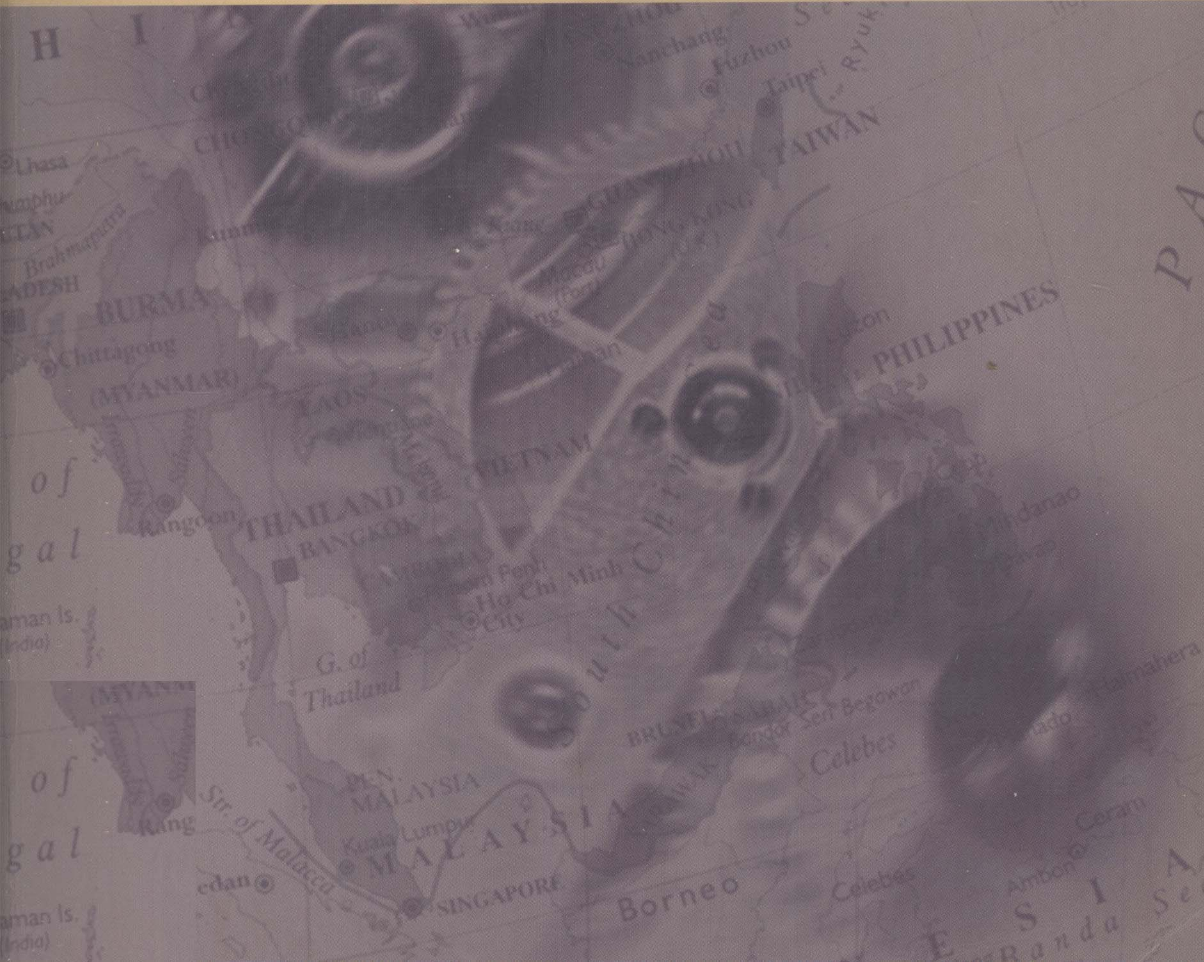
MULTINATIONALS AND EAST ASIAN INTEGRATION

OUTSTANDING CONTRIBUTION TO ASIA PACIFIC COMMUNITY BUILDING

Winner of the MASAYOSHI OHIRA AWARD 1998

Edited by Wendy Dobson & Chia Siow Yue



Multinationals and East Asian Integration

Edited by

Wendy Dobson and
Chia Siow Yue

International Development Research Centre, Canada
and
Institute of Southeast Asian Studies, Singapore

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PREFACE

This project originated in an interest, as the title implies, in the role of firms in East Asia's dynamic growth and regional integration. Three questions motivated the research: What are the links between trade and investment at the level of the firm? How should we understand the contribution of these linkages, rather than intergovernmental trade agreements, to the apparent rapid integration of the East Asian region? Do Asian investors (or investors of any particular nationality) have special influence that might lead to a regional bloc?

