization (with regard to the rollback of non-conforming measures) and a level playing field in the MAI area.

However, political realities may raise some doubts about the degree to which this outcome can be realized. The incentive structure, the trade-offs, as well as the soft pressure/knock-on and feedback effects, may be less forceful than has been assumed so far, and/or may work more unevenly between countries within the same group. For example, it could turn out that the commonly agreed liberalization package does not lie beyond the lowest common denominator to the extent that has been assumed here. The extent of the rollback package in a particular industry is largely contingent on the strength of peer pressure in the twin-track negotiation process, and on the bargaining position, power and strategy of those countries that apply non-conforming measures in that industry. Furthermore, not all non-conforming measures that have been unilaterally liberalized will necessarily be incorporated into liberalization packages during successive rounds. As long as at least one country that applies such measures resists its rollback, it cannot be included in the commonly agreed package. Thus, it would be important to build in a maximum deviation period from the MFN treatment obligation in order to preserve the temporary character of the exemption.

In spite of these qualifications, this rollback approach should lead to a higher degree of convergence, a greater level playing field and a higher level of liberalization across the MAI area than
may be obtainable by the traditional OECD rollback approach. However, the higher the degree of liberalization in the MAI area, as compared with liberalization commitments in other interfacing international agreements that contain MFN treatment obligations, the more pronounced becomes the free-rider problem in relation to non-MAI countries. The General Agreement on Trade in Services (GATS) concluded in the Uruguay Round, to which the OECD countries are contracting parties, would seem to pose the most difficult challenge.

**MFN exemptions and conflicting requirements**

From an economic standpoint, the rationale for exemptions from MFN treatment to tackle the free-rider problem seems questionable, since unilateral liberalization *per se* should actually lead to welfare gains for the country in question. The main justification for such provision is that countries may, for political reasons, not opt for the fast lane in implementing the Agreed Set of Measures package and/or be reluctant to carry out unilateral liberalization. However, it is important to reiterate that the types of exemptions suggested in this model represent only a temporary detour from the MFN/non-discrimination principle -- a core element of multilateral liberalization concepts -- and as such they are meant neither to undermine the integrity of the multilateral system, nor to spur a return to bilateralism. Instead, the exemptions serve merely as a means to the end of promoting higher levels of liberalization, and (as summarized in table 1), built-in safeguards to ensure that their application is time-bound, limited to defined industry-specific measures and refers partly to a defined set of countries. Furthermore, the scope of exemptions from MFN treatment is set to decrease in line with increasing levels of liberalization across the MAI area.

<table>
<thead>
<tr>
<th>Item</th>
<th>Agreed Set of Measures package</th>
<th>Unilateral liberalization</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sectoral coverage</strong></td>
<td>Particular subsector/industry</td>
<td>Particular subsector/industry</td>
</tr>
<tr>
<td><strong>Measures and country coverage</strong></td>
<td>Limited set of measures (Agreed Set of Measures) and defined category of countries (Very Liberal Countries). Excluding reciprocity measures.</td>
<td>Potentially applicable to all countries (but in practice mainly to Very Liberal Countries) and all measures beyond agreed set of measures. Excluding reciprocity measures.</td>
</tr>
<tr>
<td><strong>Duration</strong></td>
<td>Defined period, i.e., after shortened implementation phase until end of normal implementation phase.</td>
<td>Automatic expiry once these measures are included in the liberalization package of successive liberalization rounds. However, defined maximum period if successive rounds fail to incorporate these measures.</td>
</tr>
</tbody>
</table>

Even if the MAI parties are able to agree on the incorporation of provisions for temporary MFN treatment deviation, their application to non-MAI countries would pose serious problems, especially in the services sector (which accounts for the bulk of non-conforming measures). Here, overlaps with GATS would lead to conflict. Article II of GATS requires its members to grant immediate and unconditional MFN treatment, irrespectively of members’ specific commitments undertaken in their national schedules (except where an MFN exemption was scheduled by the
parties when they adhered to the GATS). If a MAI member rolls back restrictive measures that extend beyond the commitments undertaken in its schedules, these benefits also have to be extended to all non-MAI GATS countries, without the latter being subject to the MAI rollback obligations. The GATS members that are not party to the MAI would receive a “free-ride” if the benefits arising out of the MAI are greater than those under the GATS. Since the aforementioned outcomes of the multi-speed convergence model are contingent largely on temporary exemptions from MFN treatment, the crux of translating this model into practice lies in whether these exemptions can be somehow reconciled with the GATS requirements. As this issue requires more in-depth research, the remainder of this section can highlight only possible avenues to resolve this conflict.

In the multi-speed convergence model the free-rider problem occurs potentially at four interfaces:

1. For VLCs and MLCs, this can be between the standard and longer implementation phase. Less liberal countries enjoy a temporary “free-ride” as one of the trade-offs for increasing their liberalization commitments and subscribing to an Agreed Set of Measures package.

2. For VLCs, it may occur after the fast-speed implementation of their measures covered in the Agreed Set of Measures package. Between the shortened and the standard implementation phase non-VLC MAI members and non-MAI GATS countries may receive a “free-ride”.

3. This problem may arise (especially for VLCs) with regard to the unilateral rollback of measures that are not included in the Agreed Set of Measures package. Other MAI members and non-MAI GATS countries may obtain a “free-ride” until these measures have been captured in a future Agreed Set of Measures package.

4. Finally, it can occur for all MAI parties after the implementation of Agreed Set of Measures packages. If rollback packages bring about higher levels of liberalization, compared with the liberalization commitments in MAI members’ national GATS schedules, non-MAI GATS countries may receive a “free-ride”.

As discussed earlier, the model entails provisions for invoking temporary exemptions from the MFN treatment obligation to overcome these problems (except for case 1) in order to promote higher levels of liberalization and a level playing field within the MAI area. In contrast to cases 2 and 3, exemptions in case 4 would be applicable potentially to all measures that have been rolled back across the MAI area, and would be employed within an open-ended time-frame. However, the operation of exemptions from MFN treatment, which affect non-MAI members of the GATS, would make a waiver clause to Article II of the GATS unavoidable. But, this would necessitate the approval of at least three-quarters of its members. At present, it would appear unlikely that the MAI parties can muster this support. However, with respect to cases 2 and 3, this may be somewhat more feasible as compared with case 4, because of the temporary nature and limited scope of the exemptions (table 1). Possible approaches may include:

- Securing support via dialogue and liaison with the World Trade Organization (WTO), with information programmes emphasizing the workings of the rollback approach, as well as the temporary nature and limited scope of MFN exemptions. Institutional arrangements for
monitoring members’ compliance with the temporary MFN exemption rules could involve the incorporation of WTO observers.

- In exchange for concessions on GATS amendments, least developed countries could be offered an extension of trade preferences to FDI along the lines suggested by the United Nations Conference on Trade and Development (UNCTAD, 1995, p. 285). The Generalized System of Preferences (GSP) schemes could be extended to FDI, thereby offering a more comprehensive system of trade-investment preferences for the least developed countries.

- Non-MAI countries could be offered some form of association along the lines of European Union Association Agreements. They may configure an “outer ring” around the MAI group.

- The OECD’s “Outreach Programme” (Newton, 1996) could be intensified with a view to fostering the accession of non-OECD countries, in particular the dynamic non-OECD economies. The potential problem of “free riders” would gradually disappear as more countries accede to the MAI.

- A compensation fund could be set up for the non-MAI members of the GATS that may be adversely affected by the MFN exemptions. WTO participation could be built into the institutional arrangements relating to the operational and procedural aspects. The extent of the compensation and the size of the fund may turn out to be relatively small in comparison with the potential economic benefits arising from the contribution of temporary MFN exemptions to higher levels of liberalization. This is because of the time-bound nature and defined scope of the exemptions, in addition to the traditionally low (albeit growing) non-OECD FDI into the service sectors of the OECD countries.

These options are not necessarily mutually exclusive and certain combinations may be possible. Nevertheless, securing support within the WTO for exemptions from MFN treatment to overcome the free-rider problem in case 4 seems an insurmountable task. These exemptions stretch well beyond a temporary departure from the MFN treatment obligation and would seriously undermine the principle of MFN treatment. Thus, each MAI signatory would need to make a policy decision on the acceptability of agreeing to the rollback of those measures in the Agreed Set of Measures package which extend beyond its obligations in the GATS, as those benefits would then have to be extended on a MFN basis to all GATS members. Therefore, the commonly agreed Agreed Set of Measures packages could actually turn out to be more modest than predicted by the model. Hence, it may be worth while to explore also options for the transfer of the MAI to the auspices of the WTO, where it may eventually evolve into a global agreement. However, this raises a host of issues which need to be examined, such as specific provisions for developing countries in order to accommodate their development strategies. Here, the United Nations Conference on Trade and Development, with its expertise in policy analysis and consensus-building, could make important contributions, especially as regards the development dimension.

---

4 For a detailed discussion of the problems connected with the forum issue, see, for example, Brewer and Young (1995), Brittan (1995) and UNCTAD (1996, chap. VI).
Conclusions and caveats

Inspired by MAI negotiations, this article has provided an alternative option to the traditional OECD approach to the rollback of non-conforming measures by developing a multi-speed convergence model. The model encompasses a complex configuration of (i) successive sectoral liberalization rounds structured along industry lines; (ii) a combination of several negotiation procedures; (iii) commonly agreed liberalization packages for the rollback of measures across the MAI area; (iv) a multi-speed implementation mechanism; (v) trade-offs to raise the volume of non-conforming measures covered in the rollback package; and (vi) incentives, such as temporary deviation from the principle of MFN treatment for defined sets of measures to encourage rollback ahead of schedule, as well as unilateral liberalization beyond the commonly agreed liberalization package. It has been demonstrated how the interaction of these elements may ultimately result in the highest feasible degree of liberalization and a level-playing field among the contracting parties.

In view of countries’ variations in FDI policy orientations, the interplay between twin-track negotiations and provisions for multi-speed implementation raises the commonly agreed rollback of non-conforming measures beyond the lowest common denominator. Furthermore, the granting of temporary MFN treatment exemptions spurs unilateral liberalization beyond the measures agreed in the rollback packages, especially in countries with more liberal FDI policy orientations. However, soft pressure/knock-on and feedback effects ensure that unilateral liberalization is incorporated progressively into the commonly agreed rollback packages of successive liberalization rounds. This process leads to a convergence trend, and in the long run, all countries should (at least in principle) achieve the highest feasible degree of liberalization. The need for temporary MFN exemptions would gradually diminish. However, because of the potential free-rider problem, these exemptions are instrumental in promoting high levels of liberalization across the MAI area. However, they are in variance with the MFN treatment obligation of the GATS. Possible avenues to reconcile this conflict have been outlined, including the extension of GSP schemes to FDI, compensation funds and association agreements. Nevertheless, solutions for the potential free-rider problem facing the MAI group as a whole have still to be explored. This problem arises when rollback packages bring about higher levels of liberalization compared with the liberalization commitments in GATS.

Several caveats that may raise some doubts as to the predicted extent of liberalization and the degree of convergence have also been highlighted. The trade-offs between a degree of flexibility as to the duration of the implementation phase and increases in countries’ liberalization commitments may turn out to be insufficient to raise the rollback packages significantly above the lowest common denominator. The outcome of the rollback negotiations is influenced profoundly by the bargaining power and strategy of the individual countries. The extent of unilateral liberalization brought about by temporary MFN exemptions may also be lower than anticipated. This incentive is only one of the many variables in policy decisions by governments with regard to unilateral liberalization. Nevertheless, it is conceivable that certain countries may follow this path of liberalization even in the absence of this incentive. The soft pressure/knock-on and feedback effects may prove not so strong as has been assumed, implying that unilateral liberalization will be captured in the multilateral framework to a lesser degree than expected. Also, it also remains uncertain whether the options suggested to overcome the free-rider problem of countries with more liberal FDI policy orientations would actually enable the MAI parties to muster sufficient support in the WTO for a waiver clause to the MFN obligations in GATS to allow temporary deviations from the MFN treatment principle. Furthermore, in the absence of solutions to the potential free-rider problem which the MAI group as
a whole faces, governments may be reluctant to agree to rollback packages that extend significantly beyond their liberalization commitments in the GATS. This raises the question of whether it would be more effective to eventually incorporate the MAI into the WTO framework.

All these issues certainly warrant further examination. Although more research and analytical work is needed to refine the multi-speed convergence model and to address its possible shortcomings, on balance it would seem that this rollback approach could bring about a higher degree of convergence, a more even level playing field and higher levels of liberalization compared with the traditional OECD approach.

References


This note examines trends in parent firm export performance and compares them with trends in measures of foreign affiliate activity in Japan's 20 largest machinery firms for the 1986-1994 period. Despite a general trend towards reduced exports and expanded foreign affiliate activity in almost all of the sample firms, simple rank correlation analysis uncovers no evidence that foreign affiliate activity substitutes for parent firm exports. However, the small sample used and the failure to account for other determinants of parent firm export performance mean that these results should be treated as tentative and the focus must remain on how to generate more reliable estimates of this relationship in future research.

The issue

One of the oldest questions related to the activities of transnational corporations (TNCs) is: to what extent does foreign affiliate production substitute for -- or complement -- exports from the parent firm or, more generally, the home economy? Much of the interest in the answer to this question is spurred by labour unions and other political lobbies which often argue that foreign direct investment (FDI) by TNCs leads to reduced exports and thereby an export of jobs from the home economy. These arguments received some support from early theoretical analyses (e.g., Mundell, 1957) which emphasized that factor flows have a strong possibility of substituting for trade under the most restrictive versions of the Heckscher-Ohlin trade model. More recent theory (e.g., Markusen, 1983; Wong, 1986), however, has tended to emphasize that the substitution result can easily be reversed by relaxing key assumptions in the Heckscher-Ohlin model. When applying these analyses to TNCs, the fact that assuming imperfect competition in some markets can generate complementarity is particularly important, as TNCs are generally thought to operate in imperfectly competitive markets. Moreover, when considering the effects of FDI flows from developed economies to developing economies, the fact that differences in technology across countries can generate cases of complementarity is also relevant. In short, the theoretical literature makes it clear that the relationship between foreign affiliate activity and parent firm (or home country) exports cannot be determined a priori, but rather must be examined on a case-by-case basis.

