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Ulrich Hiemenz · Rolf J. Langhammer et al.

## The Competitive Strength of European, Japanese and US Suppliers on ASEAN Markets

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## Abbreviations and Acronyms

ASEAN	Association of Southeast Asian Nations
BIAC	Business and Industry Advisory Committee to OECD
BMWi	Bundesministerium für Wirtschaft
BMZ	Bundesministerium für wirtschaftliche Zusammenarbeit
BTN	Brussels Tariff Nomenclature
cif	cost, insurance, freight
CIME	Committee on International Investment and Multinational Enterprises
COCOM	Coordinating Committee for East-West Trade Policy
Dept.	Department
EC	European Communities
ECE	UN Economic Commission for Europe
EEC	European Economic Community
EFTA	European Free Trade Association
EMS	European Monetary System
ESCAP	UN Economic and Social Commission for Asia and the Pacific
EUROSTAT	Statistical Office of the European Communities
FDI	Foreign Direct Investment
fob	free on board
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
GDR	German Democratic Republic
GNP	Gross National Product
IDE	Institute for Developing Economies
IMF	International Monetary Fund
LDCs	Less Developed Countries
LLDCs	Least Developed Countries
MFA	Multi-Fibre Agreement
MITI	Ministry of International Trade and Industry (Japan)
MOFA	Majority-Owned Foreign Affiliate
NICs	Newly Industrializing Countries
ODA	Overseas Development Assistance
OECD	Organisation for Economic Co-operation and Development
OECF	Overseas Economic Cooperation Fund (Japan)
OPIC	Overseas Private Investment Corporation
RCA	Revealed Comparative Advantage
SITC	Standard International Trade Classification
UK	United Kingdom
US	United States
USAID	US Agency for International Development
USSR	Soviet Union
UN	United Nations
UNCTAD	UN Conference on Trade and Development
UNCTC	UN Centre of Transnational Corporations

## Preface

This study evaluates micro- and macroeconomic determinants for the export performance of European suppliers to the markets of the Association of Southeast Asian Nations (ASEAN). By comparing marketing strategies and the respective economic environment of suppliers from Europe, Japan, and the US - the major exporters to the ASEAN region - an attempt is made to trace the causes for the declining export market shares of European companies and to suggest appropriate policy measures to reverse this trend, which has continued since the early 1970s.

Large parts of the study focus on the role of foreign direct investment in export expansion. To establish a reliable data bank on investment patterns of multinational companies in ASEAN countries would not have been possible without the selfless support of many staff members of the Deutsche Bundesbank, the U.S. Department of Commerce, the research unit of the Japanese Ministry of Finance, the Institute of Developing Economies and the Japan Economic Research Center (both in Tokyo), the Ministry of Commerce in Thailand, the Indonesian Central Bank, and the Commission of the European Communities. The authors also wish to acknowledge the helpful suggestions and comments made on certain parts of the present study by a large number of academic economists from the ASEAN region and by researchers from the Australian National University, the Asian Development Bank, the East-West Center in Hawaii, and the Centre for European Policy Studies in Brussels. Last, but not least, there have been numerous helpful discussions with colleagues in the Institute.

The analysis presented in this volume is the outcome of a research project which was carried out with the financial support of the VW Foundation. The project was supervised by Ulrich Hiemenz, who also prepared the final manuscript of this study together with Rolf J. Langhammer. All the authors are staff members of the Kiel Institute of World Economics except for Friedrich von Kirchbach, who joined the research team as an outside expert.

The extensive empirical work documented in this volume was coordinated by Martin Groß with the efficient help of Angela Husfeld and Michaela Rank. Margot Müller was responsible for the careful typing of the final manuscript and Bernhard Klein and Sibylle Ruhnke meticulously edited the text for publication.

## I. Introduction

Since the early 1980s, there has been a continuing debate about the competitiveness of West German and, more generally, European suppliers of manufactured goods on world markets. Food for this debate has been provided by declining shares of European manufactured exports in world exports of manufactures which have been observed since the late 1970s. Views differ with respect to the causes for this decline. Some analysts argue [e.g. Giersch, 1985; Donges, Glismann, 1987] that delayed adjustment to a changing international environment has preserved old industries and retarded the expansion of new industries thus weakening the competitiveness of the manufacturing sector as a whole. Others such as representatives of industrial associations regard high trade surpluses of major European countries and the sustained top position of, e.g., West Germany in the hit list of the leading exporters of manufactured goods as clear indications of the competitive strength of European industries. To them, declining European shares in world manufactured exports are merely an arithmetical consequence of the emergence of new participants in world export markets, in particular the Newly Industrializing Countries (NICs).

The subsequent analysis contributes to this debate by assessing the competitive position of European suppliers in the fast growing markets of the Association of Southeast Asian Nations (ASEAN) and by tracing major determinants for the weak performance of European companies in those markets. The focal point of this analysis is not the improvement of bilateral trade relations. Success or failure in individual regional markets do not necessarily depend on the international competitiveness of suppliers from other countries, but may simply reflect differences in export composition or natural advantages of geographical proximity. If, however, a weak performance in individual regional markets is not a singular case but rather a symptom and can be identified as an early-warning indicator for an impending general loss of international competitiveness - as will be argued below - an analysis of export determinants in these markets may provide valuable insight into the causes for eroding com-

petitiveness and suggest appropriate measures at the firm and macro level to reverse this trend.

The first step of the analysis (Chapter II) is devoted to the question whether diminishing shares of European exporters in ASEAN markets can be regarded as a "special case" where market-separating factors favour neighbouring suppliers such as those from Japan, or whether there was a fairly uniform pattern of export performances of individual countries in various import markets in the 1970-1984 period. Since such a pattern seems to emerge from the comparison of European, Japanese and US trade shares in major world markets and geographical proximity can be ruled out as a decisive determinant for access to ASEAN markets (Section II.3), marketing strategies applied by exporters from different countries come into focus. Chapter III evaluates the role of marketing strategies in penetrating Southeast Asian markets and assesses differences in these strategies between the major suppliers from Europe, Japan, and the US. From this analysis, foreign direct investment (FDI) emerges as a major clue to export expansion, and hence, the relationship between FDI and export performance including the importance of intra-firm trade as an engine of export growth is further elaborated in Chapter IV.

Since ASEAN countries do not discriminate between foreign suppliers and investors, the roots of the relative neglect of ASEAN markets by European firms must be sought elsewhere. Economic reasoning suggests that European firms operate in a framework of incentives which render exports to and investment in other markets more profitable than such business relationships with ASEAN countries. This hypothesis is put to an empirical test in two ways. Firstly, the institutional environment surrounding trade and investment decisions of German, Japanese and US firms are compared to identify incentives or disincentives for doing business with ASEAN countries (Chapter V). And secondly, trade and industrial policies of the European Communities (EC) are scrutinized with respect to their impact on the attractiveness of business relations with "third countries" vis-à-vis those with other EC member countries (Chapter VI).

The results of this analysis lead to two sets of policy conclusions (Chapter VII). Concerning international competitiveness of European firms, they provide indications for crucial areas in which company strategies and macroeconomic policies need to be adjusted to strengthen the competitive position of these firms both at home and abroad. Looking more specifically at ASEAN markets, the findings allow to evaluate recent EC recommendations for fostering closer economic relations between the EC and ASEAN countries with respect to their potential efficacy.

## **II. A Comparison of the EC, Japanese, and US Trade Performance in the 1970s and 1980s**

### **1. EC Losses in Rapidly Growing ASEAN Markets - Establishing the Case**

Over the last two decades, the five member countries (1) of ASEAN, i.e., Indonesia, Malaysia, the Philippines, Singapore, and Thailand, have evolved into an economic growth pole of increasing global importance. They were not only successful in raising the productive capacity of their economies but also in integrating themselves into the international division of labour with non-traditional goods. Manufactured exports grew more rapidly in ASEAN countries than in all developing countries taken together, and the ASEAN share in total manufactured exports from developing countries increased from 12 per cent in 1965 to more than 18 per cent in 1983 (Table A1).

As a corollary to export expansion, import demand grew at a similar pace (18 per cent in 1963-1981; for details see Ariff, Hill [1985, Chapter 2]), and ASEAN countries became an important market for exports of the Organisation for Economic Co-operation and Development (OECD). Between 1970 and 1984, the share of ASEAN countries in total OECD exports increased from 2.0 per cent to 2.9 per cent (Table 1) and this increase was even more pronounced in advanced industrial goods like machinery and transport equipment (2.5 per cent to 4.0 per cent with a peak of 4.5 per cent in 1982). The combined import volume of the five countries amounted to about half the size of total imports of the much more developed Latin American countries and about two thirds of total African imports [UN, b].