These should be straightforward questions to answer, but statistics on firm-level activities are almost nonexistent unless gathered by primary research. The editors were fortunate to assemble a dedicated team of East Asian economists interested in actual observation of multinational affiliates and internationalizing East Asian firms. The project fit the objectives of the International Development Research Centre's (IDRC's) regional integration program, and generous support was provided. IDRC also wished to ensure the knowledge obtained in the project would be made available to researchers in transition economies. As a result, Vietnamese and Chinese researchers participated in two project workshops held in Singapore in 1994 and 1995.

Surveys of 241 firms in the eight economies listed below constituted the main research activity in 1993–94. Primary data collection was very time consuming and difficult because of the reluctance of firms to grant interviews or complete questionnaires and because of the scarcity of data available to local managers. Many were able to provide only interval data for one point in time. We are very grateful to those managers who participated in our surveys. Participating researchers were also creative and persistent, in one case enlisting a spouse to make a personal contact.

We have taken care to distinguish different levels of analysis, including aggregate trade and foreign direct investment (FDI) flows at the country and regional levels, and trade flows within and among firms of several nationalities in several industries.

Our conceptual framework emphasizes the importance of relative factor endowments as determinants of the linkage between trade and investment. In this study, most of the manufacturing industries attracting FDI inflows are global industries, such as electronics, that produce differentiated products. Multinational firms are adept at slicing up the value chain and allocating, through FDI, segments to locations with differing comparative advantages. While national industrial structures appear on the surface to be quite similar, below that level of analysis is a plethora of intrafirm networks within which complementary trade and FDI links are very apparent. Intermediate goods are produced in one location; shipped to other locations in the region, where further value is added; and assembled into differentiated and homogeneous final goods. These networks, in turn, are linked into global networks in these industries. In the electronics industry, we estimate that at least 55% of intraregional trade is also intrafirm.

These firm-level linkages have several implications for regional integration. First, FDI and associated trade flows have a positive sum impact on host economies. Everyone gains from the division of labour according to evolving locational characteristics of host economies. Second, governments position their economies to take advantage of such division of labour by influencing the cost and availability of inputs and access to customers. They should rely more on framework policies such as prudent macroeconomic policies and open trade and investment policies including open domestic markets. These are preferable to direct interventions such as trade-related investment measures. Third, the growing similarity of national industrial structures in East Asia, while promoting growth, is also producing vulnerability. More than half of East Asia's exports were destined for outside the region as recently as 1994 (WTO 1996); thus, cyclical and, possibly, structural vulnerabilities to such factors as currency appreciation and slowdown in world demand for these exports should be anticipated.

Several terms used in this study require clarification at the outset. The first is *East Asia*. We included eight host economies: Guangdong province (China), Hong Kong, Indonesia, Malaysia, the Philippines, Singapore, Taiwan, and Thailand. South Korea is not included because until recently it was not a major host. More recent arrivals like Vietnam are not included for the same reason and because of the lack of complete statistics. Throughout the study, we refer to our subjects as "economies," which is a common practice, although at times we use the generic term *country studies*. In addition, we define the companies that are our subjects as international, multinational, and global firms. By *multinational* and *global*, we mean large firms with operations in several economies, including those outside East Asia. *International* firms refers to multinational enterprises and global firms, as well as small and medium-sized enterprises (SMEs) that originate within the region and have more modest cross-border investments."

Finally, although this study was made possible by IDRC and the Institute of Southeast Asian Studies, the findings and views expressed are those of the authors alone.

Wendy Dobson
Chia Siow Yue
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Finally, the project logistics alone would have overcome the editors but for the expert assistance of Y.L. Lee, Executive Secretary, ISEAS, and Vivien Choy, Administrative Coordinator, Centre for International Business, University of Toronto.