Unfortunately, owing in large part to the paucity of suitable data, the empirical literature on this point is rather scarce. The empirical literature that has rigorously tried to evaluate whether foreign affiliate activity is a substitute for or complement to parent firm (or home country) exports has tended to focus on United States TNCs, with some analysis of the Swedish case also being available (e.g., Lipsey and Weiss, 1981; Blomström et al., 1988; Ramstetter, 1991). The most striking result of these studies is the lack of evidence that foreign sales substitute for parent firm exports at the firm or industry level. On the other hand, Kravis and Lipsey (1988) did find a negative relationship between

* International Center for the Study of East Asian Development, Kitakyushu, Japan. The author would like to thank three anonymous referees for their comments and suggestions. However, the author is solely responsible for all remaining errors and for all opinions expressed.
foreign affiliate employment and parent firm employment for United States TNCs in 1982. Ramstetter (1991) also found that the growth of United States parent firm employment in 1977-1982 is negatively correlated with employment growth in affiliates located in developing economies but not with employment growth in affiliates located in developed economies.

For the Japanese case, there are no known studies that rigorously evaluate the relationship between foreign affiliate production and parent firm exports at the firm level. There are a number of industry-level or aggregate studies, however. For example, in recent reports on the surveys of Japanese TNCs conducted by the Ministry of International Trade and Industry (MITI) (MITI, various years; 1993 survey, pp. 29-41; 1994 survey, pp. 69-80), survey data and input-output-based calculations were combined to estimate the export-creation and export-substitution effects for 1991-1994 and made projections for 1995. These calculations indicated that the export-creation effect dominated the export-substitution effect in the aggregate. In the 1994 survey, two estimates of export creation and export substitution were presented: calculations of effects on the balance of trade and calculations of effects on gross domestic product (GDP). The latter estimates were much larger in absolute value. In 1994, in terms of export creation, the former estimate was 9.1 trillion yen while the latter was 22.3 trillion yen; in terms of export substitution, the former estimate was -4.6 trillion yen while the latter was -11.6 trillion yen. For 1995 projections, the effects on GDP were further disaggregated by industry. It is of some interest that the combined effect on exports was negative in transport machinery but positive in all other industries. However, the TNC survey data underlying these calculations have substantial sampling problems. Thus, even though these results may seem highly plausible, substantial problems with the underlying data make them questionable. In another study based on the MITI data, Inaba (no date, pp. 15-16; see also Inaba and Morikawa, 1992) emphasized the substitution effects of affiliate activity on Japan's exports in a macroeconometric model that distinguished four manufacturing industry groups and explained the effects of Japan's FDI on the balance of payments. However, the results are not usually statistically significant, samples are quite small and there are important problems with the MITI data as mentioned earlier, thereby making these results questionable as well.

There are other studies that examined Japan's exports to a given country, group of countries, and/or industry as a function of Japan's FDI in that country, group of countries, and/or industry, among other variables. Among these studies, Lii (1994) and Kawai and Urata (forthcoming) are probably the most sophisticated and detailed ones. Their results indicated that Japanese FDI in a given host country or industry tended to stimulate Japanese exports to that country or industry. However, the data problems that tainted these results are probably even more severe than those in studies based on the MITI survey data. This is because the FDI data used in those studies referred only to Japanese FDI as had been reported to or approved by the Ministry of Finance of Japan, whereas much reported FDI has never been implemented. For example, figures on reported FDI revealed markedly different country-wise distributions from those revealed by figures on actual FDI from the balance of payments (Ramstetter, 1996). Thus, it is difficult to argue that figures on reported FDI are a reasonable proxy for figures of actual FDI and the results of studies based on these numbers are highly questionable.²

---

¹ For example, there are large variations in survey coverage over time and across variables in individual years. See Ramstetter (1996) for details.

² Kojima (1990, pp. 53-57) and Ramstetter (1986, chaps. 5-7) used similar approaches and obtained similar results, using host country data from selected Asian trading partners, which are in some cases more reliable (e.g., Republic of Korea, Thailand). However, these results are probably biased because of a missing variables problem.
Still other studies simply assumed that increasing production of foreign affiliates would substitute for Japanese exports (e.g., Nagata, 1995; Takenaka, 1991, pp. 96-98), with commensurate implications for the trade balance and so-called hollowing out in Japan. Yet, given the results of the more rigorous studies of the United States and Swedish cases, as well as the tentative evidence of a positive relationship between foreign activities of Japan's TNCs and Japanese exports discussed earlier, this is clearly a questionable assumption.

However, to understand more accurately the relationship between exports from Japan or Japanese parent firms and the activity of Japanese affiliates abroad, substantial data problems must be addressed. This study attempts to take a first step in that direction by assembling a sample of firm-level data and examining the possible correlations between measures of parent firm activity and that of affiliate activity. The scope is more limited than most of the previous studies reviewed earlier in that it focuses narrowly on the parent-affiliate relationship. Only simple correlations are examined and other relevant factors are ignored. Moreover, this study has its own substantial data problems.

Parent firm exports and affiliate activity in Japan's largest machinery companies

The data used for this exercise come from two sources: data on parent firms from Nihon Keizai Shimbunsha (various years (a), various years (b)); a compilation of reports by corporations in Japan that must be filed with the Ministry of Finance of Japan; and data on the activities of Japanese firms abroad from Toyo Keizai (various years (a), various years (b), various years (c)).

The sample period for which data were collected is from 1983 to 1994, with the 1986-1994 period being focused upon in the following analysis. A major reason for focusing on this period is that Japan's FDI stocks abroad increased relatively rapidly in the late 1980s, an annual average of 36 per cent in 1986-1990, compared with 23 per cent in 1974-1978, 20 per cent annually in 1982-1986 and 1978-1982, and 9 per cent in 1990-1994. This growth vaulted Japan into the ranks of one the world's leading outward investors by the late 1980s.3 It is important to realize that actual sales by foreign affiliates increased far less rapidly, 20 per cent annually in 1986-1990, -11 per cent annually in 1990-1992, and 9 per cent annually in 1992-1994 according to MITI surveys.4 In any case, it is clear that Japanese TNCs expanded their operations abroad rapidly during the first half of the period under study. Moreover, if this expansion were to have effects on parent firm exports, the period under study is long enough to observe them.

The firms chosen for study were Japan's 20 largest machinery firms by sales in the 1994 fiscal year. The sample in principle includes firms in all machinery industries: non-electric machinery, electric (and electronic) machinery, transport machinery and precision machinery (ISIC revision 2 categories 382, 383, 384 and 385). In reality, 18 of the 20 firms are in either electric machinery or motor vehicles, with 1 firm each in shipbuilding (Mitsubishi Heavy Industries) and precision machinery (Canon). Although it would certainly be desirable to compare the results of this approach with an alternative using a finer degree of industry-wise disaggregation, there are significant advantages to using a more aggregate classification when dealing with the large multiproduct firms that make up the majority of this sample. Small sample size is also a problem here as the use of a larger sample would have the advantage of facilitating more rigorous statistical analyses. However, the 20 firms studied

---

3 For this period, FDI stocks are calculated as cumulative balance-of-payments flows from 1965 onward, excluding reinvested earnings (Bank of Japan, various years).
4 See Ramstetter (1996, table 5) and MITI (various years) for these figures. Note also that Ramstetter (1996) adjusted the MITI estimates through 1992 to account for fluctuations in the coverage in the Ministry of International Trade and Industry surveys over time. The adjusted figures imply annual growth rates of 18 per cent in 1986-1990 and -8 per cent in 1990-1992.
here are in themselves of great interest as they alone accounted for about 44 per cent of Japan's merchandise exports in 1986, 1990 and 1994 fiscal years (table 1). Moreover, the use of a smaller sample makes it easier to highlight activities of individual firms.

Table 1. Parent firm exports and export-sales ratios in Japan's large machinery companies

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All industries</td>
<td>36 053</td>
<td>2.07</td>
<td>3.21</td>
<td>-2.70</td>
</tr>
<tr>
<td>Machinery</td>
<td>26 898</td>
<td>2.31</td>
<td>2.01</td>
<td>-1.96</td>
</tr>
<tr>
<td>Sample 1</td>
<td>15 178</td>
<td>2.03</td>
<td>3.47</td>
<td>-1.61</td>
</tr>
<tr>
<td>Sample 2</td>
<td>14 145</td>
<td>1.93</td>
<td>3.41</td>
<td>-1.62</td>
</tr>
<tr>
<td>Canon</td>
<td>318</td>
<td>9.85</td>
<td>74.45</td>
<td>0.74</td>
</tr>
<tr>
<td>Fujitsu</td>
<td>266</td>
<td>1.54</td>
<td>18.43</td>
<td>-3.68</td>
</tr>
<tr>
<td>Hitachi</td>
<td>977</td>
<td>-0.19</td>
<td>28.91</td>
<td>-3.22</td>
</tr>
<tr>
<td>Honda</td>
<td>1 319</td>
<td>-0.97</td>
<td>68.31</td>
<td>-0.83</td>
</tr>
<tr>
<td>Isuzu</td>
<td>330</td>
<td>0.74</td>
<td>56.53</td>
<td>-2.37</td>
</tr>
<tr>
<td>Matsuindus</td>
<td>1 064</td>
<td>6.00</td>
<td>33.38</td>
<td>1.49</td>
</tr>
<tr>
<td>Matsuworks</td>
<td>34</td>
<td>3.77</td>
<td>4.85</td>
<td>-3.27</td>
</tr>
<tr>
<td>Mazda</td>
<td>916</td>
<td>-1.19</td>
<td>66.42</td>
<td>-1.73</td>
</tr>
<tr>
<td>Mitsuelect</td>
<td>492</td>
<td>3.22</td>
<td>22.86</td>
<td>1.41</td>
</tr>
<tr>
<td>Mitsubishi</td>
<td>597</td>
<td>5.72</td>
<td>21.84</td>
<td>0.14</td>
</tr>
<tr>
<td>Mitsumotor</td>
<td>..</td>
<td>4.01</td>
<td>50.60</td>
<td>-1.97</td>
</tr>
<tr>
<td>NEC</td>
<td>582</td>
<td>1.26</td>
<td>28.35</td>
<td>-3.05</td>
</tr>
<tr>
<td>Nippondensu</td>
<td>90</td>
<td>6.39</td>
<td>18.46</td>
<td>2.91</td>
</tr>
<tr>
<td>Nissan</td>
<td>2 007</td>
<td>-3.49</td>
<td>42.29</td>
<td>-3.41</td>
</tr>
<tr>
<td>Sanyo</td>
<td>546</td>
<td>-2.45</td>
<td>31.62</td>
<td>-5.32</td>
</tr>
<tr>
<td>Sharp</td>
<td>496</td>
<td>3.53</td>
<td>48.19</td>
<td>-1.18</td>
</tr>
<tr>
<td>Sony</td>
<td>567</td>
<td>8.09</td>
<td>66.20</td>
<td>0.02</td>
</tr>
<tr>
<td>Suzuki</td>
<td>228</td>
<td>2.69</td>
<td>44.55</td>
<td>-1.61</td>
</tr>
<tr>
<td>Toshiba</td>
<td>624</td>
<td>4.05</td>
<td>31.04</td>
<td>0.43</td>
</tr>
<tr>
<td>Toyota</td>
<td>2 691</td>
<td>2.16</td>
<td>34.47</td>
<td>-1.73</td>
</tr>
</tbody>
</table>

Sources: Bank of Japan (various years); Ministry of Finance (various years); Nihon Keizai Shimbunsha (various years (a), various years (b)).

NOTES:

Machinery includes non-electric machinery, electric (and electronic) machinery, transport machinery and precision machinery. For all industries and machinery, sales data were taken from corporation statistics classified by industry of firm, but export data were taken from balance of payments' presentation of customs statistics classified by product.


Note that fiscal years in Japan generally end on 31 March of the following calendar year and that the estimated share of sample firms in total exports is approximate because not all firms have the same fiscal years.
Fiscal years end 31 March of the following calendar year with the following exceptions: Canon - fiscal years end 31 December of the same calendar year; Honda - through 1986 fiscal years end 28 or 29 February of the following calendar year (1987 refers to a 12-month average for the period 1 March 1986 to 31 March 1987); Isuzu - through 1993 fiscal years end 31 October of the same calendar year (1994 refers to a 12-month average for the period 1 November 1993 to 31 March 1995); Matsuindus - through 1985 fiscal years end 30 November of the same calendar year (1986 refers to a 12-month average for the period 1 December 1985 to 31 March 1987); Matsuworks - fiscal years end 30 November of the same calendar year; Mazda- through 1987 fiscal years end 31 October of the same calendar year (1988 refers to a 12-month average for the period 1 November 1987 to 31 March 1988); Nippondenso - through 1993 fiscal years end 31 December of the same calendar year (1994 refers to a 12-month average for the period 1 January 1994 to 31 March 1995); Sanyo - fiscal years end 30 November of the same calendar year; Sony - through 1985 fiscal years end 31 October of the same calendar year (1986 refers to a 12-month average for the period 1 November 1985 to 31 March 1986); Toyota - through 1993 fiscal years end 30 June of the following calendar year (1994 refers to a 12-month average for the period 1 July 1994 to 31 March 1995).

For Mitsumotor, 1987 figures are used instead of 1986; growth adjusted refers to 1987-1994, but sample average growth calculations use the 1987 figures, as a proxy for 1986 likely leads to a small underestimation of growth in Sample 1.

However, as important as these firms are in terms of Japanese exports, they are far less important in terms of overall production or employment. This is indicated in table 1 by much larger export-sales ratios in sample firms than in all industries (e.g., 41 per cent versus 4 per cent in 1986, and 36 per cent versus 3.2 per cent in 1994). Note, however, that the difference between sample firms and the average for the machinery industries combined (e.g., 24 per cent in 1986 and 20 per cent in 1994) is much smaller. Part of the reason for the narrower difference is the fact that the sample firms account for large shares of the machinery industry in Japan, about a third of sales and just under three-fifths of exports in this industry during the period under study (Ministry of Finance, various years; Nihon Keizai Shimbunsha, various years (a), various years (b)).