The question of who among the OECD exporters has most successfully exploited the opportunities provided by a fast growing absorptive capacity of ASEAN markets can easily be answered on the basis of trade

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(1) The sixth member, Brunei Darussalam, which joined in January 1984, is not included in this study.

Table 1 - Share of OECD Exports to ASEAN in Total OECD Exports, 1970, 1982 and 1984 (per cent) (a)

	1970	1982	1984
Food and beverages (0-1)	1.8	2.0	2.0
Crude materials excluding fuels (2+4)	0.9	1.6	1.5
Chemicals (5)	2.5	3.3	3.1
Machinery and transport equipment (7)	2.5	4.5	4.0
Other manufactures (6+8-67-68)	1.9	2.3	2.2
Total trade	2.0	3.2	2.9

(a) Numbers in brackets: SITC nomenclature.

Source: OECD [e]; own calculations.

data presented in Table 2. EC exporters have lost trade shares to other OECD exporters, not to mention those from NICs and other developing countries. Total EC losses to other OECD members were in the range of 25 per cent - based on an initial share of more than 28 per cent of total OECD exports to ASEAN countries in 1970 - but amounted up to 40 per cent in the product category "machinery and transport equipment". Modest gains in trade shares of the category "other manufactures" failed to outweigh losses in all other product categories.

Table 2 - Share of the EC (a), the US and Japan in OECD Exports to ASEAN, 1970, 1982 and 1984 (per cent) (b)

	EC			US			Japan		
	1970	1982	1984	1970	1982	1984	1970	1982	1984
Food and beverages (0+1)	27.7	17.7	20.2	53.7	40.4	36.6	14.2	6.2	7.3
Crude materials excluding fuels (2+4)	8.0	4.5	5.1	63.7	48.9	45.9	22.6	15.6	15.1
Chemicals (5)	38.9	32.1	33.3	17.9	27.4	27.7	37.5	30.3	29.7
Machinery and transport equipment (7)	34.1	24.3	20.1	24.8	28.5	30.9	36.2	41.5	43.9
Other manufactures (6+8-67-68)	23.3	22.4	25.1	15.8	17.2	15.4	54.4	47.8	44.7
Total trade	28.4	22.2	21.4	24.7	26.0	26.6	41.7	40.8	40.2

(a) Data refer to EC-10 in all years under observation. - (b) Numbers in brackets: SITC nomenclature.

Source: OECD [e]; own calculations.

The list of gainers comprises quite a number of countries whose individual export success roughly depends on their resource endowment. For instance, neither the EC and the US nor Japan could keep their shares in food products and crude materials. Here, all three major OECD trading partners incurred losses in ASEAN markets to other OECD members like Australia, Canada, and New Zealand. With rising degrees of processing, the balance sheet of gains and losses is confined to the EC, the US and Japan. Except in the most important category of machinery and transport equipment, where both the US and Japan captured EC losses in almost equal parts, patterns of change in shares were quite different among the two major EC competitors. Japan which had occupied a dominating trade position in ASEAN countries already in 1970 was unable to defend this position in resource-intensive manufactures (SITC 6-8) and chemicals (SITC 5). In total, Japanese gains and losses were balanced so that its forty per cent share in OECD exports to ASEAN countries remained almost constant during the 1970s and early 1980s. The US, on the other hand, gained shares in chemicals and the machinery industry before and after 1982 irrespective of the movements of the dollar exchange rate. On average, the US suppliers have slightly increased their share in total OECD exports to ASEAN countries and displaced the EC as the second largest foreign supplier of imports to the region.

## **2. Declining Competitiveness of EC Suppliers in ASEAN Markets - Singular Case or Symptom?**

### *a. Theoretical Underpinnings*

EC losses of import market shares in the ASEAN region would not give reason for concern with respect to the international competitiveness of EC suppliers, if such losses were confined to Southeast Asian markets. Exports to these markets account only for a small portion of total EC exports, and slow growth of these exports could easily be compensated



by gains in other markets. Several studies [e.g. Finger, Yeats, 1976; Sautter, 1983] have in fact shown distance to be an important variable in explaining bilateral trade flows. Hence, it does not seem surprising that in 1983, 58 per cent of Latin American imports from industrialized countries originated from the North American hemisphere, 64 per cent of African imports from the EC, and 40 per cent of Southeast and East Asian imports from Japan [GATT, 1984, Table A29].

These observations suggest a market-specific competitive advantage of certain suppliers based on geographical proximity, protectionism, or exogenous factors commonly referred to as "advantages of cultural and ethnical proximity". However, there are a priori reasons to assume that the importance of some of these market-separating factors has diminished in the 1970s and early 1980s:

- The "natural trade resistance" factor in world trade determined by transport costs has become increasingly weaker in the course of technical innovations in transportation techniques (containerization, air cargo), particularly for advanced manufactured goods [Ramsey, 1978; Shipping 2000, 1979; Langhammer, 1983].
- A similar consideration applies to cultural barriers which were lowered with the English language emerging as a commonly used working language for instructions, services and marketing and vast improvements in the international information network through telecommunication.
- Tariff and non-tariff barriers are higher in resource-based and labour-intensive goods (agriculture, textiles, steel) than in advanced, human capital-intensive manufactures such as investment goods mainly supplied by industrialized countries [Cline et al., 1978; GATT, 1979]. As far as trade barriers impede access to markets of developing countries, they equally apply to suppliers from all industrialized countries.

If these contentions were empirically valid, one would not expect the declining competitiveness of EC suppliers on ASEAN markets to be a singular case but rather a symptom for a more general erosion of their international competitiveness. To test this hypothesis, the performance of

EC, German, Japanese and US exporters on ASEAN and EC markets was compared to their performance on the aggregate world markets. ASEAN and EC markets should offer special advantages to Japanese and EC suppliers respectively, if market-separating factors play an important role, while the analysis of the world market provides a convenient reference scheme for the shifts in the two regional markets. The US are equidistant between the two regional import markets, and the US performance on these markets should, therefore, provide an additional indication for the strength of market separation. Further, the analysis focuses on more advanced manufactured goods in the SITC categories 7 and 8 (71-79 and 87-88), in which industrialized countries are believed to enjoy a comparative advantage vis-à-vis developing nations (1). The international competitiveness in these products will have a major impact on the future export performance of industrialized countries.

#### *b. Empirical Evidence*

Table 3 shows 1970, 1982, and 1984 market shares of the competing countries/regions in the three reference markets. The aggregates (bottom rows) show a fairly uniform pattern which is not significantly affected by substantial exchange rate variations in the early 1980s. Japan did not only score gains on ASEAN markets for advanced industrial goods (SITC 7+87+88) where Japan already accounted for more than one third of respective OECD exports in 1970, but also on EC and world markets (7.4 and 13.5 percentage points, respectively). In absolute and relative terms, these gains were larger than Japanese gains on ASEAN markets.

The EC as a whole lost shares in all markets as did, to a smaller degree, West Germany while the US show a mixed performance with in-

---

(1) The SITC categories included in the analysis accounted for roughly 60 per cent of manufactured exports of industrialized countries in 1982. Chemical products (SITC category 5) have been excluded from the analysis since competitiveness in these products is - to a substantial degree - related to the availability of crude oil at low prices. Domestic oil resources seem to provide a competitive edge to US manufacturers of chemicals which could boost their shares in both Asian and world markets in the 1970s [Hiemenz, 1984, p. 8].