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Introduction

Chapter 1

EAST ASIAN INTEGRATION

Synergies Between Firm Strategies and Government Policies

Wendy Dobson

A frequently cited corollary of East Asia's remarkable economic dynamism is that its economies are rapidly and spontaneously integrating with one another. Although many of the reasons for such integration, and its consequences, have been extensively studied, the cross-border activities of firms have not.

How do firms influence East Asian integration?[1] International firms[2] create linkages across borders in their search for profitable opportunities through trade, foreign direct investment (FDI), technology contracts, and other arrangements that provide flexibility needed to adjust to change and uncertainty in increasingly competitive factor and product markets. Change and uncertainty are generated in markets by such factors as technological advance, exchange rate volatility, and governments' policies and regulations affecting market access and production costs. Host governments in East Asia encourage FDI inflows to augment domestic savings, to promote technological transfer to accelerate economic development, and to obtain access to international markets for their exports.

The purpose of this study is to examine the trade and investment activities of international firms in selected manufacturing industries in eight East Asian economies — those of China (Guangdong province), Hong Kong, Indonesia, Malaysia, the Philippines, Singapore, Taiwan, and Thailand — to cast light on their impact on regional economic linkages. How is their production organized, particularly with respect to their traded activities? How much trade is intrafirm? intraindustry? Do these patterns differ by corporate nationality (that is, home country of investor), by location, by industry, and by the age of the enterprise or its size? What do these patterns imply about countries' trade policies and about the intraregional intensity of trade and investment ties compared with those with the rest of the world? Do international firms' independence and their growing importance in global production[3] discipline governments' domestic policy freedom? Research questions based on these initial questions are posed in the final section of this chapter.

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[1] Economic integration is the process by which barriers to flows of goods, services, and capital are reduced, allowing the freer play of market forces. This process, which can be spontaneous or induced by trade liberalization agreements among governments, has been described as "shallow" integration. It is distinguished from "deep" integration, which is seen to occur when governments alter domestic policies to harmonize policies or converge with the economic performance of their partners.

[2] *International firms* refers to multinational enterprises (MNEs), which locate parts of their operations in different countries; multidomestic firms, which replicate operations in multiple countries; and small and medium-sized enterprises (SMEs), which produce on a smaller scale across borders.

[3] The World Bank (1995) and the United Nations Committee on Trade and Development (UNCTAD 1994) estimate that world sales of foreign affiliates of MNEs may now exceed the world's total exports.

This topic implies several levels of analysis: the regional level, the level of individual economies, and the firm level in particular industries. The overview in this chapter relates regional integration and firm behaviour. In the next section, I review studies of the determinants of regional integration, to establish whether trade and investment ties are becoming more intensive within the region than with the rest of the world. The third section shifts the focus to firms and governments and suggests possible "synergies" between their respective strategies. In studying firms' role in integration in this study, we focus on the value-chain activities of affiliates and their associated intrafirm trade, rather than on the more traditional measure, intraindustry trade (IIT). Firms' production and trade in host economies are influenced by such well-known determinants as location, industry, corporate nationality of the parent, and affiliates' age and size. Host governments' public policies aimed at attracting or influencing the value-added activities of international firms are prominent locational determinants.

In the final section, research methodology, study design, and research questions are presented. Unique data sources were used for this study, including eight firm-level surveys conducted in 1994 by the authors in the eight East Asian economies, which are significant recipients of FDI inflows.[4] The firm-level surveys were carried out in the electronics, textile and garment, auto, and chemical industries, which are the recipients of much of the inflows of manufacturing-related FDI and account for a significant share of trade. Taken together, these industries accounted for nearly half of world merchandise trade in 1994 and 60% of Asian exports (WTO 1996). Patterns of intrafirm trade in these industries, holding location constant, are analyzed in the eight country chapters; in Chapter 10, the firm is held constant in an analysis of the cross-border activities of six electronics firms.

Regional integration

The traditional determinants of integration among a group of economies are gravity (proximity and size of respective economies); growth rates of the economies; policies (creation of preferential trade ties, reduction of barriers to trade, and host-country policies to influence direct investment); and firms (the activities of firms, measured traditionally through IIT).