Perhaps one of the most striking things revealed by those data is just how much Japan's overall export performance depends on the fate of a relatively few firms. Indeed, if one adds the roughly one-third to one-half of Japan's exports accounted for by the nine major sogo shosha (trading companies), it becomes clear that the vast majority of Japan's exports are accounted for by the top 30 or so exporters. Moreover, within the sample presented in table 1, the top exporters account for the vast majority of the exports in the sample. In 1994, for example, the top six exporters (Toyota, Matsushita Electric Industrial, Honda, Nissan, Sony and Mitsubishi Motors) alone accounted for 24 per cent of Japan's exports, with the next four exporters (Toshiba, Mazda, Canon and Hitachi) accounting for another 9 per cent and the remaining 10 firms for only 11 per cent. However, it is important to note that some of these large exporters do not depend that heavily on exports for their revenues. Export-sales ratios are below the sample average in Hitachi and Toshiba, and roughly equal to the sample average in Toyota and Matsushita Electric Industrial. Among the smaller exporters, export propensities are higher than the average in Isuzu, Sharp and Suzuki.

Of particular concern in this context is the fact that export growth has been relatively slow in recent years, only about 2 per cent annually in nominal terms for all sample firms in 1986-1994 (table 1). This rate of growth is roughly equal to that for all Japanese corporations but slightly below that for the machinery aggregate. As a result of this slow export growth, export-sales ratios actually declined by about 1.6 per cent annually in

---

6 In 1994, for example, these 20 firms accounted for 2.6 per cent of employment and 4.0 per cent of all sales by Japanese corporations (Ministry of Finance, various years; Nihon Keizai Shimbunsha, various years (a)).
7 Note that the estimate for machinery industries is only approximate, with the denominator coming from corporation statistics (Ministry of Finance, various years) and the numerator from commodity trade statistics as reported in the balance of payments (Bank of Japan, various years).
8 Trading company data come from Nihon Keizai Shimbunsha (various years (a), various years (b)) and total export data come from the Bank of Japan (various years). Simple addition of the machinery and trading firm shares as given in the text may overestimate the share of these 29 firms in total exports because there may be some double counting of exports through trading firms.
sample firms during this period, though this decline was relatively small compared with both all industries and machinery.

This sample contains not only some of the largest exporters in Japan, but also some of the largest outward investors from that economy. Unfortunately, it is very difficult to measure the extent of foreign affiliate activity precisely, and it is impossible to calculate precise shares of these firms in Japan’s FDI or other TNC activities abroad. Toyo Keizai has compiled some information on affiliates by parent firm since 1988, including estimates of FDI stocks and -- in recent years -- estimates of foreign affiliate sales. However, this information is not available for a number of parent firms or years, and these aggregate figures do not distinguish manufacturing affiliates, the production of which is usually posited to substitute for parent firm exports. It would, in principle, be possible to compile information affiliate by affiliate over time, but affiliate information is often unavailable in some years, with recent surveys appearing more comprehensive than earlier ones. Moreover, the data appear to be adjusted at discrete intervals. As a result, the time paths of available variables are affected by the date of data update.

In view of those problems, data from one year’s survey were chosen (i.e., 1995) and affiliates were classified by date of establishment or start-up. This approach has the disadvantage of failing to account for growth over time owing to the expansion of old affiliates. However, it has the advantage of reducing unavailable observations and avoids problems resulting from differences in survey methodology over time. Moreover, because a large portion of Japanese TNC expansion in 1986-1994 was accounted for by the establishment of new affiliates, this classification captures a large portion of the overall expansion of Japanese TNCs abroad during this period.9

Three indicators can be compiled in this manner with reasonable comprehensiveness: the number of affiliates, equity stocks and employment. Four of the firms studied here (Fujitsu, Honda, Matsushita Electric Works and Sony) do not provide employment data for most affiliates and are omitted from the employment samples (table 2). In terms of the number of affiliates, Matsushita Electric Industrial was the largest throughout the period and also had by far the largest number of manufacturing affiliates. Focusing on manufacturing affiliates in 1994, Matsushita was followed by Honda, Sanyo, Hitachi, NEC and Toshiba. In terms of manufacturing affiliate equity, Toyota was the largest in 1994, followed by Matsushita Electric Industrial, Honda, Nissan, Mitsubishi Heavy Industries, Nippondenso and Toshiba. If affiliate equity is taken as a ratio of parent firm sales, Nippondenso had by far the largest foreign presence relative to the size of the parent firm, followed by Honda, Matsushita Heavy Industries, Suzuki, Mazda, Nissan and Canon. Finally, looking at manufacturing affiliate employment in 1994 (excluding those affiliates that do not report these figures), Matsushita Electric Industrial was again by far the largest, followed by Nissan, Toyota and Sanyo. Ratios of manufacturing affiliate employment to parent firm employment were largest in Matsushita Electric Industrial and Suzuki, followed by Sanyo, Sharp, Nissan and Canon. Thus, it can be observed that the size of a firm’s foreign affiliates differs greatly, depending on the measure used. The automobile firms and Mitsubishi Heavy Industries tend to have a relatively large foreign presence in terms of equity, and electric machinery firms tend to be relatively large in terms of number of affiliates and employment.

---

9 Note, however, that the comparison of growth rates of FDI stocks by year of measurement and the growth rates of affiliate equity stocks by year of affiliate establishment does indicate that growth rates of FDI stocks were considerably higher for a number of affiliates in the period under study (appendix, table A1). This indicates that substantial growth in previously established affiliates is not captured here. However, note also that this comparison is not precise because of differences in the periods covered (see table A1) and the measures used differ in important respects (e.g., FDI stocks include loans not included in affiliate equity and affiliate equity stocks include local and third country contributions not included in FDI).
Table 2. Indicators for foreign affiliates of Japan’s large machinery firms in 1994, by industry of affiliate and year of affiliate establishment or start-up

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Subtotal</td>
<td>502</td>
<td>629</td>
<td>971</td>
<td>1218</td>
<td>8.61</td>
<td>8.27</td>
</tr>
<tr>
<td>Canon</td>
<td>35</td>
<td>40</td>
<td>67</td>
<td>79</td>
<td>8.88</td>
<td>14.02</td>
</tr>
<tr>
<td>Fujitsu</td>
<td>21</td>
<td>28</td>
<td>41</td>
<td>60</td>
<td>10.00</td>
<td>11.73</td>
</tr>
<tr>
<td>Hitachi</td>
<td>59</td>
<td>62</td>
<td>71</td>
<td>88</td>
<td>4.47</td>
<td>6.12</td>
</tr>
<tr>
<td>Honda</td>
<td>42</td>
<td>60</td>
<td>82</td>
<td>93</td>
<td>5.63</td>
<td>6.26</td>
</tr>
<tr>
<td>Isuzu</td>
<td>7</td>
<td>11</td>
<td>18</td>
<td>19</td>
<td>7.07</td>
<td>6.59</td>
</tr>
<tr>
<td>Matsuindus</td>
<td>71</td>
<td>84</td>
<td>129</td>
<td>177</td>
<td>9.76</td>
<td>8.54</td>
</tr>
<tr>
<td>Matsuworks</td>
<td>7</td>
<td>8</td>
<td>19</td>
<td>34</td>
<td>19.83</td>
<td>8.62</td>
</tr>
<tr>
<td>Mazda</td>
<td>58</td>
<td>10</td>
<td>18</td>
<td>22</td>
<td>10.36</td>
<td>10.67</td>
</tr>
<tr>
<td>Mitsuelect</td>
<td>35</td>
<td>41</td>
<td>56</td>
<td>60</td>
<td>4.87</td>
<td>6.76</td>
</tr>
<tr>
<td>Mitsubishi</td>
<td>14</td>
<td>19</td>
<td>34</td>
<td>53</td>
<td>13.68</td>
<td>11.42</td>
</tr>
<tr>
<td>Mitsumotor</td>
<td>7</td>
<td>9</td>
<td>14</td>
<td>18</td>
<td>9.05</td>
<td>1.95</td>
</tr>
<tr>
<td>NEC</td>
<td>34</td>
<td>40</td>
<td>66</td>
<td>78</td>
<td>8.35</td>
<td>4.80</td>
</tr>
<tr>
<td>Nissan</td>
<td>11</td>
<td>16</td>
<td>27</td>
<td>33</td>
<td>9.47</td>
<td>10.36</td>
</tr>
<tr>
<td>Sanyo</td>
<td>25</td>
<td>39</td>
<td>63</td>
<td>81</td>
<td>9.57</td>
<td>6.38</td>
</tr>
<tr>
<td>Sharp</td>
<td>10</td>
<td>17</td>
<td>33</td>
<td>40</td>
<td>11.29</td>
<td>9.88</td>
</tr>
<tr>
<td>Sony</td>
<td>31</td>
<td>35</td>
<td>54</td>
<td>59</td>
<td>6.75</td>
<td>6.40</td>
</tr>
<tr>
<td>Suzuki</td>
<td>8</td>
<td>16</td>
<td>24</td>
<td>43</td>
<td>10.28</td>
<td>10.97</td>
</tr>
<tr>
<td>Toshiba</td>
<td>34</td>
<td>42</td>
<td>67</td>
<td>82</td>
<td>8.72</td>
<td>11.47</td>
</tr>
<tr>
<td>Toyota</td>
<td>20</td>
<td>26</td>
<td>44</td>
<td>49</td>
<td>8.24</td>
<td>5.20</td>
</tr>
</tbody>
</table>

Number of affiliates (number and growth in percentage)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Subtotal</td>
<td>1725</td>
<td>2087</td>
<td>3204</td>
<td>3647</td>
<td>7.23</td>
<td>10.12</td>
</tr>
<tr>
<td>Canon</td>
<td>70</td>
<td>75</td>
<td>107</td>
<td>110</td>
<td>5.03</td>
<td>16.57</td>
</tr>
<tr>
<td>Fujitsu</td>
<td>113</td>
<td>115</td>
<td>195</td>
<td>216</td>
<td>8.21</td>
<td>10.48</td>
</tr>
<tr>
<td>Hitachi</td>
<td>55</td>
<td>57</td>
<td>89</td>
<td>102</td>
<td>7.55</td>
<td>6.71</td>
</tr>
<tr>
<td>Honda</td>
<td>142</td>
<td>207</td>
<td>277</td>
<td>285</td>
<td>4.13</td>
<td>3.05</td>
</tr>
<tr>
<td>Isuzu</td>
<td>9</td>
<td>13</td>
<td>42</td>
<td>42</td>
<td>16.04</td>
<td>47.29</td>
</tr>
<tr>
<td>Matsuindus</td>
<td>81</td>
<td>98</td>
<td>182</td>
<td>260</td>
<td>12.99</td>
<td>17.91</td>
</tr>
<tr>
<td>Matsuworks</td>
<td>4</td>
<td>4</td>
<td>13</td>
<td>32</td>
<td>29.60</td>
<td>28.91</td>
</tr>
<tr>
<td>Mazda</td>
<td>12</td>
<td>12</td>
<td>89</td>
<td>96</td>
<td>29.83</td>
<td>47.29</td>
</tr>
<tr>
<td>Mitsuelect</td>
<td>46</td>
<td>50</td>
<td>73</td>
<td>76</td>
<td>5.33</td>
<td>9.88</td>
</tr>
<tr>
<td>Mitsubishi</td>
<td>42</td>
<td>43</td>
<td>168</td>
<td>192</td>
<td>20.53</td>
<td>51.65</td>
</tr>
<tr>
<td>Mitsumotor</td>
<td>40</td>
<td>41</td>
<td>82</td>
<td>96</td>
<td>11.15</td>
<td>32.29</td>
</tr>
<tr>
<td>NEC</td>
<td>102</td>
<td>108</td>
<td>179</td>
<td>197</td>
<td>7.76</td>
<td>3.98</td>
</tr>
<tr>
<td>Nissan</td>
<td>261</td>
<td>290</td>
<td>361</td>
<td>374</td>
<td>3.23</td>
<td>31.31</td>
</tr>
<tr>
<td>Sanyo</td>
<td>57</td>
<td>65</td>
<td>84</td>
<td>104</td>
<td>6.04</td>
<td>8.59</td>
</tr>
<tr>
<td>Sharp</td>
<td>35</td>
<td>42</td>
<td>61</td>
<td>66</td>
<td>5.92</td>
<td>6.33</td>
</tr>
<tr>
<td>Sony</td>
<td>536</td>
<td>537</td>
<td>563</td>
<td>613</td>
<td>1.68</td>
<td>3.52</td>
</tr>
<tr>
<td>Suzuki</td>
<td>9</td>
<td>15</td>
<td>39</td>
<td>61</td>
<td>19.35</td>
<td>19.13</td>
</tr>
<tr>
<td>Toshiba</td>
<td>27</td>
<td>41</td>
<td>181</td>
<td>196</td>
<td>21.66</td>
<td>17.33</td>
</tr>
<tr>
<td>Toyota</td>
<td>82</td>
<td>237</td>
<td>344</td>
<td>355</td>
<td>5.18</td>
<td>4.38</td>
</tr>
</tbody>
</table>