Table 3 - Share of Major Industrialized Countries in OECD Countries' Exports of Advanced Industrial Goods to the World, the EC (a) and ASEAN, 1970, 1982 and 1984 (b)

	EC			West Germany			US			Japan		
	1970	1982	1984	1970	1982	1984	1970	1982	1984	1970	1982	1984
	World											
Power generating machinery (71)	47.1	46.5	41.0	15.2	15.1	14.5	30.1	28.7	27.6	5.1	11.8	15.3
Machinery specialized for particular industries (72)	59.5	49.6	50.1	25.6	20.4	21.4	21.5	25.5	20.5	5.9	10.4	13.9
Metal working machinery (73)	60.4	53.5	47.7	34.8	27.5	24.2	16.3	14.1	11.6	4.8	14.3	22.3
General industrial machinery and equipment (74)	56.2	53.1	52.3	23.6	21.1	20.8	24.5	18.7	16.8	6.1	14.3	16.5
Office machines and automatic data processing machines (75)	45.0	40.4	36.7	15.1	11.2	8.9	37.5	35.1	33.2	8.0	16.3	22.5
Telecommunications & sound recording apparatus (76)	39.8	30.1	24.1	13.8	10.9	8.5	13.8	12.4	10.5	34.0	45.8	54.6
Electrical machinery apparatus, appliances and parts (77)	59.2	48.6	41.7	21.7	18.1	15.5	19.8	21.4	22.4	9.4	18.8	25.5
Road vehicles (78)	54.4	46.4	37.9	23.0	23.5	19.1	17.1	11.3	12.7	9.2	25.3	27.3
Other transport equipment (79)	28.6	38.7	38.7	6.2	13.7	12.3	35.5	31.4	29.0	18.5	16.7	19.3
Professional, scientific & controlling instruments (87)	50.0	46.3	46.1	22.6	17.8	17.2	26.4	30.8	29.3	15.4	9.1	11.4
Photographic apparatus, optical goods, watches (88)	46.7	37.8	36.0	19.0	12.9	11.7	20.5	15.8	14.1	12.0	29.6	33.6
Total (7 + 87 + 88)	51.2	45.7	40.8	20.3	18.9	16.5	22.6	20.6	19.7	10.8	19.8	24.3
	EC			West Germany			US			Japan		
	1970	1982	1984	1970	1982	1984	1970	1982	1984	1970	1982	1984
	EC											
Power generating machinery (71)	66.0	59.2	53.7	23.8	20.9	19.9	24.4	25.2	26.3	0.7	3.1	3.6
Machinery specialized for particular industries (72)	71.3	65.6	65.4	31.3	27.0	26.8	13.4	16.2	14.3	1.6	3.0	4.6
Metal working machinery (73)	70.9	59.7	56.6	40.4	28.1	26.2	10.8	11.2	9.8	1.0	6.0	8.9
General industrial machinery and equipment (74)	68.2	69.2	68.6	31.6	28.3	27.9	15.8	10.5	10.2	2.1	3.4	4.1
Office machines and automatic data processing machines (75)	41.6	51.9	49.4	16.6	14.1	11.7	37.7	32.7	32.1	4.7	9.3	12.0
Telecommunications & sound recording apparatus (76)	58.8	40.5	43.2	23.5	16.1	17.2	16.6	8.9	8.6	11.2	37.7	35.0
Electrical machinery apparatus, appliances and parts (77)	71.2	67.5	63.5	28.9	24.2	22.5	14.7	13.2	14.0	2.2	6.6	9.7
Road vehicles (78)	89.4	79.0	73.8	32.2	35.1	32.7	4.2	2.6	2.5	1.4	9.0	11.1
Other transport equipment (79)	37.1	62.7	58.6	8.4	38.1	35.8	37.1	20.7	24.3	9.0	8.1	10.3
Professional, scientific & controlling instruments (87)	59.0	53.2	52.9	24.3	19.9	18.8	22.7	27.1	28.3	9.4	4.3	5.0
Photographic apparatus, optical goods, watches (88)	58.0	49.9	48.3	22.7	15.5	14.7	18.5	15.3	16.0	6.2	19.9	20.6
Total (7 + 87 + 88)	67.8	64.6	61.2	27.1	26.6	24.5	16.8	14.2	15.3	3.4	9.3	10.8

Table 3 continued

	EC			West Germany			US			Japan		
	1970	1982	1984	1970	1982	1984	1970	1982	1984	1970	1982	1984
	ASEAN											
Power generating machinery (71)	34.0	24.1	28.8	11.3	8.7	10.1	22.9	28.9	22.7	40.1	38.7	43.8
Machinery specialized for particular industries (72)	35.0	23.5	26.9	13.3	8.7	12.8	30.7	34.3	32.6	31.3	35.0	33.8
Metal working machinery (73)	39.2	28.9	19.9	14.5	12.4	7.9	21.0	18.4	9.8	35.7	40.1	58.1
General industrial machinery and equipment (74)	31.0	27.3	26.3	9.0	9.6	9.7	31.4	19.8	13.9	33.7	45.6	54.0
Office machines and automatic data processing machines (75)	44.4	15.1	13.0	18.3	4.5	3.5	34.1	46.9	61.7	16.3	33.0	22.3
Telecommunications & sound recording apparatus (76)	21.6	18.4	14.2	6.8	5.9	4.9	15.7	10.7	10.4	51.7	64.8	68.1
Electrical machinery apparatus, appliances and parts (77)	33.9	14.7	16.7	13.5	5.7	5.0	23.2	52.9	49.3	40.2	30.0	33.3
Road vehicles (78)	36.8	16.2	15.5	14.0	8.8	9.0	18.9	5.7	4.9	38.3	76.4	77.2
Other transport equipment (79)	31.3	40.3	24.1	3.7	6.2	7.4	20.5	27.7	42.8	39.0	21.2	20.6
Professional, scientific & controlling instruments (87)	30.8	28.1	29.6	14.8	8.3	9.6	29.2	37.5	34.4	36.5	24.1	28.3
Photographic apparatus, optical goods, watches (88)	27.6	12.6	14.1	12.4	5.0	4.7	22.4	15.2	13.0	30.7	49.2	45.5
Total (7 + 87 + 88)	33.3	24.1	20.2	11.8	9.4	7.8	24.7	28.4	30.6	36.7	41.1	43.4

(a) Data for the EC refer to EC-9 in 1970 and to EC-10 in 1982 and 1984. Due to the negligible share of Greece in EC-10 exports of advanced industrial goods (less than 0.5 per cent) there is no distortion arising from the different country coverage. - (b) Numbers in brackets: data for 1970 recorded in SITC Rev. 1 have been converted to Rev. 2.

Source: OECD [e]; own calculations.

creasing shares in ASEAN and losses in EC and world markets. The EC suppliers were fairly successful in defending "fortress Europe" [Wolf, 1983] and, despite losses, managed to retain a two thirds share in EC markets. There are indications, however, that the strong position of local producers on EC markets was rather maintained by national and EC protectionist policies than by competitive strength. The heavy EC losses on markets outside the EC and the fact that not only Japanese but also US exporters could compete successfully with EC exporters on these markets hints at a declining international competitiveness of EC suppliers.

An analysis of the 50 three-digit product categories included in SITC 7+87+88 reinforces the above conclusions (1). Decreasing EC trade shares were by no means restricted to a few industries or small markets in which Japanese or American suppliers may have a special advantage. Only in eight out of the fifty product groups within the SITC 7+87+88 category, the EC could gain shares on world markets between 1970 and 1984. These few successful export categories were largely identical with those nine product groups in which the EC gained on ASEAN markets. Though the EC performance appeared to be somewhat better on the internal EC market, still thirty-two groups, that is almost two thirds, incurred losses. The only clear export stronghold of the EC as a whole concerns two industries, power generating machinery and aircraft, but at least in the latter industry successful market penetration was not based on genuine competitiveness but on high government subsidies paid to the European Airbus Industry.

The German export industry has performed better on all three reference markets than competitors from other EC countries. Yet, the sectoral pattern of gains and losses is again very similar on all three markets indicating an erosion of the international competitiveness of the German industry, too. This follows from an analysis of similarities of changes in trade shares presented elsewhere [Langhammer, Hiemenz, 1985]. Both rank correlation coefficients between changes of market shares and export overlap indices show that US and Japanese exporters were able to penetrate EC markets with products which were successfully sold in other markets as well, i.e., the US and Japan have captured shares in all regional markets in product categories in which EC suppliers were losing out. A deviation from this general pattern is provided by the - compared to other EC countries - more open German economy. West Germany enjoyed a more robust market position vis-à-vis Japan than the other EC members. Neither in ASEAN nor in the EC market were German losses pocketed by Japanese industries. Instead, the US emerged as a stronger competitor to West Germany. This may be explained by a relatively high initial level of inter-industry specialization between Japan

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(1) To economize on space, respective data are not reproduced here. They are available from the authors upon request.

and West Germany and by more intra-industry specialization between the US and West Germany. It is between the two latter countries where gains and losses were shifted in all markets during the observed period. In ASEAN markets, however, gains of Japanese industries were mainly to the detriment of American suppliers. The general picture emerging from this analysis is that of European exporters being chased by US competitors and both being chased by Japan; a picture which is most accentuated on the relatively small ASEAN markets.

### **3. Do Transport Costs Matter?**

The above findings suggest that market-separating factors no longer play a decisive role in determining export success in foreign markets. Looking at EC and ASEAN countries, one may, however, argue that distance still matters for these geographically remote regions. Therefore, available information on transport costs is used to test whether Japan owes part of her outstanding export performance in Southeast Asia to locational advantages reflected in transport cost differentials vis-à-vis US and European competitors.