The role of policies has received extensive study because of concerns that the world may be organizing into regional trading blocs. Successive multilateral trade negotiations in the postwar period, progress toward currency convertibility, and dramatic improvements in international communications and transportation have reduced barriers to international business and facilitated flows of trade and investment. Intraregional trading arrangements in the European Union (EU) and those in the North American Free Trade Agreement (NAFTA) have raised concerns that regional trading blocs are forming.[5] Economists generally view bloc formation as a negative development. They believe that, whether through formal institutional arrangements or through more spontaneous market-driven developments, blocs will yield a lower level of world welfare than would a fully open and multilateral trading system.[6]

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[4] The Republic of Korea is not included because it has not until recently been an important destination for FDI. Although Korean firms have become significant outward investors in the region, few agreed to participate in our surveys.

[5] Regional integration can be either market or policy driven. East Asian integration has occurred in the absence of a formal institutional framework, whereas integration in Europe and North America has occurred with formal trade agreements. The term *bloc* generally refers to arrangements among partners in an institutional framework in which policies toward non-partners become more restrictive or exclusive.

[6] The issue has stimulated heated debate. This debate is summarized in Federal Reserve Bank of Kansas City (1991). Paul Krugman, on one side, took the position that, in theory, free-trade zones are undesirable because they divert trade from low-cost to high-cost suppliers. In practice, however, free-trade zones increase market size and are therefore likely to be trade promoting because of their contribution to productive efficiency and competitiveness. Fred Bergsten took the opposite position — that moving to free-trade zones was bad, both in theory and in practice. He argued that, too often, institutionalized free-trade zones may have the implicit goal of diverting trade and that a free-trade zone in the Western hemisphere would divert trade from low-cost producers around the world.

In East Asia, trade flows have been growing rapidly for the past two decades. Intraregional trade increased in the 1980s, as it had earlier in North America and the European Economic Community. If the increased intensity of these trade flows is simply the result of growth and development, rather than of preferential arrangements negotiated by governments, then fears of an evolving trading bloc are overblown. Measures of integration, summarized below, show that East Asia is closely tied into the world trading system. Only very recent evidence suggests that ties within the region are becoming more intensive than those with the rest of the world.

Historically, preferential trading arrangements have not played much of a role in the integration of East Asian economies. Such arrangements have existed in the Association of Southeast Asian Nations (ASEAN) since 1977, yet in 20 years the intra-ASEAN share of ASEAN's total trade has barely increased: from 17.1% in 1970 to 18.3% in 1992 (Hill 1995). Indeed, the fastest trade growth within the region has been the growth of trade with China since 1979, and this has occurred in the absence of formal trade-liberalization agreements. Such trends toward spontaneous regional integration result from progressive outward orientation of individual economies' trade and investment policies and unilateral liberalization of goods and capital markets. Governments have also moved aside to facilitate the creation of "subregional economic zones" of economic cooperation, most notably the SIJORI growth triangle (**Si**ngapore; the Malaysian state of **Jo**hore; and Batam Island in **Ri**au, Indonesia) and the South China Economic Zone (including Guangdong province of China and Hong Kong). In both cases, governments have recognized that economic complementarities between available cheap labour and land in some parts of the subregion and capital available in Singapore and Hong Kong, respectively, could contribute to higher rates of regional growth and development than would otherwise have been possible.

Since the early 1990s, however, governments have been moving toward more formalized preferential arrangements. In January 1992, ASEAN heads of state adopted the Common Effective Preferential Tariff (CEPT) agreement, which will lead to the establishment of the ASEAN Free Trade Area (AFTA). In September 1992, a modest institutional framework was created for the Asia–Pacific Economic Cooperation (APEC) forum as a vehicle for regional economic cooperation. Since November 1994, when the Bogor Declaration was signed by APEC leaders at a summit meeting in Indonesia, a framework has existed in which free trade will be pursued in the group during the next two decades.

Measures of integration

Has intraregional trade increased more rapidly than would be predicted in a systematic framework measuring a normal level of trade? Gravity models shed light on the question, using distance and economic-size variables to explain bilateral flows among countries in a group. If there were nothing to the notion of trading blocs, gravity variables would absorb most of the explanatory power. Frankel (1993) found some evidence of a special regional effect, with a drop in the bias in the first half of the 1980s and a slight increase in the second half implying that intraregional trade cannot be entirely explained by proximity and size.[7]

Historical gravity models show a steady decline in the regional bias of East Asian trade in all but the last 5 years (Petri 1993). Gravity coefficients have fallen steadily in the postwar period. This is true for most individual East Asian economies as well.[8]

The traditional measure of integration has been indices of IIT (for example, Grubel and Lloyd 1975; Belassa 1986). This measure is usually applied to economies with similar structures and income levels. IIT indices measure the extent to which an economy's imports in an industrial category approximate its exports in the same category; in other words, the index measures trade in

[7] None of these results was statistically significant, though.