Equity of affiliates (billions of Yen and growth in percentage)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Subtotal</td>
<td>1725</td>
<td>2087</td>
<td>3204</td>
<td>3647</td>
<td>7.23</td>
<td>10.12</td>
</tr>
<tr>
<td>Canon</td>
<td>70</td>
<td>75</td>
<td>107</td>
<td>110</td>
<td>5.03</td>
<td>16.57</td>
</tr>
<tr>
<td>Fujitsu</td>
<td>113</td>
<td>115</td>
<td>195</td>
<td>216</td>
<td>8.21</td>
<td>10.48</td>
</tr>
<tr>
<td>Hitachi</td>
<td>55</td>
<td>57</td>
<td>89</td>
<td>102</td>
<td>7.55</td>
<td>6.71</td>
</tr>
<tr>
<td>Honda</td>
<td>142</td>
<td>207</td>
<td>277</td>
<td>285</td>
<td>4.13</td>
<td>3.05</td>
</tr>
<tr>
<td>Isuzu</td>
<td>9</td>
<td>13</td>
<td>42</td>
<td>42</td>
<td>16.04</td>
<td>47.29</td>
</tr>
<tr>
<td>Matsuindus</td>
<td>81</td>
<td>98</td>
<td>182</td>
<td>260</td>
<td>12.99</td>
<td>17.91</td>
</tr>
<tr>
<td>Matsuworks</td>
<td>4</td>
<td>4</td>
<td>13</td>
<td>32</td>
<td>29.60</td>
<td>28.91</td>
</tr>
<tr>
<td>Mazda</td>
<td>12</td>
<td>12</td>
<td>89</td>
<td>96</td>
<td>29.83</td>
<td>47.29</td>
</tr>
<tr>
<td>Mitsuelect</td>
<td>46</td>
<td>50</td>
<td>73</td>
<td>76</td>
<td>5.33</td>
<td>9.88</td>
</tr>
<tr>
<td>Mitsubishi</td>
<td>42</td>
<td>43</td>
<td>168</td>
<td>192</td>
<td>20.53</td>
<td>51.65</td>
</tr>
<tr>
<td>Mitsumotor</td>
<td>40</td>
<td>41</td>
<td>82</td>
<td>96</td>
<td>11.15</td>
<td>32.29</td>
</tr>
<tr>
<td>NEC</td>
<td>102</td>
<td>108</td>
<td>179</td>
<td>197</td>
<td>7.76</td>
<td>3.98</td>
</tr>
<tr>
<td>Nissan</td>
<td>261</td>
<td>290</td>
<td>361</td>
<td>374</td>
<td>3.23</td>
<td>31.31</td>
</tr>
<tr>
<td>Sanyo</td>
<td>57</td>
<td>65</td>
<td>84</td>
<td>104</td>
<td>6.04</td>
<td>8.59</td>
</tr>
<tr>
<td>Sharp</td>
<td>35</td>
<td>42</td>
<td>61</td>
<td>66</td>
<td>5.92</td>
<td>6.33</td>
</tr>
<tr>
<td>Sony</td>
<td>536</td>
<td>537</td>
<td>563</td>
<td>613</td>
<td>1.68</td>
<td>3.52</td>
</tr>
<tr>
<td>Suzuki</td>
<td>9</td>
<td>15</td>
<td>39</td>
<td>61</td>
<td>19.35</td>
<td>19.13</td>
</tr>
<tr>
<td>Toshiba</td>
<td>27</td>
<td>41</td>
<td>181</td>
<td>196</td>
<td>21.66</td>
<td>17.33</td>
</tr>
<tr>
<td>Toyota</td>
<td>82</td>
<td>237</td>
<td>344</td>
<td>355</td>
<td>5.18</td>
<td>4.38</td>
</tr>
</tbody>
</table>
(Table 2, cont’d)

<table>
<thead>
<tr>
<th>Firm</th>
<th>All affiliates</th>
<th>Manufacturing affiliates</th>
<th>All affiliates</th>
<th>Manufacturing affiliates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratios of equity of affiliates to sale of parent firms (per cent and growth in percentage)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canon</td>
<td>18.83</td>
<td>13.84</td>
<td>11.47</td>
<td>10.24</td>
</tr>
<tr>
<td>Fujitsu</td>
<td>11.42</td>
<td>7.75</td>
<td>8.36</td>
<td>9.56</td>
</tr>
<tr>
<td>Hitachi</td>
<td>2.06</td>
<td>1.94</td>
<td>2.36</td>
<td>2.72</td>
</tr>
<tr>
<td>Honda</td>
<td>7.68</td>
<td>8.85</td>
<td>9.90</td>
<td>11.56</td>
</tr>
<tr>
<td>Isuzu</td>
<td>1.38</td>
<td>1.25</td>
<td>3.47</td>
<td>3.63</td>
</tr>
<tr>
<td>Matsuindus</td>
<td>2.99</td>
<td>3.12</td>
<td>3.88</td>
<td>5.86</td>
</tr>
<tr>
<td>Matsuworks</td>
<td>0.76</td>
<td>0.67</td>
<td>1.31</td>
<td>3.28</td>
</tr>
<tr>
<td>Mazda</td>
<td>0.85</td>
<td>0.73</td>
<td>4.00</td>
<td>5.67</td>
</tr>
<tr>
<td>Mitsuelect</td>
<td>2.89</td>
<td>2.78</td>
<td>2.83</td>
<td>3.05</td>
</tr>
<tr>
<td>Mitsuheavy</td>
<td>2.19</td>
<td>2.63</td>
<td>7.23</td>
<td>7.60</td>
</tr>
<tr>
<td>Mitsumotor</td>
<td>3.41</td>
<td>2.35</td>
<td>3.56</td>
<td>3.62</td>
</tr>
<tr>
<td>NEC</td>
<td>7.02</td>
<td>5.10</td>
<td>6.04</td>
<td>6.54</td>
</tr>
<tr>
<td>Nippondenso</td>
<td>0.36</td>
<td>3.90</td>
<td>5.49</td>
<td>13.63</td>
</tr>
<tr>
<td>Nissan</td>
<td>7.54</td>
<td>8.47</td>
<td>8.65</td>
<td>10.99</td>
</tr>
<tr>
<td>Sanyo</td>
<td>6.97</td>
<td>7.76</td>
<td>7.56</td>
<td>9.77</td>
</tr>
<tr>
<td>Sharp</td>
<td>4.57</td>
<td>4.83</td>
<td>5.28</td>
<td>5.26</td>
</tr>
<tr>
<td>Sony</td>
<td>69.61</td>
<td>53.11</td>
<td>29.94</td>
<td>32.60</td>
</tr>
<tr>
<td>Suzuki</td>
<td>1.79</td>
<td>1.98</td>
<td>3.84</td>
<td>5.79</td>
</tr>
<tr>
<td>Toshiba</td>
<td>1.32</td>
<td>1.63</td>
<td>5.59</td>
<td>5.91</td>
</tr>
<tr>
<td>Toyota</td>
<td>1.49</td>
<td>3.93</td>
<td>4.02</td>
<td>4.31</td>
</tr>
</tbody>
</table>

Employment of affiliates (thousands and growth in percentage)

| Subtotal | 242.1 | 282.1 | 364.5 | 471.5 | 6.63 | 173.5 | 205.3 | 278.9 | 368.3 | 368.3 | 7.58 |
| Canon    | 14.6  | 15.6  | 18.8  | 24.7  | 5.91 | 2.8  | 3.4  | 6.3   | 12.3  | 17.2  |
| Fujitsu  | 19.8  | 22.3  | 24.0  | 32.9  | 5.00 | 16.9 | 18.7 | 19.3  | 25.2  | 3.8   |
| Hitachi  |       |       |       |       |     |     |     |       |       |       |
| Honda    |       |       |       |       |     |     |     |       |       |       |
| Isuzu    | 2.2   | 2.6   | 5.0   | 7.7   | 14.42 | 1.9 | 1.9  | 4.0   | 6.7   | 17.5  |
| Matsuindus | 68.0 | 71.4  | 80.4  | 104.7 | 4.90 | 44.1 | 46.4 | 54.9  | 76.3  | 6.4   |
| Matsuworks |      |       |       |       |     |     |     |       |       |       |
| Mazda    | 2.4   | 2.4   | 8.1   | 10.2  | 19.69 | 0.9 | 0.9  | 6.2   | 6.8   | 28.3  |
| Mitsuelect | 16.7 | 17.8  | 20.2  | 26.3  | 4.99 | 8.0  | 9.0  | 11.3  | 16.6  | 8.0   |
| Mitsuheavy| 6.9   | 8.0   | 16.9  | 22.4  | 13.74 | 6.7 | 7.0  | 15.7  | 20.6  | 14.5  |
| Mitsumotor| 6.0   | 7.0   | 11.2  | 15.3  | 10.25 | 5.9 | 6.2  | 10.3  | 14.0  | 10.7  |
| NEC      | 11.9  | 16.5  | 17.8  | 23.5  | 4.51 | 10.6 | 13.9 | 14.4  | 18.7  | 3.8   |
| Nippondenso | 3.4  | 4.8   | 7.0   | 11.5  | 11.59 | 2.8 | 4.2  | 6.1   | 10.4  | 12.1  |
| Nissan   | 31.3  | 37.1  | 41.3  | 43.7  | 2.07 | 26.4 | 30.6 | 34.1  | 34.4  | 1.5   |
| Sanyo    | 18.0  | 22.6  | 34.2  | 36.6  | 6.20 | 15.0 | 19.3 | 29.1  | 30.1  | 5.7   |
| Sharp    | 8.3   | 12.0  | 17.6  | 21.8  | 7.72 | 7.1  | 10.9 | 14.9  | 18.6  | 6.9   |
| Sony     |       |       |       |       |     |     |     |       |       |       |
| Suzuki   | 2.3   | 9.4   | 13.6  | 22.4  | 11.46 | 2.1 | 9.2  | 13.2  | 21.5  | 11.1  |
| Toshiba  | 8.7   | 10.7  | 14.0  | 27.6  | 12.62 | 6.8 | 8.0  | 10.8  | 22.7  | 13.9  |
| Toyota   | 21.6  | 21.9  | 34.5  | 40.3  | 7.92 | 15.6 | 15.7 | 28.3  | 33.2  | 9.8   |

88
(Table 2, cont’d)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratios of employment of affiliates to employment of parent firms (percentage)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal</td>
<td>36.66</td>
<td>39.94</td>
<td>47.95</td>
<td>61.46</td>
<td>5.54</td>
<td>26.27</td>
<td>29.06</td>
<td>36.68</td>
<td>48.01</td>
<td>6.48</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canon</td>
<td>124.19</td>
<td>101.17</td>
<td>111.75</td>
<td>135.22</td>
<td>3.69</td>
<td>23.87</td>
<td>22.26</td>
<td>37.78</td>
<td>67.08</td>
<td>14.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hitachi</td>
<td>26.21</td>
<td>28.57</td>
<td>30.10</td>
<td>42.93</td>
<td>5.22</td>
<td>22.33</td>
<td>23.96</td>
<td>24.16</td>
<td>32.84</td>
<td>4.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isuzu</td>
<td>14.59</td>
<td>16.35</td>
<td>37.32</td>
<td>52.57</td>
<td>15.72</td>
<td>12.19</td>
<td>11.53</td>
<td>30.12</td>
<td>45.85</td>
<td>18.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matsuiindus</td>
<td>179.77</td>
<td>178.07</td>
<td>177.30</td>
<td>220.50</td>
<td>2.71</td>
<td>116.59</td>
<td>115.81</td>
<td>121.11</td>
<td>160.78</td>
<td>4.19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mazda</td>
<td>8.82</td>
<td>8.49</td>
<td>27.48</td>
<td>37.24</td>
<td>20.29</td>
<td>3.38</td>
<td>3.26</td>
<td>20.92</td>
<td>24.97</td>
<td>28.98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mitsuelect</td>
<td>34.55</td>
<td>36.19</td>
<td>41.53</td>
<td>54.24</td>
<td>5.19</td>
<td>16.55</td>
<td>18.31</td>
<td>23.17</td>
<td>34.36</td>
<td>8.18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mitsuheavy</td>
<td>12.73</td>
<td>16.83</td>
<td>38.20</td>
<td>51.86</td>
<td>15.11</td>
<td>12.22</td>
<td>14.67</td>
<td>35.54</td>
<td>47.80</td>
<td>15.91</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mitsumotor</td>
<td>27.36</td>
<td>30.43</td>
<td>43.85</td>
<td>53.13</td>
<td>7.22</td>
<td>26.78</td>
<td>26.92</td>
<td>40.29</td>
<td>48.74</td>
<td>7.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEC</td>
<td>34.21</td>
<td>43.08</td>
<td>46.23</td>
<td>57.25</td>
<td>3.62</td>
<td>30.29</td>
<td>36.18</td>
<td>37.53</td>
<td>45.64</td>
<td>2.95</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nissan</td>
<td>52.49</td>
<td>94.27</td>
<td>72.53</td>
<td>88.95</td>
<td>-0.72</td>
<td>44.30</td>
<td>77.77</td>
<td>59.89</td>
<td>69.95</td>
<td>-1.31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sanyo</td>
<td>97.40</td>
<td>106.39</td>
<td>123.26</td>
<td>132.63</td>
<td>2.79</td>
<td>81.38</td>
<td>90.60</td>
<td>104.74</td>
<td>109.09</td>
<td>2.35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sharp</td>
<td>49.03</td>
<td>69.15</td>
<td>84.34</td>
<td>94.74</td>
<td>4.01</td>
<td>42.23</td>
<td>62.55</td>
<td>71.45</td>
<td>80.74</td>
<td>3.24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suzuki</td>
<td>20.25</td>
<td>73.21</td>
<td>107.97</td>
<td>166.59</td>
<td>10.83</td>
<td>18.71</td>
<td>71.85</td>
<td>104.45</td>
<td>159.79</td>
<td>10.51</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toshiba</td>
<td>13.01</td>
<td>15.07</td>
<td>19.42</td>
<td>37.53</td>
<td>12.08</td>
<td>10.15</td>
<td>11.29</td>
<td>14.98</td>
<td>30.86</td>
<td>13.39</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toyota</td>
<td>36.35</td>
<td>33.77</td>
<td>47.27</td>
<td>57.73</td>
<td>6.93</td>
<td>26.24</td>
<td>24.28</td>
<td>38.82</td>
<td>47.60</td>
<td>8.78</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


NOTES:

All samples exclude affiliates for which date of establishment or start-up is unknown.

Equity sample excludes affiliates for which equity estimates are not available as well as some affiliates in countries with historically high inflation rates (mainly in Latin America) where translating book values at March 1995 exchange rates generates unrealistically high equity stocks.

Employment sample excludes affiliates for which employment estimates are not available; Fujitsu, Honda, Matsuworks and Sony are not listed in the table, because they do not report employment numbers for most of their affiliates.