The analysis is based on the Philippine trade statistics which provide imports valued in US \$ both on a fob (free-on-board) as well as on a cif (cost-insurance-freight) basis. The ratio of cif to fob values is a measure of the ad valorem incidence of transport costs (1). The Philippines is the only ASEAN country for which cif/fob import values are available. This country is best suited for such an analysis of transport cost differentials, because Japanese foreign affiliates which could bias the comparison of Japanese, US, and European exports through intra-firm trade, are not as dominant in the Philippines as in other ASEAN countries (see Chapter IV below).

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(1) This ratio excludes the costs of loading in the exporting country's port and thus is inferior to the ratio of cif-"free alongside ship" value applied in other studies. However, as one can assume costs of stevedoring and crantage in the ports of the major industrialized countries to be roughly the same, there is not much distortion in applying cif-fob ratios.

Estimates of the ad valorem incidence of transport costs in Philippine imports from different sources of origin are based on a sample of about 160 manufactured commodities imported in 1970 and 1983, at the highest level of disaggregation (seven-digit level). This level helps to exclude product heterogeneity to the largest possible extent. Only those commodities were included in the sample which were imported from Japan as well as from the US and the EC in the respective year. Cif-fob ratios for imports from two exporting countries were divided by each other and used as a proxy for transport cost differentials in identical commodities. Averages of such differentials are estimated by using common weights. Both the selection of commodities imported from several industrialized countries and the use of common weights aim at preventing calculations on average transport cost differentials to be distorted by different product compositions and by different weights in imports from industrialized countries (1). The methods applied are described in detail in Appendix A.

Table 4 displays the weighted average ad valorem incidence of transport costs in Philippine manufactured imports from the US, Japan and EC suppliers in 1970 and 1983. Three major results emerge:

- 1) In spite of rocketing prices for fuels in sea-borne transport during this period, transport costs decreased or at least stagnated on average (SITC 5-8).
- 2) Transport costs vary among products, especially for long-distance suppliers. Though they are in general lower for sophisticated high-value products (SITC 7) than for less processed goods such as chemicals, the estimates do not suggest a straightforward relationship between product sophistication and transport costs.
- 3) Long-distance suppliers such as West Germany do not seem to face consistently higher transport costs than Japanese suppliers. This may be due to the high degree of sophistication in West German products which have a higher unit value than those originating from Japan,

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(1) For a controversy on the product composition effect in the estimates of Indian transport cost disadvantages see Sapir [1983] and Yeats [1983].

Table 4 - Weighted Average Ad Valorem Incidence of Transport Costs (a) in Philippine Manufactured Imports, 1970 and 1983 (per cent)

Imports from	Total manufactures		Chemicals		Manufactured goods classified chiefly by material (SITC 6)		Machinery and transport equipment (SITC 7)		Miscellaneous manufactured articles (SITC 8)	
	(SITC 5-8)		(SITC 5)		(SITC 6)		(SITC 7)		(SITC 8)	
	1970 (n=159)	1983 (n=157)	1970 (n=40)	1983 (n=41)	1970 (n=39)	1983 (n=40)	1970 (n=40)	1983 (n=44)	1970 (n=40)	1983 (n=32)
US	10.6	8.5	15.2	13.9	12.5	11.9	7.6	4.7	15.3	6.3
West Germany	7.7	7.4	12.5	7.2	9.2	12.1	5.5	5.2	11.7	4.6
EC (b)	10.0	10.0	12.3	13.8	12.0	8.0	8.6	5.8	9.4	5.6
Japan	6.9	7.0	9.3	8.4	7.5	6.6	5.3	6.7	8.4	5.9

(a)

$$T = \frac{\sum_i \left( \frac{M_i^{cif}}{M_i^{fob}} - 1 \right) M_i^{cif}}{\sum_i M_i^{cif}} \cdot 100$$

where T is the import-weighted ad valorem rate of transport costs,  $M_i^{cif}$  and  $M_i^{fob}$  are the Philippine US \$ import values in the seven-digit SITC item on a cif and fob basis respectively. - (b) Imports from the most important individual EC supplier.

Source: Republic of the Philippines [1970; 1983]; own calculations.

but may also be explained by massive technological innovations (containerization) in the dense sea transport network between Europe and Southeast Asia during the 1970s.

Differences of average transport costs between imports from different sources suggest that these costs do also differ between exporting countries for *identical* commodities. This hypothesis implies pairwise transport cost differentials for commodities imported from two selected industrialized countries to differ from unity in a statistically significant way. Table 5 shows that

- US manufactures face a significant transport cost disadvantage not only vis-à-vis competing Japanese imports in the range of about 70 to 80 per cent on average, but in many cases also vis-à-vis EC suppliers. This result holds for 1970 as well as for 1983. However, the transport cost disadvantage of US suppliers vis-à-vis EC suppliers is



Table 5 - Weighted Average Transport Cost Differentials (a) in Philippine Manufactured Imports, 1970 and 1983 (b)

	Total manufactures		Chemicals		Manufactured goods classified chiefly by material (SITC 6)		Machinery and transport equipment		Miscellaneous manufactured articles	
	(SITC 5-8)		(SITC 5)		(SITC 6)		(SITC 7)		(SITC 8)	
	1970	1983	1970	1983	1970	1983	1970	1983	1970	1983
US/Japan	1.73*	1.82*	1.73*	1.83*	1.75*	2.79*	1.67*	1.12	2.28*	1.43*
US/EC	1.20	2.23*	1.30*	1.26	1.20*	3.09*	1.15	2.10	1.36	2.08
US/West Germany	1.30*	1.41	1.13	1.73*	1.16	1.43*	1.48*	1.07	1.22	2.44
EC/Japan	1.71*	1.34*	1.45*	1.68*	1.63	1.03	1.74	1.36	3.63*	1.53*
West Germany/Japan	1.63*	1.63*	1.64*	1.57*	1.90*	2.13*	1.26	1.33	3.98*	1.33
EC/West Germany	1.24	1.19	0.97	1.43	1.01	0.67	1.54	1.46	1.05	1.21

(a)

$$TCD = \frac{\sum_i \frac{R_{ia}}{R_{ib}} \cdot M_{i,jap}^{cif}}{\sum_i M_{i,jap}^{cif}}$$

where TCD is the transport cost differential,  $R_{ia}$  and  $R_{ib}$  are cif/fob value ratios minus unity in Philippine imports of item  $i$  from country  $a$  and country  $b$  respectively.  $M_{i,jap}$  is the value of imports from Japan in item  $i$  as the common weight. For the number of items see Table 4. - (b) Right-tail t-test of significance of deviation from unity. - \* = statistically significant at the 1 per cent level.

Source: See Table 4.

by far less systematic across products as in the US/Japan case as the statistical test indicates;

- Japan's competitive edge due to transport cost advantages has been the highest vis-à-vis the US, but plays a role vis-à-vis European suppliers, too. It is, however, interesting to note that, in the most important product category, machinery and transport equipment, Japan has enjoyed a significant transport cost advantage neither against West Germany and other EC suppliers in both years nor against the US in 1983. The excess of the competitors' transport costs over those of Japanese suppliers in this product category has not been systematic, but rather at random;

Table 6 - Average Transport Cost Disadvantages (a) on the Philippine Market of German and US Suppliers vis-à-vis Japan, and of US Suppliers vis-à-vis West Germany, 1970 and 1983 (per cent)

	Total manu- factures		Chemicals		Manufactured goods clas- sified chiefly by material (SITC 6)		Machinery and transport equipment (SITC 7)		Miscella- neous manu- factured articles (SITC 8)	
	(SITC 5-8)		(SITC 5)		(SITC 6)		(SITC 7)		(SITC 8)	
	1970	1983	1970	1983	1970	1983	1970	1983	1970	1983
West Germany/Japan	4.1	4.1	5.4	4.4	6.3	7.0	n.s.	n.s.	23.1	n.s.
US/Japan	4.7	5.4	6.2	6.4	5.2	11.1	3.4	n.s.	9.9	2.4
US/West Germany	2.1	n.s.	n.s.	4.9	n.s.	4.6	2.5	n.s.	n.s.	n.s.

(a) Transport cost-induced excess of cif import unit values in per cent of cif import unit values for imports from Japan and West Germany respectively. In algebraical terms:  $\frac{T}{100 + T} (TCD-1)$ . - n.s. = disadvantage is not statistically significant at the 1 per cent level.

Source: See Table 4.

- transport costs between goods shipped from West Germany and other EC member states are not significantly different.