[8] This is with the exception of China, where the decline has been rapid, and the Philippines, where there has been an increase. Both these changes have political explanations.

differentiated products. IIT has formed the basis for an increasing amount of trade in world manufactures for the past three decades. Indeed, formal trading arrangements in Europe were facilitated by rising IIT, which afforded opportunities for specialization in differentiated products and continued trade among partner economies.

Several studies of the Asia–Pacific region have identified similarities in per capita incomes, relative factor endowments, geographic proximity, common borders, and participation in regional trading arrangements as determinants of IIT (Fukusaku 1992; Dobson 1993; Drysdale and Garnaut 1993; Saxonhouse 1993). Indices for 1970, 1980, and 1990 for 15 Asia–Pacific economies — the 8 economies in this study, the 3 NAFTA economies, Australia, New Zealand, India and Japan — reveal a general pattern of rising IIT. Intra-East Asian trade-intensity indices declined, however, during the same period (Drysdale and Garnaut 1993). Taken together, these measures indicate that much remains to be done within the ASEAN countries (excluding Singapore) to liberalize the structure of protection of final consumption goods, intermediate products, and basic raw materials (Flatters and Harris 1995).

Simpler measures of trade intensity and ratios of evolving intraregional trade flows indicate that ties with the rest of the world continue to dominate the region's trade (Petri 1993). Integration can also be measured by estimating the ratio of extraregional exports and imports relative to a country's gross national product (GNP) (Lawrence 1991).[9] By this measure, extraregional trade is very important to Japan and Southeast Asia. The importance of extraregional trade means that no region is in a position to sever or significantly curtail its trade ties with the rest of the world by forming closed blocs.

Japan-centred integration?

Some analysts have focused on the political economic question of whether Japan has tried to influence its neighbours' trade toward itself. Successive waves of outward investment from Japan have flowed to the United States, Europe, and more recently East Asia. Although the East Asian share of these flows has been small, the size of investment inflows relative to the sizes of host economies has been significant. Inflows since the mid-1980s have increased the stock of Japanese investment such that it now approximates the US share in many economies.

A single economic theory explaining these surges of outward FDI is lacking (Graham and Krugman 1993), but some assert, rightly or wrongly, that Japan is pursuing a political strategy to become the centre of a potentially self-sustaining Asian economic system (Fallows 1994). Measured purely by trade shares, evidence of a "triangular" trading relationship among these economies existed in the 1986–92 period (Table 1.1). In Table 1.1, the share of each economy's manufacturing exports is presented as a ratio of its import shares with Japan, the United States, Europe, and ASEAN-9 (the eight study economies plus Korea). Typically, ratios with Japan are less than one — an economy's exports to Japan as shares of total exports are about one-third the size of its import shares from Japan. The ratios for the United States are the reverse: exports shares are two to five times larger than import shares. Europe's are closer to parity, while the ratios among the ASEAN-9 economies show Indonesia, Taiwan, and Singapore to be the most export dependent. In effect, Japan's East Asian neighbours depend on it for imports and on the United States and Europe for export markets.

More sophisticated analysis using gravity models does not find evidence that Japan is diverting trade toward itself, however. Although trade between Japan and other Asian countries increased substantially in the late 1980s, the intraregional bias did not (as measured by introducing a dummy variable for trade with Japan [Frankel 1993]). The trend in bilateral trade between Japan and its neighbours can be explained readily as a natural outcome of the overall growth of Japanese trade, the emphasis in the structure of Japanese production on machinery and other intermediate and capital goods, and the growth levels attained in other Asian economies.

[9] This measure simply looks at a country's dependence on world trade. It could easily be refined to look at a country's dependence on a region. Furthermore, it would be useful to have a time series of these ratios to see what is happening to this dependence, however defined.