Turning to the growth of the manufacturing affiliates in 1986-1994, Matsushita Electric Works grew most rapidly in number, followed by Canon, Fujitsu, Toshiba, Mitsubishi Heavy Industries, Suzuki, Mazda and Nippondenso (table 2). In terms of affiliate equity, Mazda experienced the most rapid growth, followed by Mitsubishi Heavy Industries, Isuzu, Mitsubishi Motor, Nippondenso and Matsushita Electric Works. When affiliate equity is measured relative to parent sales, growth was again most rapid in Mazda, and then Isuzu, Mitsubishi Heavy Industries, Nippondenso, Mitsubishi Motor and Matsushita Electric Works. Employment growth was also most rapid in Mazda and Isuzu, followed by Canon, Mitsubishi Heavy Industries, Toshiba, Nippondenso, Suzuki and Mitsubishi Motors. Finally, the growth of affiliate employment relative to parent firm employment was again most rapid in Mazda and Isuzu, followed by Mitsubishi Heavy Industries, Canon, Toshiba and Suzuki. Thus, growth in terms of all indicators tended to be more rapid in the automobile firms and Mitsubishi Heavy Industry than in the electric machinery firms, probably reflecting in part that electric machinery firms initiated large-scale FDI somewhat earlier.
Given the decline in exports by Japanese automobile firms in recent years, the relatively high growth of foreign affiliates of these firms would suggest that foreign production may, indeed, be substituting for parent firm exports in these firms. However, in this sample, simple rank correlation analyses of relationships between measures of parent firm export performance and those of foreign affiliate activity in 1986 or 1994, or between the growth of parent exports and the growth of foreign affiliate activity in 1986-1994, reveal only one negative correlation and that correlation is not even close to being significant statistically (table 3). On the other hand, there were a number of positive and significant correlations at the 0.05 level between the level of parent firm exports and the level of affiliate equity in 1986 and 1994; the parent firm export-sales ratio and the number of foreign affiliates in 1994; and the growth of the parent export-sales ratio and the growth of the ratio of foreign affiliate employment to parent firm employment. The positive correlation between the growth of parent firm exports and the growth of the number of foreign affiliates is also significant if a slightly lower 0.06 level is used.

Table 3. Spearman rank correlation coefficients between indicators of parent firm export performance by year of activity and indicators of foreign manufacturing affiliate activity in 1994 by year of establishment or start-up

<table>
<thead>
<tr>
<th>Variables correlated</th>
<th>Spearman rank correlation coefficient</th>
<th>t-statistic</th>
<th>Significance level</th>
<th>Number of observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>XP86 &amp; NA86</td>
<td>0.373</td>
<td>1.70</td>
<td>0.106</td>
<td>20</td>
</tr>
<tr>
<td>XP86 &amp; KA86</td>
<td>0.483</td>
<td>2.34</td>
<td>0.031</td>
<td>20</td>
</tr>
<tr>
<td>XP86 &amp; EA86</td>
<td>0.335</td>
<td>1.33</td>
<td>0.204</td>
<td>16</td>
</tr>
<tr>
<td>XP94 &amp; NA94</td>
<td>0.230</td>
<td>1.03</td>
<td>0.319</td>
<td>20</td>
</tr>
<tr>
<td>XP94 &amp; KA94</td>
<td>0.570</td>
<td>2.94</td>
<td>0.009</td>
<td>20</td>
</tr>
<tr>
<td>XP94 &amp; EA94</td>
<td>0.420</td>
<td>1.72</td>
<td>0.107</td>
<td>16</td>
</tr>
<tr>
<td>XPg &amp; NAg</td>
<td>0.424</td>
<td>1.99</td>
<td>0.062</td>
<td>20</td>
</tr>
<tr>
<td>XPg &amp; KAg</td>
<td>0.286</td>
<td>1.26</td>
<td>0.222</td>
<td>20</td>
</tr>
<tr>
<td>XPg &amp; EAg</td>
<td>0.388</td>
<td>1.58</td>
<td>0.137</td>
<td>16</td>
</tr>
<tr>
<td>XPR86 &amp; NA86</td>
<td>-0.050</td>
<td>-0.23</td>
<td>0.820</td>
<td>20</td>
</tr>
<tr>
<td>XPR86 &amp; KAR86</td>
<td>0.260</td>
<td>1.16</td>
<td>0.260</td>
<td>20</td>
</tr>
<tr>
<td>XPR86 &amp; EAR86</td>
<td>0.080</td>
<td>0.31</td>
<td>0.760</td>
<td>16</td>
</tr>
<tr>
<td>XPR94 &amp; NA94</td>
<td>0.540</td>
<td>2.71</td>
<td>0.010</td>
<td>20</td>
</tr>
<tr>
<td>XPR94 &amp; KAR94</td>
<td>0.210</td>
<td>0.91</td>
<td>0.380</td>
<td>20</td>
</tr>
<tr>
<td>XPR94 &amp; EAR94</td>
<td>0.370</td>
<td>1.50</td>
<td>0.160</td>
<td>16</td>
</tr>
<tr>
<td>XPRg &amp; NAg</td>
<td>0.320</td>
<td>1.41</td>
<td>0.170</td>
<td>20</td>
</tr>
<tr>
<td>XPRg &amp; KARg</td>
<td>0.330</td>
<td>1.48</td>
<td>0.160</td>
<td>20</td>
</tr>
<tr>
<td>XPRg &amp; EARg</td>
<td>0.570</td>
<td>2.58</td>
<td>0.020</td>
<td>16</td>
</tr>
</tbody>
</table>

Variable definitions:

- **EA86** = 1994 employment of affiliates established in 1986 or earlier
- **EA94** = 1994 employment of affiliates established in 1994 or earlier; **EA g**=[(EA94/EA86)-1]*100
- **EAR86** = [EA86/(parent firm employment 1986)]*100
- **EAR94** = [EA94/(parent firm employment 1994)]*100
- **EAr g** = [(EAr94/EAr86)-1]*100
- **KA86** = 1994 equity of affiliates established in 1986 or earlier
- **KA94** = 1994 equity of affiliates established in 1994 or earlier
- **KAg** = [(KA94/KA86)-1]*100

10 Rank correlations are used here because the presence of some very large firms (e.g., Toyota, Matsushita Electric Industrial) is thought to create a severe outlier problem if straight correlations are used.
KAR86 = \left[ \frac{KA86}{\text{parent firm sales 1986}} \right] \times 100

KAR94 = \left[ \frac{KA94}{\text{parent firm sales 1994}} \right] \times 100

KARg = \left[ \frac{KAR94}{KAR86} - 1 \right] \times 100

NA86 = 1994 number of affiliates established in 1986 or earlier

NA94 = 1994 number of affiliates established in 1994 or earlier

NAg = \left[ \frac{NA94}{NA86} - 1 \right] \times 100

XP86 = parent firm exports 1986

XP94 = parent firm exports 1994

XPg = \left[ \frac{XP94}{XP86} - 1 \right] \times 100

XPR86 = parent firm export-sales ratio 1986

XPR94 = parent firm export-sales ratio 1994

XPRg = \left[ \frac{XPR94}{XPR86} - 1 \right] \times 100

These correlation results are indicative at best. The biggest problem with this type of analysis is that other factors affecting parent firm exports are not accounted for, creating a potentially severe missing variables problem. The small sample used is also a severe statistical problem and requires caution in interpreting the results. Moreover, in the growth specifications, the failure to account for price movements -- that is, to analyse real growth rates instead of nominal growth rates -- is another potentially serious problem. The failure to account for growth in previously established affiliates is another potentially important problem. Despite those problems, it is of some interest that such simple correlations fail to provide any support for the view that foreign manufacturing affiliate activity substitutes for parent firm exports in those important Japanese TNCs.

**Implications of the patterns observed and a research agenda**

This note has examined trends in parent firm export performance and compared them with trends in measures of foreign affiliate activity in Japan's 20 largest machinery firms for the 1986-1994 period. Despite a general trend towards reduced exports and expanded foreign affiliate activity in almost all of the sample firms, simple rank correlation analysis uncovers no evidence that foreign affiliate activity substitutes for parent firm exports. However, as emphasized earlier, the small sample used and the failure to account for other determinants of parent firm export performance mean that these results should be treated as tentative and the focus must remain on how to generate more reliable results in future research. To this end, it seems most important to try and account for other factors affecting parent firm export growth, perhaps using methodologies similar to those of Lipsey and Weiss (1984); or Blomström et al., (1988). Data constraints will present substantial obstacles to such efforts, but the sources introduced here can go a long way towards overcoming those obstacles, albeit at a substantial cost. One data problem that will be particularly difficult to overcome, however, is the measurement of price movements in large diversified companies such as those studied here. To improve the reliability of the estimates, increasing sample size will also be important, though this will introduce a whole new set of problems surrounding how to define the sample and how to treat the large multiproduct firms studied here together with more focused firms in a single sample. Finally, it will also be important to construct better measures of affiliate growth. Despite the difficulties, with the devotion of sufficient resources and effort, these problems should be soluble, making it possible for us to obtain a clearer answer to the question: does foreign affiliate activity substitute for Japanese parent firm exports?

---

11 The Nikkei and Toyo Keizai databases are sold in electronic form, as are other versions of the underlying Ministry of Finance reports, but they are very costly and their use can be very time-consuming.
References


### Appendix: Comparing measures of affiliate activity

Table A1. Growth rates of FDI stocks and growth rates of Japan’s largest machinery firms

*(Fiscal years and billions of yen)*

<table>
<thead>
<tr>
<th>Industry, firm</th>
<th>Annual growth rates of FDI stocks by date of measure</th>
<th>Annual growth of affiliate equity stocks by date of affiliate establishment</th>
<th>Growth rate differential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canon</td>
<td>..</td>
<td>..</td>
<td>5.03</td>
</tr>
<tr>
<td>Fujitsu</td>
<td>1987-1993</td>
<td>-1.56</td>
<td>8.21</td>
</tr>
<tr>
<td>Hitachi</td>
<td>1988-1994</td>
<td>25.07</td>
<td>7.55</td>
</tr>
<tr>
<td>Honda</td>
<td>1987-1994</td>
<td>8.08</td>
<td>4.13</td>
</tr>
<tr>
<td>Isuzu</td>
<td>1987-1993</td>
<td>23.95</td>
<td>16.04</td>
</tr>
<tr>
<td>Matsuindus</td>
<td>..</td>
<td>..</td>
<td>12.99</td>
</tr>
<tr>
<td>Matsuworks</td>
<td>1988-1993</td>
<td>53.69</td>
<td>29.60</td>
</tr>
<tr>
<td>Mitsuelect</td>
<td>1988-1994</td>
<td>20.68</td>
<td>5.33</td>
</tr>
<tr>
<td>Mitsuheavy</td>
<td>1987-1992</td>
<td>53.04</td>
<td>20.53</td>
</tr>
<tr>
<td>Mitsumotor</td>
<td>..</td>
<td>..</td>
<td>11.15</td>
</tr>
<tr>
<td>NEC</td>
<td>1987-1993</td>
<td>9.56</td>
<td>3.23</td>
</tr>
<tr>
<td>Nippondenso</td>
<td>..</td>
<td>..</td>
<td>20.90</td>
</tr>
<tr>
<td>Nissan</td>
<td>1987-1993</td>
<td>9.56</td>
<td>3.23</td>
</tr>
<tr>
<td>Sanyo</td>
<td>1987-1992</td>
<td>20.74</td>
<td>6.04</td>
</tr>
<tr>
<td>Sharp</td>
<td>..</td>
<td>..</td>
<td>5.92</td>
</tr>
<tr>
<td>Sony</td>
<td>1987-1993</td>
<td>44.99</td>
<td>1.68</td>
</tr>
<tr>
<td>Suzuki</td>
<td>1986-1994</td>
<td>18.45</td>
<td>19.35</td>
</tr>
<tr>
<td>Toshiba</td>
<td>1986-1991</td>
<td>30.05</td>
<td>21.66</td>
</tr>
<tr>
<td>Toyota</td>
<td>1985-1992</td>
<td>25.95</td>
<td>5.18</td>
</tr>
</tbody>
</table>

*Sources: Toyo Keizai (various years a, various years b, various years c).*

*NOTES:*

FDI stocks refer to cumulative equity and loans. These estimates include some short-term loans not usually included in FDI flows as defined in the balance of payments.
Development-friendliness criteria for a multilateral investment agreement

A.V. Ganesan*

The question of establishing a comprehensive and legally binding multilateral framework for investment (MFI) has now become a priority issue on the international economic policy agenda. Two recent developments, namely, the ongoing negotiations in the Organisation for Economic Co-operation and Development (OECD) to establish an Multilateral Agreement on Investment (MAI) as a free-standing treaty, and the Singapore Ministerial Declaration of December 1996 of the World Trade Organization (WTO), have brought this issue to the centre stage of international debate. The participation of developing countries in such an MFI is regarded as important not only to ensure that the MFI is truly universal in its membership, but also because foreign direct investment (FDI) is increasingly becoming a key vehicle for accessing foreign markets, and many developing countries are increasingly becoming attractive destinations for FDI. However, the willingness of developing countries to participate in an MFI depends on how the development issues are addressed in it, and how it ensures a balance of interests and mutual advantage of all parties. The identification of the specific criteria to assess the development-friendliness of an MFI has thus assumed special importance in the ongoing debate on such a framework.

Before considering the specific criteria, it may be useful to keep in view certain general points:

- It may be true that an investment-friendly MFI would usually be development-friendly also, and that conditions required to promote FDI are precisely the conditions required to promote domestic investment as well. But this assumption requires to be tempered by the fact that while an MFI is FDI-friendly, it needs to recognize equally the developmental needs of developing countries, especially their need to foster domestic capabilities through policies designed to favour or support domestic enterprises.

- Development issues cannot be adequately addressed in an MFI merely by hortative statements and *best-effort* clauses in the preamble and body of the treaty. Likewise, while longer transition periods and special safeguards or derogations in favour of developing countries may be necessary, they are not sufficient to build the development dimension into the treaty. That dimension needs to be built into an MFI through substantive provisions, one part of which would be to allow sufficient freedom and flexibility to developing countries to pursue their own policies in regard to FDI, and the other part would be to spell out the obligations of investors.