The major conclusion to be drawn from these statistical tests is that differentials do not seem to reflect geographical proximity but product peculiarities and differences in transportation media and technology. Transport cost-induced price disadvantages incurred by the US and West German exporters (1) vis-à-vis Japan and by the US producers vis-à-vis the West German competitors range between 2 and 23 per cent with an average rate of 4-5 per cent for all manufactures (Table 6). This differential is equivalent to a hypothetical margin of preference for Japanese goods over US and EC goods. In 1970-1983, these margins have not changed much vis-à-vis West Germany but have slightly increased

(1) West Germany as the largest individual EC supplier on the Philippine market has been taken as a proxy for the competitive position of the European Community with respect to transport costs. This seems justified by statistically insignificant transport cost differentials between exports shipped from West Germany and other EC countries to the Philippines (Table 5).

vis-à-vis the US. In light of the relatively small transport cost advantage of Japanese suppliers, it is not surprising that a comparison of growth rates of Philippine imports from the US, Japan and West Germany, the corresponding trade shares and their changes (Table A2), and the transport cost disadvantages do not provide empirical support for a causal relationship between the trade figures and transport cost disadvantages.

### **III. The Role of Marketing Strategies in Penetrating ASEAN Markets**

#### **I. On the Importance of Marketing Strategies for Export Expansion**

If market-separating factors can by and large be ruled out as determinants of declining EC trade shares in ASEAN markets, competitive disadvantages of European suppliers have to accrue from either higher costs of production or deficient marketing strategies. The importance of appropriate marketing strategies for penetrating foreign markets is often underrated although these strategies are an important determinant for the success of any exporter. This can be gathered from the considerable value added produced by final distribution of exports in the target market.

A questionnaire survey of foreign trading companies in four Asian countries suggested, for example, that marketing and distribution costs of imported products in the final market amounted to as much as 27 per cent of the final user's price for machinery and engineering equipment, 36 per cent for chemicals, 51 per cent for medical supply and 53 per cent for non-durable consumer goods [ESCAP/UNCTC, 1985, Table 56]. As a matter of fact, actual production costs are smaller than marketing and distribution costs for numerous products. It follows, that comparative advantages of exporters in marketing and distribution may be just as important as those in the sphere of production. This holds true in particular for industries which are vertically integrated down to the distribution level.

Appropriate marketing and distribution channels may even be a more essential ingredient to export success in ASEAN countries than elsewhere since markets of ASEAN member countries have remained separated from each other by substantial trade barriers. Attempts to arrive at a free trade area, not to speak of a customs union or higher stages of economic integration, remained rudimentary. Today, the common umbrella "ASEAN" still stands for political rather than for economic co-operation. This is at best characterized by the fact that trade policies are still under national

competence and that preferential tariff reductions failed to promote intra-regional trade because of their very limited coverage [Rieger, 1985; Wong, 1985; Ooi, 1986]. So did attempts towards regional industrialization planning. Hence, foreign firms have to adapt their sales strategies to the specific conditions prevailing in each of the six ASEAN countries.

Furthermore, there are at least four other characteristics common to the countries under review which further augment the importance of appropriate marketing in this region:

- 1) ASEAN product markets are highly segmented owing to the unequal distribution of income of consumers as well as firms. The positioning of products within a particular market is therefore of utmost importance. Marketing and distribution channels have to be chosen accordingly in order to be effective.
- 2) Long-term company and personal relations play an outstanding role. The importance of personal rather than functional relations requires long-term commitments for the establishment of distribution channels.
- 3) Brand consciousness is pronounced not only for Westernized local elites, but also in low-price market segments, where consumers can hardly take the risk of switching to unknown brands. This underscores the importance of marketing.
- 4) More generally, the markets of Southeast Asian developing countries are no longer open markets in the sense of sellers' markets. This holds true across the board for consumer, intermediate and capital goods imports. Competition is stiff, as Japanese, US, European and other Asian suppliers vie among each other and with local companies for future market shares. Marketing strategies figure in the forefront of this competition.

In connection with the declining share of European companies in Asian imports, the two following central questions emerge:

- 1) Are there any significant differences between the export and marketing strategies of European, US, Japanese and other Asian manufacturers supplying the countries under review? If yes, what is the background to these differences?

- 2) If there are any significant differences, to what extent do they lend themselves as explanation for the declining role of European companies in Southeast Asian markets?

The subsequent sections seek to shed light on these questions by examining major aspects of the institutional organisation of export channels selected by companies exporting to the countries under review and by relating these institutional choices to the respective export performance. The major results are summarized in Section III.3.

## **2. Export Marketing Strategies in Comparison**

### *a. Concepts and Data*

The options available to foreign firms engaging in exports to ASEAN markets vary from sporadic exports upon request only to investment in assembly or production facilities in the final market. This choice requires primarily a decision of the exporter on the amount of resources he is prepared to invest in the distribution channel. One may distinguish the following six alternatives for penetrating foreign markets:

1. sporadic exports without any representative or agent in the region;
2. appointment of a trading company from the home country or region of the exporter as an agent;
3. appointment of a local trading company as importer and distributor;
4. establishment of a marketing affiliate in the foreign market;
5. establishment of assembly or production facilities abroad;
6. licensing of foreign manufacturing companies.

Channels 1 to 5 are put into an order of increasing costs required to set up export governance structures [Roehl et al., 1984]. The question is to which degree European, Japanese and US exporters rely on these different channels and to what extent this could be related to their success in ASEAN markets.

There is hardly any readily available data to answer these questions. Therefore, a new approach is employed towards analysing the institutional patterns of international trade, referred to as trade channel analysis (1). In addition, the evidence is drawn from the results of a questionnaire survey on foreign trading companies operating in Asia (for details, see von Kirchbach [1985, pp. 10-14]).

The trade channel analysis basically reclassifies foreign trade statistics by types of traders using the original customs declaration for all export and import transactions. This technique allows to calculate the involvement of different types of traders in exports and imports for each product. In addition, a number of trader-specific characteristics can be derived, such as average export and import unit values, product and geographical specializations and average size of transactions.

The remaining loopholes have largely been remedied by the results of an interview survey of 132 foreign trading companies in the Republic of Korea, Malaysia, Sri Lanka and Thailand conducted in 1982 which included the nine affiliates of the major Japanese trading houses (sogo shosha) (2).

Entering or operating in ASEAN markets exclusively from an exporter's sales department *without any permanent representative* in the target market (Channel 1) would appear to be the least costly approach from the point of view of the exporter. However, this approach has become increasingly difficult and rare. For most products, this is related to the initially low slope of the sales response function (relationship between marketing efforts over time and demand). This relationship implies that market entry initially requires a substantial amount of marketing efforts. Only beyond a certain threshold value does demand respond more elasti-

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(1) The concept of the trade channel analysis was developed in connection with research on transnational trading corporations, which one of the authors, Friedrich von Kirchbach, carried out for the ESCAP/UNCTC Joint Unit on Transnational Corporations, United Nations Economic and Social Commission for Asia and the Pacific, Bangkok.

(2) A list of companies interviewed is given in von Kirchbach [1985, Annex Table 3].

cally to additional marketing efforts. This shape of the sales-response function is due to the above-mentioned reasons, which make marketing and distribution strategies a key factor for the success of exporters, i.e., intra-ASEAN trade barriers, market segmentation, importance of long-term personal relations, brand consciousness and general competitiveness of markets. Although it is difficult to prove this point empirically, there are indications that direct selling without any permanent representative plays a minor role for all OECD exports to the region [von Kirchbach, 1985, pp. 15-17]. The crucial decisions to be made by foreign firms with respect to appropriate marketing strategies are, therefore, related to the use and selection of trading companies, the establishment of own marketing affiliates, and investment in assembly or production subsidiaries. The relevance of this choice emerges from an evaluation of observed differences in the positioning of products between the major foreign suppliers of Thailand.

#### *b. Positioning of Products and Market Penetration*

The positioning of products within a specific market in terms of prices and quality is a key variable in marketing. In the context of the present study, this point gains particular weight because of the pronounced segmentation of markets in Asia. With the exception of a few Latin American countries, there is probably no other region in the world in which the sources of demand comprise the entire range from leading manufacturers employing state-of-the-art technology and consumers rich by any standard down to backyard shops and rural households with very limited cash income.

Each of the various market segments has its own growth and mobility pattern. This has further complicated the appropriate positioning of products as both the pronounced segmentation and the dynamic development of each segment have to be taken into account.