* Former Commerce Secretary to the Government of India.
Political, social and economic development objectives intertwine rather strongly in the realm of FDI, and it is difficult to separate them completely. The sensitivity in regard to FDI and transnational corporations (TNCs) is heightened by the fact that developing countries are net importers of capital and that the size and strength of their enterprises, and in many cases even of their economies, are hardly a counterweight to those of the TNCs of the developed countries. Policies pursued for developmental or social reasons often have a political angle as well. This intermingling of political, social and developmental concerns is particularly relevant for dealing with issues of national treatment or right of entry and establishment in an MFI.

While an MFI may make a valuable contribution to the enhancement of the investment climate of a host developing country, it may not be prudent to have high hopes about its importance in boosting FDI flows to developing countries. As the pattern of distribution of FDI flows to developing countries shows clearly, the market and investment opportunities offered by host countries, coupled with their macroeconomic conditions and other locational advantages, predominantly determine the locational decisions of foreign investors. As long as host countries keep their investment climate stable and congenial even by their own autonomous measures, they will continue to receive FDI flows in response to the investment and market opportunities they provide. There is no empirical basis for the view that developing countries not signatories to an MFI would be at a serious disadvantage vis-à-vis those that are signatories to an MFI in competing for FDI. An unbalanced MFI is therefore not in the interests of either developed or developing countries.

Against this background, the following are my priority criteria for determining the development-friendliness of a legally binding MFI:

1. **Definition of investment.** The definition of investment in the current (September 1997) draft of the OECD treaty is very broad, and it purposely goes far beyond the traditional notion of FDI. It includes not only equity capital, but also all forms of portfolio investment, debt capital, intellectual property rights and other tangible or intangible assets. The definition is so wide that it raises the question whether the purpose of the proposed MAI is to set standards for the treatment of (or liberal regimes for) TNCs and foreign investors rather than of FDI *per se*. Even if the OECD treaty finally adopts a dual approach to the definition of investment as is being contemplated, namely, an open (i.e., non-exhaustive) list of assets that are considered as investment, and a short closed list of items or operations that, except for purposes of investment protection, are not considered as investment, the scope and coverage of the treaty will be much too wide for the comfort of developing countries. From the perspective of developing countries, the definition of investment should be confined to the traditional notion of direct investment (i.e., FDI *per se*), as, for example, the definitions used by UNCTAD for the annual *World Investment Report* or by the IMF for its statistical purposes. The definition of investment has significant implications not only for the national treatment, investment-protection and dispute-settlement obligations of an MFI, but also, in particular, through the depth of exceptions that may be needed for developing countries under the obligation relating to free transfer of funds by foreign investors. The East Asian currency turmoil is a reminder of how fragile foreign investor confidence can be in times of a crisis and how important it is to distinguish between long-term FDI and short-term volatile capital in a legally binding multilateral treaty.
National treatment. The issue of national treatment -- i.e., non-discriminatory treatment as between domestic and foreign investors -- must be considered at two distinct levels, namely, national treatment in the pre-establishment and establishment stages, and national treatment in the operational stage. While the latter may be an acceptable proposition for investments that are made in accordance with the host countries’ laws and regulations, as is the case in most of the existing bilateral and regional investment treaties, the issue of national treatment in the pre-establishment and establishment stages is on a different footing.

The building up of domestic industrial and technological capabilities is at the heart of the developmental objectives of developing countries. Experience shows that, without sufficient domestic capabilities, they may not be in a position to cope with, or derive full benefits from, foreign investment and technology flows. The establishment and strengthening of domestic capabilities depend on the freedom and flexibility to pursue their own policies to support or protect domestic industries and to provide a level playing field for them vis-à-vis foreign enterprises with much greater competitive strength. Unqualified national treatment to foreign investors at the entry and establishment stages will inhibit the capacity of developing countries to achieve their developmental objectives, which, as stated earlier, are also often intermixed with their political and social objectives.

The exceptions to national treatment that developing countries may need would be the exclusion or restriction of FDI in certain industries, sub-industries or activities; domestic ownership requirements, including formation of joint ventures; and screening and approval of inward FDI.

Some of the ways for addressing national treatment in the pre-establishment phase from the standpoint of developing countries are:

- excluding the whole issue from an MFI as far as developing countries are concerned and reviewing it, say, after a ten-year period;
- having neither a negative list of country-specific reservations nor a positive list of commitments, but only a requirement for notification from time to time of the exceptions to national treatment followed by each country;
- following the hybrid approach of the General Agreement on Trade in Services (GATs) of the WTO, i.e., a positive listing of the industries and activities opened up and a negative listing of the applicable limitations on national treatment and market access;
- freedom for each country to prescribe the quantum of FDI above which only it may grant national treatment;
- freedom from standstill and rollback obligations in the event that a negative list approach is followed; and
- the inclusion of developmental reasons in the category of general exceptions, in addition to reasons such as national security, public order or culture.

It may not be an exaggeration to say that the touchstone for testing the development-friendliness of an MFI will be the degree of freedom and flexibility it allows to developing countries to pursue policies suited, in their view, to their developmental objectives, or in other words, the extent to which they remain free from the obligation of national treatment in the pre-establishment and establishment stages of an investment.
3. **Performance requirements and investment incentives.** The OECD treaty aims at prohibiting several performance requirements totally, and a number of other performance requirements when they are not connected with the granting of an advantage. It is noteworthy that it may prohibit three types of performance requirements not prohibited by the WTO Agreement on Trade-Related Investment Measures (TRIMs), i.e., the employment of a given level of nationals, establishment of a joint venture with nationals, and a minimum level of local equity participation. At the same time, the OECD negotiations so far have revealed an ambivalent attitude towards disciplining the use of investment incentives. From the perspective of developing countries, the issue of performance requirements should be left to be addressed by the TRIMs Agreement, and an MFI should not become an instrument for imposing additional obligations on them in this matter. This is all the more necessary if an MFI does not include any discipline on investment incentives (including taxation) other than the most-favoured-nation clause, national treatment and transparency. Developing countries should have a certain flexibility in the matter of performance requirements, particularly if they are linked to fiscal, financial or other incentives or if they are applicable to domestic and foreign investors alike.

4. **Restrictive business practices.** An MFI should address the anti-competitive and restrictive business practices of firms. This important issue should not be ignored on the ground that corporate practices cannot be brought within the ambit of intergovernmental agreements and that they should be left to be regulated by national laws and regulations applicable to domestic and foreign investors alike. An MFI should, beyond prohibiting restrictive business practices that are regarded as illegal *per se*, aim at curbing such practices and thereby strengthen efforts at national levels.

5. **Obligations of investors.** Taken as a whole, an MFI must strike a fair balance between the rights of foreign investors and their obligations. To achieve this balance, an MFI should spell out investors’ obligations, legally binding wherever possible, and suggest good corporate practices where this may not be possible. Three multilateral instruments were negotiated under the auspices of the United Nations system to lay down standards for the conduct, behaviour and obligations of foreign investors, especially TNCs. These are the Set of Multilaterally Agreed Equitable Principles and Rules for the Control of Restrictive Business Practices (negotiated in UNCTAD and adopted as a non-binding code by a United Nations resolution in 1980, the only multilateral instrument on this subject so far); the Draft United Nations Code of Conduct on Transnational Corporations (negotiated in the United Nations as a non-binding code, but not adopted); and the Draft International Code of Conduct on the Transfer of Technology (negotiated in UNCTAD as a non-binding code, but not adopted). These three instruments, negotiated over considerable periods of time and stalled by the industrialized countries, provide valuable concepts and formulations concerning the obligations of foreign investors which are relevant to achieving a balance of interests of all parties in an MFI.

6. **Environmental concerns.** Non-governmental organizations have voiced the concern that the top-down approach to liberalization of investment regimes contained in the draft OECD treaty would undermine the ability of national governments to regulate access to and use of their

---

1 The three instruments are contained in UNCTAD, 1996. *International Investment Instruments: A Compendium* (Sales No. E.96.II.A.9).
natural and biological resources, and that it would put developing countries and transition economies in a particularly disadvantageous position. From the standpoint of developing countries, it is important that the rights secured by them over their natural and biological resources in multilateral instruments such as the United Nations resolution on Permanent Sovereignty over Natural Resources (1962) and the Rio de Janeiro Bio-diversity Convention (1992) are not diluted or whittled down by the national treatment obligations of an MFI (such as right of entry, right of establishment and freedom of access to natural resources on a par with nationals).

7. **Harmonization with the WTO Agreements.** An MFI should not become an instrument for imposing additional obligations and commitments on developing countries in matters falling within the ambit of the WTO Agreements. For example, the services sector should be left to be addressed entirely by the GATS. Article XIX of the latter already envisages successive rounds of negotiations for progressive liberalization of the services sector, taking into account the needs and circumstances of developing countries. The question of treatment and protection of intellectual property rights should similarly be left to be addressed by the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs) by excluding intellectual property rights from the definition of investment in an MFI. Performance requirements should be left to be addressed by the TRIMs Agreement, the more so when an MFI does not discipline the use of investment incentives. In short, an MFI must be compatible and consistent with the WTO Agreements, as well as the Ministerial Decisions of the WTO. If they wish to follow the multilateral route for investment, developing countries would therefore need to consider seriously the question of using WTO as the forum for it. The scope and content of an MFI will be influenced heavily by the forum in which it is negotiated.

To sum up, the development-friendliness of an MFI hinges crucially upon the extent to which it allows freedom and flexibility to developing countries to pursue their own policies and to build up their own industrial and technological capabilities. Development needs must as much be a central aim of an MFI as unhindered market access for foreign investors. An MFI will tend towards development-friendliness if the issue of national treatment is focused more at the operational stage and less at the admission stage. The question of the economic benefits to be derived from foreign investment is not in doubt, nor is the need for fair and equitable treatment and the full and constant security of investment that takes place in accordance with host-country policies and regulations. But what is needed is a sensible balance between the operation of foreign investment and the national objectives of host countries, be they economic, political, social or cultural. As UNCTAD World Investment Report 1996 pointed out, development issues must be and can be addressed in an MFI if the concerns and circumstances of all the participants are recognized.

* * *

---

Global Corporations and National Governments

Edward M. Graham

(Washington D.C., Institute for International Economics, 1996), 150 pages

This is an important book about an important topic. It is essential reading for anyone interested in the future of the international trade/investment regime -- or more generally the relations between transnational corporations (TNCs) and governments. Its relative brevity and Graham’s crisp writing style make it readily accessible to public sector officials and business executives as well as scholars. At the same time, it offers a serious treatment of politically sensitive issues.¹

The central theme of the book is that new international rules on investment are "urgently needed" (p. 2) in the light of the tremendous increases in foreign direct investment (FDI), followed by deep integration of national economies in recent years. This argument is supported by interpretation of data on trends in the world economy, as well as by exegesis of existing international agreements and prescription of the components for new agreements.

The basic structure and content of the book are as follows; chapter 1 briefly presents four premises underlying the book’s arguments -- that the globalization of business is increasing; that TNCs face a variety of national policies which create inefficiencies; that conflicts between TNCs and national governments are inevitable; and that both TNCs and governments have legitimate though different goals. Chapters 2 and 3 concern, respectively, trends and explanations of the globalization of business.

The core of the book is in chapters 4-6, which focus on issues associated with the development of international investment rules. The logical sequence of these three chapters is clear and compelling. Chapter 4 is a normative analysis of the features of an international regime that the author would like to be created. It specifies principles, rights and obligations for both governments and TNCs that it would incorporate. Chapter 5 is a description of existing international agreements concerning investment and an analysis of the extent to which those agreements meet the criteria postulated in the previous chapter. The topic of chapter 6 is the venue for efforts to develop further international rules -- the World Trade Organization (WTO) and/or the Organisation for Economic Co-operation and Development (OECD). These core chapters are supplemented by two appendices which contain an analysis of the technological spillovers of FDI in developing countries and a game theory analysis of the problems that arise in enforcing international economic agreements.

The book is, in part, an answer to the argument sometimes made, to the effect that the widespread unilateral liberalization of national investment policies, together with the large increases in FDI, particularly in recent years, implies that there is no need for new international rules on investment.

¹ See, also UNCTAD (1996) and several recent articles in the present journal (Brewer and Young, 1995, 1996; Brittan, 1995; Graham, 1995).
According to this argument, there is already a relatively open, liberal array of national policies and bilateral treaties that facilitate the free flow of investment. However, as Graham notes, there are in fact still many barriers to FDI -- not only in developing countries. Furthermore, increases in FDI create additional pressures for strengthened institutional mechanisms which have the potential to mitigate additional conflicts between both governments and TNCs and governments.

Graham thus makes a case for developing new international rules for investment that would constrain the collectively self-defeating Abeggar-thy-neighbour® policies of national governments. These rules should be developed in a manner similar to that in which the international trade agreements negotiated through the GATT and later the WTO during the past half century were developed. On the basis of a simple numerical analysis, Graham illustrates that "The potential benefit of eliminating these distortions is very high" (p. 4). The worldwide sales of the foreign affiliates of TNCs in 1992 were $5.2 trillion. New international rules that could increase this figure by 1 per cent through restrictions on national government policies that distort investment and create inefficiencies would increase world output by $52 billion, and this is probably a conservative estimate. He illustrates the point with several examples. One of these is of a TNC that decides to locate a large chemical facility in an Asian country that has offered a very generous subsidy, despite the TNC’s own study which indicates that a more efficient alternative is to invest in another country. Other examples concern national regulatory regimes that protect local firms from foreign competition both in service industries through regulations on foreign ownership and in manufacturing industries through export-performance requirements that divert sales from the local markets where FDI projects are located. Some of these national policies are becoming part of the WTO disciplines as a result of the Uruguay Round Agreements. The author argues, however, that these existing rules are largely inadequate.

Another factor motivating interest in the development of new multilateral rules on investment is the patchwork problem, i.e., the existence of a large and growing number of bilateral and regional agreements that give rise to complexities, uncertainties and inconsistencies and cause problems for both investors and governments. Regional agreements, for instance, can have international investment-distorting effects (as well as trade-distorting effects), as firms invest inside instead of outside the region because of the competitive disadvantages faced by those that produce outside and try to serve local markets by importing into it. Regional agreements, however, can also provide some prototype elements for new multilateral agreements, a point developed by the author in relation to the North American Free Trade Agreement (NAFTA) and the Asia-Pacific Economic Cooperation group (APEC) in particular.