In relation to the positioning of products in terms of pricing, the differences between European, US, Japanese and other Asian exporters appear to be very pronounced indeed. In general, European companies



have aimed at the top price segments, whereas Japanese and even more so other Asian companies have responded to the medium and bottom price segments of the demand curve. This has often confined the commercialization of European products to the comparatively small and price-inelastic demand of well-to-do, urban and Westernized consumers and the most advanced manufacturing units. In contrast, Japanese exporters have been far more successful in penetrating the more price-sensitive, but large and rapidly-growing middle-income segment and partly even entered the traditional market segment, to which many of the exporters from other Asian developing countries cater.

These differences in the positioning of products emerge from a comparison of import unit values for Thailand [von Kirchbach, 1985, Table 14]. Average import prices were clearly the highest for imports from the EC, followed by those from the US. Average import prices from Japan were much lower, on average even below those of imports from other Asian countries. Although these indices do not reveal to what extent price differences reflect the positioning of products in terms of quality (i.e. product heterogeneity) or cost advantages, the significant differences point to a competitive advantage of Japanese suppliers in the price-conscious Asian markets (1).

The differences in pricing strategies become more obvious at a disaggregated product level. An overview of Thai average import prices by sectors, countries of origin and trade channels [von Kirchbach, 1985, Annex Tables 14-17] makes the reliance of European exporters on high-price and high-quality products distributed by agency houses particularly evident.

Import prices of foreign agency houses have often been high not only in comparison to local trading companies but also in relation to import prices of foreign-affiliated manufacturing companies or marketing affiliates. This reflects primarily the different approach of overseas manu-

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(1) Pre-feasibility studies made available by a German consultant firm confirm prices of German capital goods to be much higher in e.g. Indonesia, than prices for Japanese or Taiwanese substitutes.

facturers. Those appointing distributors rather than establishing their own sales affiliates often attach marginal importance to the market concerned. They tend to fix prices at a high level in order to cream off the top-price segment of demand. Principals establishing their own sales or manufacturing subsidiary generally assess the market more optimistically. They are more likely to adopt a long-term market development strategy and to export at marginal prices.

These differences are most pronounced for products such as pharmaceuticals or electronic consumer goods requiring little adaptation to local market conditions. There are a few examples of Asian manufacturing subsidiaries of European companies, which have successfully employed this latter strategy and have been able to establish themselves firmly in markets for standard nondurable consumer goods in urban as well as in rural areas. Nestlé's production and sales of Chinese noodles in Malaysia and Unilever's success with soap in Indonesia are cases in point. In general, however, European companies seem to have devoted only marginal marketing efforts to ASEAN countries.

### *c. The Contribution of Trading Houses to Export Expansion*

Concerning trading companies, the major competitors offering their services to foreign exporters are European agency houses and Japanese as well as local ASEAN *trading companies* (Channels 2,3). There are only few international US trading companies since until recently foreign trade played a minor role for the US economy and exports were concentrated in the hands of the leading multinational corporations [Bello, Williamson, 1982].

European agency houses have historically evolved as the central economic link between the colonial powers and their colonies. Their core activity has been the import and distribution of final goods and services from non-affiliated principals. They typically administer a portfolio of distributorship contracts, which grant them exclusive marketing rights for the products of their principals. European agency houses have been most

active in those countries of the region which were under European colonial rule, i.e., in Indonesia, Malaysia, and Singapore.

What is common to all agency houses is the primary orientation of each affiliate to the final market. Agency houses tend to be fairly independent of their headquarters, and geographical and product diversification has been less essential to survival than their country-specific experience. The agency houses' intimate knowledge of their final markets, in which many of them have been operating for several decades, has been the major asset they have offered to their principals. Against this background, one would expect to find many European manufacturers with limited resources for export marketing appointing agency houses as their distributors in Asian markets.

A closer investigation shows that in the early 1980s the European agency houses handled only a very small percentage of total imports of the countries under review and that this share was further eroding. In Thailand, the share of the 19 major agency houses (including three small American ones) was 2.6 per cent in 1980, according to the questionnaire survey (see Table A3). The trade channel analysis confirms this order of magnitude indicating that the 23 foreign-affiliated agency houses, figuring among Thailand's 1000 top importers, handled 1.8 per cent of total Thai imports (excluding transactions on commission basis, which do not enter the customs statistics under the name of the commission agent; Table 7). In Malaysia, the share of 13 agency houses (out of which one was non-European) in total imports was 2.0 per cent in 1980, and - for comparison - in the Republic of Korea their share was even lower with 0.8 per cent of total Korean imports. Although no empirical data was available for Indonesia and the Philippines, factual evidence suggests that the share of the European agency houses in total imports was even smaller in these countries. Moreover, imports of the agency houses have been growing at rates clearly inferior to those of national import growth.

The average annual growth rate of all agency houses included in the survey and weighted by the size of each company's imports amounted to 7.4 per cent over the years from 1975 to 1980, i.e., about one third of import growth at the national level.

The declining role of European agency houses is clearly not only the result of the decreasing share of ASEAN imports from Europe. The questionnaire survey suggests that only between 6 and 10 per cent of total imports of Malaysia and Thailand from Europe were handled by agency houses (Table A3). The reasons behind the declining importance of European agency houses are manifold [von Kirchbach, 1985, pp. 27-32], but - among other things - many agency houses had difficulties in competing with local trading companies and the Japanese *sogo shosha*.

Table 7 - Thai Imports by Trade Channel, 1980 (a)

	1	2	3	4	5	6	7	8
	Japanese trading companies	Agency houses	Marketing affiliates	Foreign trading companies (1+2+3)	Trade companies from developing Asia	Local state trading companies	Local trade companies promoted BOI (b)	Other local trading companies
Food and tobacco	22 (0.3)	858 (12.9)	123 (1.9)	1,003 (15.1)	- -	- -	- -	535 (8.1)
Mineral products & fuels	- -	3 (0,0)	6,654 (11.2)	6,657 (11.2)	- -	- -	3 (0.0)	12 (0.0)
Chemical products	431 (2.2)	832 (4.3)	1,915 (9.9)	3,178 (16.5)	5 (0.0)	416 (2.2)	6 (0.0)	2,155 (11.2)
Wood, wood products and paper	- -	1 (0.0)	12 (0.3)	13 (0.3)	- -	76 (1.8)	28 (0.7)	433 (10.2)
Textiles and textile articles	- -	- -	3 (0.1)	3 (0.1)	217 (3.9)	- -	220 (3.9)	16 (0.3)
Base metals	154 (0.9)	92 (0.5)	48 (0.3)	294 (1.8)	2 (0.0)	- -	3 (0.0)	1,606 (9.6)
Machinery	34 (0.1)	558 (2.1)	810 (3.1)	1,402 (5.4)	164 (0.6)	29 (0.1)	5 (0.0)	1,043 (4.0)
Transportation equipment	- -	351 (2.3)	1,106 (7.1)	1,457 (9.4)	2 (0.0)	- -	- -	1,072 (6.9)
Others	- -	33 (1.9)	34 (2.0)	67 (3.9)	2 (0.1)	- -	- -	69 (4.1)
Total	641 (0.4)	2,728 (1.8)	10,705 (6.9)	14,074 (9.1)	392 (0.3)	521 (0.3)	265 (0.2)	6,941 (4.5)

Table 7 continued

	9	10	11	12	13	14	15	16	17
	Local trading companies (6+7+8)	All trading companies (4+5+9)	Foreign manufacturing companies with equity by FTCs (c)	Other foreign manufacturing companies	Manufacturing from developing Asia	Local manufacturing companies	All manufacturing companies (11+12+13+14)	All sample companies (10+15) (d)	All imports (148 major products)
Food and tobacco	535 (8.1)	1,538 (23.2)	433 (6.5)	435 (6.6)	-	2,031 (30.6)	2,899 (43.7)	4,437 (66.9)	6,632 (100.0)
Mineral products & fuels	15 (0.0)	6,672 (11.2)	2 (0.0)	36,021 (60.6)	-	11,644 (19.6)	47,667 (80.2)	54,339 (91.4)	59,466 (100.0)
Chemical products	2,577 (13.3)	5,760 (29.8)	2,661 (13.8)	2,330 (12.1)	63 (0.3)	1,566 (8.1)	6,620 (34.3)	12,380 (64.1)	19,311 (100.0)
Wood, Wood products and paper	537 (12.6)	550 (13.0)	125 (2.9)	64 (1.5)	211 (5.0)	763 (18.0)	1,163 (27.4)	1,713 (40.3)	4,246 (100.0)
Textiles and textile articles	236 (4.2)	453 (8.1)	1,463 (26.2)	479 (8.6)	-	724 (13.0)	2,666 (47.7)	3,119 (55.8)	5,589 (100.0)
Base metals	1,609 (9.6)	1,905 (11.4)	1,636 (9.8)	1,786 (10.7)	67 (0.4)	2,562 (15.3)	6,051 (36.1)	7,956 (47.5)	16,759 (100.0)
Machinery	1,077 (4.2)	2,643 (10.1)	1,411 (5.4)	6,777 (25.9)	6 (0.0)	2,867 (11.0)	11,061 (42.7)	13,704 (53.1)	26,132 (100.0)
Transportation equipment	1,072 (6.9)	2,531 (16.3)	1,479 (9.5)	1,459 (9.4)	-	6,504 (41.8)	9,442 (60.7)	11,973 (77.0)	15,544 (100.0)
Others	69 (4.1)	138 (8.1)	22 (1.3)	181 (10.7)	2 (0.1)	111 (6.5)	316 (18.6)	454 (24.5)	1,697 (100.0)
Total	7,727 (5.0)	22,190 (14.3)	9,232 (5.9)	49,532 (31.9)	349 (0.2)	28,772 (18.5)	82,885 (56.6)	110,075 (70.8)	155,376 (100.0)

(a) Value of imports (of 144 major products) on own account in Baht mill.; numbers in brackets: percentage share of each trading channel in imports. - (b) BOI: Board of Investment of Thailand. - (c) FTC: Foreign Trading Companies. - (d) Includes 354 of the largest importers in 1980.