Graham’s vision of a comprehensive new multilateral policy regime is impressive in both its breadth and structure. Organized around rights and obligations for governments and firms, it includes a broad array of provisions concerning government policy liberalization, TNC conduct, investment protection and enforcement of obligations. Among them are the key elements investor rights/host government obligations concerning establishment and national treatment. The discussion also includes an interesting analysis of the reasons for obligations for TNCs, as well as governments. It proposes a series of ancillary codes which could include matters such as taxation, transfer pricing, competition policy, accounting and reporting standards, as well as environmental issues, labour standards, corruption and intellectual property rights.

The analysis of the venue issue -- that is, whether to proceed with international investment rule-making in the WTO and/or in the OECD -- is likely to receive much attention during the next couple of
years. Because the OECD already has in progress formal negotiations to create a new binding Multilateral Agreement on Investment (MAI), its role would probably increase substantially in the future (even though its ambitious June 1997 target date for completion of the MAI negotiations was not met). Graham's preference for action in the WTO, however, is clear. His reasons for that preference are also clear: the WTO is much more comprehensive in its membership, as it includes many major developing countries. Moreover, the WTO offers the prospect of a more thorough integration of new international investment rules with international trade rules. On the other side, there are those who argue that the WTO members are not likely to form a consensus to undertake serious initiatives on investment issues for several more years and that, if they do, the resulting standards in a WTO agreement will be lower than those likely to result from the OECD negotiations. There are, it should also be noted, a variety of other arguments and counter-arguments about this issue. In any case, one can plausibly imagine the evolution of a pluralistic regime involving both the OECD and the WTO, with a shift in the centre of activity from the former to the latter over the next several years. However, there is a broad range of unsolved issues about the substance of any agreement as well as the forum in which negotiations take place, and issues about substance and process will continue to interact.

As this is a timely book about an evolving topic of current interest, some of its parts do of course face the risk of becoming outdated rather quickly. For instance, when the book was published, the Singapore Ministerial Meeting of the WTO in December 1996, was a forthcoming event. Nevertheless, the ministerial meeting itself increased interest in the topic of the book. Indeed, the topic will no doubt become increasingly salient -- and controversial -- over the next several years, and this book will continue to be an excellent introduction to many of the most relevant facts, concepts and issues.

Thomas L. Brewer
Professor
Georgetown University
School of Business
Washington, D.C.
United States

References


Lars Oxelheim

(London, Routledge, 1996), 434 pages

The condition of a country’s financial markets is a major criterion for transnational corporations (TNCs) to evaluate potential locations for their foreign direct investment (FDI). The more developed that market is, and the more integrated it is with the global financial market, the easier it will be to move capital into (and out of) the country and, if desired, raise capital inside the country. But while TNCs use many tools to determine how their local investment can be integrated with their global operations, few tools are available to measure the development of a country’s financial market and its level of integration with the global financial market. Lars Oxelheim’s well-documented book makes an ambitious attempt to create such a tool.

Oxelheim starts from the premise that a global financial system is in place, and it may be asserted with some confidence that this is true, as witnessed by unprecedented cross-border financial transactions, including foreign-exchange dealings, whose daily volumes amount to trillions of dollars. This global financial system incorporates a diversity of transactions, ranging from simple ones (e.g., forward currency contracts) to complex ones (e.g., index-based interest rate swaps), as well as a wide range of instruments from bonds to stock futures. How can such a complex system be captured in a single, readable volume? Frankly, it cannot and, to Oxelheim’s credit, he does not attempt to capture it. Rather, he has chosen a plausible proxy - bond markets - to illustrate the evolution of the global financial system. And to further facilitate discussion, he has chosen to look at bond markets in Denmark, Finland, Norway and Sweden only.

There are good reasons for this particular focus. First and foremost, bond markets are a laboratory where national economic policies and foreign (and domestic) reactions can be observed. Government participation in bond markets influences domestic interest rates, as well as the amount of domestic credit. First, too much government debt can raise interest rates, crowd out domestic firms and affect adversely the country’s creditworthiness. Second, once bonds are issued, they can be traded in the secondary market, which can become an indicator of the issuer’s economic health. Oxelheim points out correctly that a well-functioning secondary market is one of the key components of economic growth, as it is in the secondary market where funds, from whatever source, are marshalled for investment.

The Nordic countries have been chosen for analysis because they share similar economic conditions (except for Norway’s oil reserves), but have dissimilar regulatory environments. This allows for comparison of differing regulatory approaches to similar economic conditions. The geographical proximity of the four countries also opens up the discussion to regional influences. In other words, it is possible to explore the possibility that, by operating either collectively or cooperatively, these four countries enjoy advantages that would not be available to them by acting individually.
The book is divided into three segments. The first one lays the foundation of the study. In this segment, chapter 5 - AOn measuring the international dependence of national markets@ deserves special attention. One of the great difficulties in understanding foreign direct and portfolio investment flows stems from a narrow approach to the real motivations of investors. Since the mid-1960s, theoretical work by Hymer, Vernon, Buckley, Casson, Rugman, Dunning, Ozawa and others has provided a rich body of literature to explain why a TNC would choose FDI over a more traditional arm's-length transaction to pursue its global business strategies. The whos, whats, whys, wheres and hows of FDI continue to be analysed today. As for explanations of foreign portfolio investment, most of them waver between endogenous and exogenous factors. The former ones include a country's macroeconomic policies and economic growth, while the latter ones are economic conditions in key markets such as the United States, Western Europe and Japan. Support for either view is provided by a variety of statistical analyses, in which capital flows to and from markets are tracked against specific variables such as interest rates in the United States. So far the results are ambiguous.

A shortcoming in many studies is that the level of integration between the market to which the capital is flowing and the market from which it has come is not explicitly addressed. Oxelheim, on the other hand, looks at this issue explicitly. He places the degree to which a national economic system is tied to the global financial system on a scale between disintegration and total integration, where expected real interest rates are equal in the markets in question. In between lie indirect integration and direct integration. The former implies that returns in one country are indirectly linked to returns in another, for example through a third party. Under the latter, risk-adjusted, as opposed to real, rates are the same in markets.

To measure integration, Oxelheim looks at the gap between national bond rates and the Aglobal@ bond rate. A commonly used proxy for the global bond rate has been the United States bond rate, but the expansion of the Eurobond market, as well as other bond markets, makes this proxy less justifiable. Oxelheim suggests an aggregated bond rate composed of the rates of the world's major economies. When he turns to measuring the level of integration in the four countries, he uses both the United States bond rate and an OECD rate as benchmarks. The advantage of using the degree of financial integration to explain capital flows is that it allows the creation of an analytical framework in which the methods traditionally used to analyse differences in returns among markets can be incorporated.

The second section of the book applies the analytical framework to the particular circumstances of Denmark, Finland, Norway and Sweden. In doing so, Oxelheim makes several important contributions to the literature on financial market analysis. The first, and most important, is that he presents a historical review of the four bond markets. In fact, these chapters could be virtually excerpted as a separate text and still be valuable. Another valuable contribution of this section is Oxelheim's approach to political risk. In the literature, it is tied to a country's ability (or willingness) to meet its obligations to foreign creditors, or to facilitate the payment of foreign obligations owed by the private sector. In contrast, Oxelheim views political risk as the propensity of governments to Achange the rules@ for bond markets. The reason for this approach is that political risk manifests itself in a risk premium which investors demand for the uncertainty they face. Determining the size of risk premium is, however, difficult. Unfortunately, using the propensity to change the rules as an indicator of political risk
does not help in this regard, mainly because, as Oxelheim points out, it is hard to separate an interest rate gap into exchange-risk and political-risk components. To overcome this difficulty, Oxelheim maps out periods of time in which rule changes occur frequently and then ties them to changes in interest rates, thus identifying periods when political risk was present. This approach to political risk is not entirely new. The macroeconomic stabilization programmes favoured by the IMF are an implicit proof that instability (rule changes) does indeed have adverse effects. Oxelheim just makes this connection more explicit. And while he might be challenged on his definition of political risk, he should be lauded for drawing attention to rule changes.

Oxelheim synthesizes his findings in the last section of the book. He charts in this section the historical pattern of differences between domestic bond rates and his proxies for the global bond rate. He also presents here his conclusions on the timing and degree of integration to the global financial system. An interesting finding is the mixed empirical support for the Fisher Effect; sometimes strong correlations between nominal interest rates and expected inflation are present, but sometimes not. This is noteworthy because the test was done on good-quality data. And whether or not one believes in the Fisher Effect, the existence of differences between expected inflation and nominal rates is a good indicator that the integration of markets has not yet occurred.

It may be tempting to test the viability of Oxelheim’s findings on the pattern of integration in these four countries by extending the study to other countries and/or regions. It would be equally interesting to carry on a prescriptive analysis on the integration of national financial systems into the global financial system. But caution would be required in such exercises. Even though Oxelheim describes an optimal sequence of integration, he does not mean it as a prescription to be followed. This is reasonable because each national financial system is at a different stage of integration and each has a different history and pattern of relationships with other systems. Another reason is the unequal quality of data in other countries. Oxelheim could not have produced this work without access to good, reliable data, not matched from many other parts of the world. The inability to extend the findings of this study to countries other than the four analysed should not be viewed as a criticism, however. What Oxelheim has provided is a road map for future analyses of this type.

Oxelheim’s main message is that the de facto existence of integration (unrestricted foreign access to a market) and the de jure reality (the regulatory framework through which access from and to foreign markets is permitted) have to mesh. How and when this will occur depends on country-specific variables.

This is an important book, mostly because it ventures into a territory few have braved. No doubt those who choose to follow in Oxelheim’s footsteps will improve parts of the map and discard others. It provides interesting insights for students of international finance, investors and policy makers, although it is not easy reading. It also suffers, to a certain degree, from what may be characterized as an identity crisis. Indeed, is this supposed to be a text on the development of financial markets? Is it a theoretical piece? Is it an empirical work? To whom is this book really addressed? Some proficient readers might find parts of the book too elementary. Readers schooled in corporate finance may, for example, wish to skim through the text on bond markets in a corporate perspective and efficiency of secondary bond markets. However, readers unfamiliar with corporate finance will find it useful. Part of
the problem is the title; it hints at a broader scope of analysis than actually delivered and leads to an expectation of extensions of the analysis beyond Scandinavia. In turn, from the second section on, the book's best parts are revealed. At its heart, it is a superior analysis of how the national bond markets of Denmark, Finland, Norway and Sweden developed internally and then established ties to financial markets outside their borders. Oxelheim could well have limited his discourse to simply tracing and analysing this history and still would have had a worthwhile book.

John R. Dilyard

Rutgers University
Newark, New Jersey
United States
This is an important and timely book examining foreign direct investment (FDI) in Turkey. It was commissioned and supported by the Association for Foreign Capital Coordination, a private agency of foreign firms operating in Turkey, in cooperation with the Foreign Investment Directorate of the Under-secretariat of the Treasury of Turkey, the sole authority dealing with foreign investment applications, which also assists foreign investors in exploring opportunities in Turkey (Foreign Investment Directorate 1991).

As the purpose of the study was to provide a general profile of foreign firms operating in Turkey, Deniz Erden selected a sample of 330 firms from a total of 2,358. Both the intensity of the follow-up efforts and the support of the Association for Foreign Capital Coordination probably contributed to a high response rate (66 per cent).

In chapter 2, the sample data are grouped by three measurements of size (the amount of capital, the level of sales and the number of employees), sectors, home countries and the date of entry. Although before the publication of this book, up-to-date and complete information on all foreign firms operating in Turkey with monthly updates coupled with information on the regulation of foreign investment, as well as statistics about each and every foreign firm operating in Turkey (for example, Yabanci Sermaye Baskanligi 1990), has been available in the foreign capital reports of the Foreign Investment Directorate, these reports are in Turkish, a language few non-Turks are familiar with. By examining the entry motives and ownership structure (chapter 3), managerial control (chapter 4), expansion trends, export performance, product development and training efforts in Turkey (chapter 5), and the perception of country advantages and operating risks (chapter 6), this book makes a significant contribution, in the English language, to FDI research in Turkey. Statistical methods such as Pearson correlation, hypothesis testing and one-way analysis of variance were used appropriately to show whether the hypothesized relationships were statistically significant.

Notwithstanding the above-mentioned positive aspects, the book has certain shortcomings which could be corrected in a future edition. Some basic terms such as “partners” and “shareholders” are not always employed according to general usage. Therefore, in table 5 of chapter 3, page 43, the “number of shareholders” should have been the “number of partners”. On the same page, “joint ventures” were called “partnerships” while “wholly owned” subsidiaries were referred to as “singly owned”. “Entry form” was used for explaining ownership proportions rather than the form of involvement such as licensing and franchising. On the next page, in table 7, the distinctions between “new company”, “local company acquired” and “joint venture” are not clear. Since a new company or a local acquisition can be a joint venture at the same time, such a classification is not comprehensible.

The findings of the questionnaire could have been analysed in greater depth. For example, on page 50, when the share of foreign investors’ capital was presented by subsectors, it was found that
most service firms in trade, banking and insurance had either majority (51-99 per cent) or full foreign ownership. However, there was no explanation about the possible causes of this phenomenon. Other studies show that many service firms tend to have low capital intensity and are therefore more capable of forming wholly or majority owned subsidiaries than their manufacturing counterparts (Erramilli, 1991, 1996). Tourism is the only service subsector where most firms have minority foreign ownership (15 versus 4). One reason might be the possibility of achieving de facto control over resources through contractual or collaborative associations without having de jure control with 51 per cent or more equity stake (Dunning and McQueen, 1981; Dunning, 1989).

Although many experts believe that the amount of foreign capital brought into the host country is one of the main motives of control (Hodgetts and Luthans, 1997), this study reported no relationship between the foreign investor’s capital and the degree of control exercised. However, a significant relationship was found between ownership structure and control (pp. 60, 63 and 75). It is difficult to understand why investors would not be concerned with control when they invest a large sum, but would be apprehensive when they have a majority share in a small venture.

Conflicting results are reported concerning the foreign investor’s share and control. In chapter 4, page 61, it is stated that, in insurance firms, control was shared between foreign and local partners (the degree of control is 3 on a 1 to 5 Likert scale). On page 63, a statistically meaningful relationship was found between ownership share and the degree of control; the higher the percentage of foreign ownership, the higher the degree of control. That is, investors who have a majority share exercise tight control. However, in chapter 3, table 12 shows that 10 out of 13 insurance firms had either 100 per cent or majority ownership in the study sample. Since insurance firms do not show a high degree of control, the conclusion about a majority share leading to tight control (on p. 63) does not seem to follow the findings of page 61 for all sectors.

In chapter 5, table 1 shows the types of new investments. Since the author does not give definitions of the types listed in the table, it is not possible to distinguish between “new plant/office” and “capacity expansion”. The lack of definitions again leads to confusion in chapter 6, when Turkey is compared with other countries in terms of country risk.

An inaccurate analogy leads to a doubtful conclusion in chapter 5 (page 132). The author compares the export performance of foreign firms in Turkey with those of the domestic firms engaged in exporting from their home country to international markets, as examined by Bonaccorsi (1992) and others. Since the subsidiaries of foreign firms operating in Turkey typically follow the strategic decisions of their headquarters, and their presence in Turkey is mainly to serve the large Turkish market, their export behaviour is not comparable with those of the domestic firms studied in previous works. Therefore, the negative correlation between firm size and export performance is not comparable with the findings of the Italian study.

To Erden’s credit, she tries to find meaningful relationships between several factors, as shown in copious tables throughout the book. Still, some important points were omitted. For instance, in chapter 6, table 25 gives the number of firms by subsectors which reported negative treatment by public authorities or the general public. However, there is no further explanation on the allegations of these
firms. Let us take the example of two mining firms that reported negative treatment. Part of the explanation is in table 21 of the same chapter: mining firms are the only ones which find environmental protection legislation to be a serious problem, with 1.5 points on a scale from 1 (very serious) to 5 (not at all serious). Further explanations could be found in the protests against the exploration and extraction of gold in Western Turkey by some foreign mining companies, as reported by both the Turkish and foreign news media. The Turkish people have become very apprehensive about the environment, and do not want their land to be seriously polluted by any firm, foreign or domestic. This attitude is very likely directed against environmental disasters, and not foreign firms per se. Finally, some more editing and the addition of an index would have enhanced the readability of the book.

Despite these shortcomings, Erden’s book presents interesting information on FDI in Turkey. The study, which fills a lacuna in a neglected area, should be beneficial for scholars and specialists as well as investors, both foreign and Turkish.

Necla V. Geyikdagi
Assistant Professor of International Business
Rochester Institute of Technology
Rochester, New York
United States
References


This timely book analyses the challenges and responses of the economy and the firms of the Republic of Korea in an era of economic liberalization, political democratization and globalization. It therefore addresses broader issues than its title suggests. The theme revolves around seven policy prescriptions necessary for the growth and development of the economy and the firms of the Republic of Korea. These imperatives are to:

1. develop a new industrial policy;
2. restructure the conglomerates, or chaebols;
3. stimulate the growth and development of small- and medium-sized firms;
4. expand the globalization of the major firms;
5. enhance technological development capabilities;
6. create new management structures;
7. develop human capital.

These prescriptions are to be understood in the context of the segye'hwa (aglobalization in Korean) movement initiated by former President Kim Young Sam in early 1993. The movement covered social, political and economic reforms aiming to prepare the country for the twenty-first century. It had three intertwined spheres of change: (i) political and social reform (the quest for freer and more mature democratic society); (ii) economic renewal and the strengthening of economic competitiveness; and (iii) cultural development. The main tools of the movement were increased deregulation of enterprises, enhanced market liberalization, reduced reliance on the government as an economic partner, greater support for small- and medium-size firms, and the pursuit of more equitable partnership between management and labour.

In many ways, the first policy prescription was the most important of all, as it provided the framework for the other six ones. Under the title of industrial policy, broader issues such as the development of a macroeconomic and macro-organizational strategy as described by Dunning (1993) were discussed. As it implied a holistic, systemic and integrated strategy, it was inseparable from the more general industrial, trade, competition and technology policies, as well as other government policies.

Until recently, the major thrust of industrial policy in the Republic of Korea used to be government intervention in the private sector designed to achieve national economic development. Industrial policy was conducted on the basis of reciprocity: the Government offered incentives on the proviso that firms deliver on predetermined performance requirements (mostly in the form of export targets). Government support was justified by infant-industry arguments.

post-1992 policy was a continuation of trade and market liberalization but cut much deeper. It called for both *internal liberalization* and *external liberalization*. The former meant the minimization of government interference in the private sector, and greater emphasis on market forces to create and allocate resources for economic development. The role of government in industrial adjustment became more indirect, through investments in technology, human capital and infrastructure. Central to this objective was deregulation “to facilitate industrial adjustment by eliminating entry barriers, streamlining socioeconomic regulations, simplifying administrative procedures, and inducing foreign competition” (p. 59-60). In the light of these objectives, as well as the requirements of OECD membership, the Republic of Korea had to liberalize its financial and capital markets.

The major goal of external liberalization was to open the historically closed domestic market to greater foreign competition. The imperative for this stemmed fundamentally from international pressures by major trading partners in the light of the emergence of the Republic of Korea as an economic power.

The predicament that government policy makers faced was how to liberalize financial and capital markets, imports and foreign capital inflows without significant macroeconomic dislocations, and undermined competitiveness of domestic firms and industries. One way was to stipulate that conglomerates should finance 20 per cent of their overseas investment from their own internal funds -- a move that could constrain globalization. This underscored one of the conflicts between liberalization, deregulation and globalization.

The book discussed the other objectives of the 1993-1997 five-year plan -- the development of small- and medium-size firms, of the promotion of technology development and of human resources development as three separate policy prescriptions. Restructuring efforts aimed at reducing the size and diversity of the Republic of Korea conglomerates (or *chaebols*) were not explicit goals in the 1993-1997 five-year plan. Rather, these efforts stemmed indirectly from the need to redefine the role of the government in economic development, the increasing pressures for fair trade from the major trading partners of the Republic of Korea and by shifts in management strategy and corporate governance, including the development of small- and medium-size firms. The political and social reforms of the *segyehwa* movement were forcing a re-examination of protectionism and economic concentration. With political democratization, many would regard the close relationship between government and business to be less justifiable and sustainable in the future.

The restructuring of the *chaebols* raised important questions. While it may have been justified to forgo protectionism and financial support to the *chaebols* as they had progressed beyond the infant stage, there seemed to be no real economic imperative to eliminate economic concentration other than that it was in line with political and social reforms under way. First, scale and scope economies have proved paramount in high-technology competition and, in fact, have made the *chaebols* more profitable than their American and Japanese counterparts. Second, the size of the *chaebol*, although not negligible, was smaller than that of large Western or Japanese MNEs. The Republic of Korea's largest *chaebol* as of 1995 (Samsung) was smaller in size by several orders of magnitude than Japan's largest *keiretsu* (Mitshubishi). Yet the current trend is to downsize and specialize them. Third, unlike Japanese *keiretsus*, these firms were not allowed to own banks until recently. With reduced financial strength and increased risks, could the *chaebols* compete against the larger and better-financed firms from the more developed countries, particularly in higher value-added industries? Fourth, it is important to remember above all that more than 80 per cent of the country’s GNP is generated by the 30 or so family-owned
Korean conglomerates. The economic success in the past decades of the Republic of Korea particularly and of many other countries in the region more generally have, in a large part, been made possible by the Korean chaebols, the Chinese business groups and the Japanese keiretsus whose business dealings have tended to be based on highly valued Confucian-style relationships. To restructure the chaebols may therefore have negative implications on the very basis of the growth and prosperity of the Republic of Korea and the Asian region.

In any event, the envisaged restructuring of the chaebols did not proceed very far under President Kim as these companies became even more powerful and larger with their continued expansion into newer markets financed on the basis of debt. It remains to be seen whether the economic crisis would have greater success in implementing this policy initiative.

The growth and development of small- and medium-size firms as engines of growth was the mirror image of the restructuring of the chaebols. Small and medium-size firms accounted for 43 per cent of total exports in 1993, and for some 20 per cent of outward foreign direct investment (FDI) in 1994. Their growth and development was not so much a new policy priority as a renewed emphasis. In the mid-1980s, the Government already had stipulated the shift of support from chaebols towards small and medium-sized firms. But this had proved ineffective, particularly in the period after 1988 when many of these firms were allowed to sink or swim in the face of high labour costs and declining labour productivity.

The priorities for the 1990s lay in increasing the competitiveness of SMEs in response to the demands of industrial restructuring, market liberalization and globalization. In addition, as in developed countries, particularly in Japan, small and medium-size firms acted as key suppliers of intermediate inputs such as specialized parts and components to large assembling industries operated by conglomerates. These were substantial challenges for SMEs, particularly in the light of their limited financial resources and inadequate funding, lack of qualified and motivated employees, etc. Meeting those challenges required the enhancement of their technological and entrepreneurial capabilities, government support and the use of newer sources of finance for companies. Indeed, it is no longer possible to continue to provide low-cost, government-financed loans -- the basis of the country’s past economic miracles and a contributory factor to its current economic debacles.

The expansion of globalization efforts -- the fourth policy prescription -- was at the core of the growth and survival of the firms of the Republic of Korea. The book reviews the globalization efforts of the big four chaebols: Samsung, Hyundai, Daewoo and Lucky-Goldstar (LG). Globalization was required to protect and expand markets, and to build technology, as well as an important instrument of domestic industrial restructuring.

As far as technological development is concerned, the book outlines the responses of the Republic of Korea: enhanced local R&D efforts, increased overseas investment, increased exports of technology and increased technological alliances. Perhaps what was far more important was the development of an indigenous technological base that would have been enriched not only by the responses outlined above but also by inward FDI, research-based outward FDI and imports of technology which were likely to assume increasing importance with external liberalization. With the incursion of the firms of the Republic of Korea into high-technology (particularly semiconductor) production, new and more innovative modalities of acquiring foreign technology were required since technology partners and suppliers tended to be more self-protective and less willing to share. Besides,
the element of technology that forms the basis of firm-specific competitive advantage is unique, firm-
specific, tacit and differentiated and therefore non-tradable across firms (Cantwell, 1994). Its transfer is
made difficult, particularly to firms of a different technological experience, and more so to firms in
countries at a different stage of economic development.

While the book describes the responses of the 1990s in the field of technological development,
mentioning the government-initiated projects to develop essential technologies and the growing
importance of strategic technological alliances involving cooperative R&D and cross-licensing, the
specific technology strategies for the development of small- and medium-sized firms -- a policy priority -
- seemed to be lacking.

The sixth policy prescription raised important issues of organization and management. While the
requirements of global competition could have made it necessary to adopt Western- style organizational
structures and management systems, the main challenge was not to unnecessarily shake the cultural
foundations -- the Confucian values -- that continued to form the basis for the economic vibrancy of the
Republic of Korea and many countries of Asia. The book draws lessons for the Republic of Korea
from the experience of Japan that shares similar Confucian values and where moderate decentralization
and professionalization of management had been clearly established.

The development of human resources was the last but by no means least important policy
prescription, as it was intimately linked with other policies. Together with other created assets such as
technology, the development of human resources is regarded as the critical competitive asset to the
contemporary success of firms and countries. There is a lengthy analysis in the book of human resource
management, recruitment, training and motivation, comparing the Confucian approach with the modern,
Western, more “professional” approach. However, there was little discussion in this context of the more
fundamental, although difficult, task of overcoming the inherent inertia in people's mindsets and attitudes
towards change -- the secret behind the prosperity of Samsung, LG and many other chaebols. The
recent economic meltdown in the country and in other parts of the region associated with the
bankruptcies of many companies may just underscore the need for such reform.

Paz Estrella E. Tolentino
Lecturer in International Business
Department of Management and Business Studies
Birkbeck College
University of London
United Kingdom

References


118
JUST PUBLISHED

Competitive Business Strategies of Asian Transnational Corporations

(ST/ESCAP/1785)

This monograph presents the detailed results of a survey of transnational corporations from four Asian countries. These corporations pay particular attention to their choice of location and production in a foreign market, to management, and to long-term strategies to sustain growth. The research suggests that Asian transnational corporations are geared towards competition in the global and regional marketplace. They locate foreign investment in both developed economies to access new technologies and service industry facilities and in neighbouring countries to seek market opportunities and profits. Production strategies are related to previous experiences in domestic markets and to the technologies that they access. Management is largely conservative, with little concern in smaller Asian transnational corporations for decentralization of decision-making to foreign affiliates. The mark of long-term corporate strategy is flexibility in order to respond to opportunities that might serendipitously turn up in a new foreign market.

La inversión extranjera en América Latina y el Caribe: Informe 1996

(Sales No. S.97.II.G.7) ($8)

This 150-page document prepared by the ECLAC/UNCTAD Joint Unit analyses the tendencies of foreign direct and portfolio investment in Latin America and the Caribbean in 1996. The analysis is placed in the context of the difficulties with short-term debt instruments experienced by some Latin American countries in 1995. The first, long section of the report touches upon such topics related to foreign direct investment as inflows to the region during the 1990s, the principal country recipients, the sectoral composition of inflows, their origin, the significance of the inflows in respect of GDP and gross capital formation, the importance of privatization-related inflows, and their profitability, as well as information on outflows from the region. The second section deals with portfolio investment in bonds and capital shares. The document contains 40 pages of detailed statistical annexes.

Pro-Invest. Special issue of Transnationals (vol. 9, nos. 2-3)

*Transnationals* is a quarterly newsletter, available free of charge. This special issue focuses on the second annual conference of the World Association of Investment Promotion Agencies (WAIPA), held in Geneva from 23 to 26 September 1997.
Books received on foreign direct investment and transnational corporations since August 1997