Source: Unpublished data provided by Department of Business Economics, Ministry of Commerce, Thailand; own calculations.

The term Japanese *general* trading companies or *sogo shosha* refers to Japan's nine largest trading companies Mitsubishi Corp., Mitsui & Co.,

C. Itoh & Co., Marubeni Corp., Sumitomo Corp., Nissho-Iwai Corp., Toyo Menka Kaisha, Kanematsu-Gosho, and Nichimen. They are the world's largest trading companies, handling close to 50 per cent of Japanese foreign trade and approximately 4 per cent of world trade. They are truly general trading companies, with subsidiaries all over the world (Table A4), involvement in some 20 000 different products and a high degree of functional diversification (for details, see e.g., Kojima, Ozawa [1984]). The involvement of the *sogo shosha* is the most striking difference when comparing export marketing strategies of Japanese manufacturers with those of Western exporters.

Preliminary estimates based on the interview survey suggest a 15-20 per cent share of *sogo shosha* in total ASEAN imports. This size of operation seems to have permitted the realization of substantial economies of scale. In contrast to the European agency houses, final consumer goods were only of marginal importance in *sogo shosha* imports, whereas intermediate goods (steel products and chemicals) and machinery accounted for the bulk of their imports (Table A5). The major strength of *sogo shosha* lies in the international allocation of buyers and sellers. Although this is a relatively low value-added activity compared to final distribution, for instance, it requires vast investments to establish a world-wide network of information and communication. The international network of the *sogo shosha* is practically unrivalled, and it is used to offset a particularly critical handicap of most Third-World-based importers and exporters, namely limited knowledge of overseas markets.

From the point of view of Japanese export manufacturers and overseas investors, the involvement of the *sogo shosha* has been invited as risk absorbers and in order to tap the *sogo shosha*'s vast potential of information, experience and connections in the respective overseas markets as well as their access to financial resources. This has been of prime importance for the small and medium-size exporters, which could hardly have ventured abroad on their own (Table A6). Significantly, Japanese medium-size companies have been able to participate to a much larger extent in exports to and overseas investment in all Asian countries than medium-size companies from the US or Europe have done. The availability of the *sogo shosha* services as export marketing vehicle has un-

doubtedly been one of the major advantages of second-tier manufacturers from Japan over their Western competitors in Southeast Asian markets.

The same holds true for the other end of the spectrum: the *sogo shosha* have proven to be very successful in organizing consortia for projects too large or too risky for any individual company. As the most important organizers of Japanese plant exports, they handled the bulk of these exports which amounted to approximately US \$ 10 bill. per annum in the early 1980s and out of which about one third was exported to developing Asia [MITI, b; Young, 1979, p. 203].

Not surprisingly, the *sogo shosha* are so well established in ASEAN and OECD countries that they have been involved, to a growing extent, in exports from the US, Europe, and other developing countries to the countries under review. In Thailand, for instance, the *sogo shosha* handled 21.2 per cent of all imports from North America in 1980 as well as 6.0 per cent of imports from Australia and New Zealand; their imports from Europe had reached 2.7 per cent of total imports from Europe and were equivalent to 27.1 per cent of the agency houses' imports from Europe [von Kirchbach, 1985, p. 44].

In sum, the *sogo shosha* have greatly facilitated the access to Southeast (and East) Asian markets for Japanese exporters. They have functioned as readily available export marketing channels to large and small manufacturers, alike. Their powerful position within Japan's industrial conglomerates has put them into a unique position as two-way communicators and organizers, transmitting export opportunities in Asia to potential exporters in Japan and feeding back to them market acceptance in the final market and adaptation requirements. Due to their functional diversification, the *sogo shosha* have been able to enhance Japanese exports to developing Asia, irrespective of the specific organization of the export marketing channel. Not only have they handled approximately half of Japanese exports to the region, but they have also been active in linking up Japanese exporters and local distributors, and they were Japan's largest investors in the countries under review.

A relatively new link in the chain of marketing activities in ASEAN countries are local import and distribution companies which have multiplied over the last two decades. The share of *local trading companies* (Channel 3) in the region's imports has reached a significant level. In Malaysia, locally-controlled limited companies in the wholesale and retail sector handled 13.5 per cent of total imports in 1980, excluding the import activities of the large number of partnerships and individual proprietorships (Table 8). In Thailand, imports (on own account) of the 57 largest local trading companies amounted to 5.0 per cent of total imports in 1980 (Table 7, Column 9). If the several thousand smaller local trading companies were included, the share of local trading companies is likely to have been at least twice as high. In Indonesia and the Philippines, local trading companies played a major role in national imports because of restrictions on the activities of foreign-affiliated companies in wholesaling and retailing and because of the comparatively advanced development of local entrepreneurship in the Philippines.

There is reason to believe that the reliance on local importers and distributors differed significantly between manufacturers from Europe, Japan and the US. Japanese companies appear to have been more prepared to co-operate with local trading companies in the countries under review than European and US manufacturers, and European manufacturers have probably used local distributors slightly more than US companies. There are three different factors which could explain this difference between Japanese and Western exporters:

- 1) Japanese manufacturers have generally responded more intensively than US and European firms to the demand in the large and fast growing transitional and traditional market segments. Motor cycles and electrical household appliances such as fans, radios, and TVs are prime examples among consumer goods. Penetrating these markets required much more of a grass-root level sales organisation than concentrating on the comparatively small urban demand for prestigious consumption goods and state-of-the-art technology.
- 2) The presence of the *sogo shosha* greatly facilitated the identification of suitable ASEAN importers and distributors and the monitoring of their activities. To the extent that the *sogo shosha* were involved



Table 8 - Malaysian Imports by Sectors and Ownership of Importing Companies, 1969, 1976 and 1980  
(M \$ mill.) (a)

	Agricultural companies	Mining companies	Manufacturing companies	Wholesale traders	Retail traders	Other companies	All industries
All limited companies							
1969	25	30	1,013	1,005	191	16	2,280
1976	22	382	3,868	2,438	479	389	7,578
1980	36	318	8,951	5,612	778	260	15,956
Locally-controlled companies							
1969	6	-	260	332	104	4	707
1976	13	2	1,128	877	416	338	2,774
1980	24	11	3,174	2,458	714	230	6,612
Foreign-controlled companies							
1969	19	29	753	673	86	12	1,573
1976	9	380	2,741	1,561	63	52	4,804
1980	12	308	5,777	3,154	64	30	9,343
Total Malaysian imports							
1969	} n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	3,605
1976							9,772
1980							23,539
<p>(a) The 1969 data refer to all limited companies irrespective of their size. In 1976, only those companies were included with revenue of M \$ 1 mill. or more. In 1980, the survey covers only companies having M \$ 5 mill. revenue or more. The different sample sizes, however, hardly disturb the picture, as the small companies excluded in 1976 and 1980 account for a very small share of total imports.</p>							

Source: Dept. of Statistics, Malaysia [var. iss.].

as commission agents, Japanese exporters had powerful agents at their disposal to monitor the performance of their ASEAN distributors.

- 3) The emergence of modern Asian trading companies and the Japanese export offensive to the countries under review are relatively recent phenomena and came about after most European and US manufacturers had already established their export marketing channels. Co-operation among the former two was therefore particularly attractive.

The empirical evidence available on these issues is, however, not very significant. According to the trade channel analysis in Thailand, local trading companies handled 12.2 per cent of the imports from Japan, 11.6 per cent of those from the EC and 9.2 per cent of imports from the US (Table 9). Yet, the preference of many Japanese exporters to invite local equity participation in their marketing affiliates in Asia (see subsequent section) matches with the above hypothesis, too. European exporters may have been slightly more inclined to co-operate with local import and distribution companies than US companies because of the considerable number of meanwhile indigenized agency houses of European origin. Again, however, there is no solid evidence.

#### *d. Establishment of Marketing Affiliates*

Downstream integration into international distribution has become an important element in the efforts of many major OECD manufacturers to implement global marketing strategies. It has been particularly important for market leaders in differentiated and marketing-intensive product markets. Obviously, manufacturers have moved primarily into fast-growing markets of above-average size. The Asian developing countries have been a prime example for this trend, in spite of the numerous restrictions on the establishment of foreign-owned marketing affiliates. This may be gathered from the substantial inflow of FDI into the trade sector of the ASEAN region (Table 10). In Thailand, for instance, the cumulative net inflow of direct investment into the trade sector amounted to US \$ 205.4 mill. or one fifth of direct investment inflows into all sectors between 1970 and 1980 (calculated from Sibunruang, Brimble [1987,

Table 9 - Selected Thai Imports (a) by Country of Origin and Import Channel, 1980

	EC	US	Japan	Other Asia	All im-ports (b)
Food and Tobacco (Baht mill.)	934	1538	122	389	4437
Share (per cent)					
Foreign-affiliated agency houses	72.4	0.0	0.2	26.1	19.3
Marketing affiliates	1.6	1.1	0.0	8.5	2.8
Local trading companies	1.1	-	-	4.8	12.1
Foreign-affiliated manufacturing companies	16.1	6.6	0.0	23.7	19.6
Local manufacturing companies	8.9	92.2	81.8	36.8	45.8
Other(c)	-	-	18.1	-	0.5
Mineral products and fuels (Baht mill.)	990	332	31	12,436	54,339
Share (per cent)					
Foreign-affiliated agency houses	0.1	0.2	-	0.0	0.0
Marketing affiliates	15.1	1.7	35.4	44.7	12.2
Local trading companies	0.0	0.2	10.8	0.0	0.0
Foreign-affiliated manufacturing companies	16.8	33.2	52.0	25.0	66.3
Local manufacturing companies	68.1	64.8	1.8	30.2	21.4
Other(c)	-	-	-	-	-
Chemical products (Baht mill.)	3,091	3,032	3,825	417	12,380
Share (per cent)					
Foreign-affiliated agency houses	11.9	1.3	1.5	8.3	6.7
Marketing affiliates	27.4	19.3	3.8	28.6	15.5
Local trading companies	11.3	25.0	13.5	22.0	20.8
Foreign-affiliated manufacturing companies	31.2	38.5	64.3	21.9	40.8
Local manufacturing companies	15.6	14.0	10.3	9.4	12.6
Other(c)	2.5	1.9	6.6	9.7	3.5
Wood, wood products and paper (Baht mill.)	83	187	26	215	1,713
Share (per cent)					
Foreign-affiliated agency houses	0.4	0.1	0.1	-	0.1
Marketing affiliates	2.9	4.0	5.9	-	0.7
Local trading companies	47.8	5.9	61.9	39.0	31.3
Foreign-affiliated manufacturing companies	44.6	51.0	13.9	2.9	23.4
Local manufacturing companies	4.2	38.9	18.1	58.1	44.5
Other(c)	-	-	-	-	-
Textile products (Baht mill.)	34	1,329	541	704	3,119
Share (per cent)					
Foreign-affiliated agency houses	0.1	-	-	-	0.1
Marketing affiliates	0.6	0.0	0.3	-	0.1
Local trading companies	13.1	9.4	0.8	6.4	7.6
Foreign-affiliated manufacturing companies	84.4	59.6	70.0	71.7	62.3
Local manufacturing companies	0.6	31.0	9.2	12.6	23.2
Other(c)	-	-	19.7	9.2	6.9

Table 9 continued

	EC	US	Japan	Other Asia	All imports (b)
Base Metals (Baht mill.)	532	790	3,351	1,055	7,956
Share (per cent)					
Foreign-affiliated agency houses	3.4	0.2	1.6	0.0	1.2
Marketing affiliates	0.1	0.1	1.4	0.0	0.6
Local trading companies	28.4	25.7	16.0	28.5	20.2
Foreign-affiliated manufacturing companies	13.1	45.4	56.7	32.6	43.9
Local manufacturing companies	52.3	26.7	23.9	38.9	32.2
Other (c)	2.6	1.8	0.4	-	2.0
Machinery (d) (Baht mill.)	2,024	5,006	3,900	651	13,704
Share (per cent)					
Foreign-affiliated agency houses	15.2	1.9	0.5	2.3	4.1
Marketing affiliates	2.9	1.0	13.7	6.8	5.9
Local trading companies	7.9	7.5	10.9	4.6	7.9
Foreign-affiliated manufacturing companies	19.0	84.1	48.3	68.3	59.7
Local manufacturing companies	54.9	3.9	23.7	17.4	20.9
Other (c)	0	1.6	2.8	0.6	1.4
Transportation Equipment (Baht mill.)	1,060	5,200	5,578	13	11,973
Share (per cent)					
Foreign-affiliated agency houses	4.1	2.2	3.5	0.5	2.9
Marketing affiliates	0.2	0.0	19.6	0.1	9.2
Local trading companies	28.3	2.5	10.9	0.3	9.0
Foreign-affiliated manufacturing companies	39.4	0.1	43.8	26.0	24.5
Local manufacturing companies	27.8	95.3	22.2	73.1	54.3
Other (c)	0.2	0.0	0.0	-	0.0
Other (Baht mill.)	66	116	93	53	454
Share (per cent)					
Foreign-affiliated agency houses	29.3	2.3	10.5	0.3	7.3
Marketing affiliates	0.8	2.7	28.6	5.3	7.5
Local trading companies	6.6	12.3	11.0	-	15.2
Foreign-affiliated manufacturing companies	37.6	69.9	27.9	93.7	45.2
Local manufacturing companies	25.4	11.4	19.9	0.8	24.4
Other (c)	0.3	1.3	2.0	-	0.4
All Imports (a) (Baht mill.)	8,816	17,259	17,468	15,933	110,075
Share (per cent)					
Foreign-affiliated agency houses	16.3	1.5	1.9	0.9	2.5
Marketing affiliates	12.2	3.8	10.6	36.2	9.7
Local trading companies	11.6	9.2	12.2	3.6	7.0
Foreign-affiliated manufacturing companies	25.4	39.4	52.2	29.2	53.7
Local manufacturing companies	33.4	45.1	20.2	29.4	26.1
Other (c)	1.1	0.9	2.9	0.7	0.9
Share in Total Thai Imports (per cent)	12.7	16.6	20.7	22.8	100.0

(a) Imports by 354 major importers, including 144 major import products. - (b) Including imports from other major destinations. - (c) Own business of the sogo shosha and other Asian trading companies. - (d) Excluding transport equipment.

Table 10 - FDI in the Trade Sector in ASEAN Countries

	Total FDI in trade			
	year	amount (US \$ mill.)	type of FDI	source
Indonesia	1967-1982	13.9	Approved inflows	BKPM (Central Bank)
Malaysia	1980	154.3	Net fixed assets in Malaysia of foreign-controlled companies	Department of Statistics
Philippines	1970-1981	85.4	Central Bank approved and implemented FDI	Central Bank of the Philippines
Thailand	1970-1980	205.4	Net inflow of FDI	Bank of Thailand

Source: Unpublished data provided by the sources given in the table.

Table 12.4)). While downward integration into overseas marketing and distribution has been characteristic for multinational corporations in general (1), there are some notable differences in this respect between US, European and Japanese manufacturers supplying developing Asia.

In the region as a whole *direct marketing through own sales affiliates* (Channel 4) has been particularly important for US companies. This is mirrored by the considerable share of intra-firm trade of final products in US total exports (see Section IV.3 below) and the substantial amount of US direct investment into trade, which amounted to US \$ 1.2 bill. (1981) in eight major Asian countries [U.S. Dept. of Commerce, a, 1982, p. 22]. Typical examples of US companies channeling their exports to Asia through overseas marketing affiliates were the oil companies, pharmaceutical firms and manufacturers of consumer goods. The same held

(1) As a matter of fact, the balance between manufacturing and marketing activities seems to shift for many leading multinational corporations into the direction of marketing, increasingly involving third-party products.

true for the leading US companies in banking, shipping, advertising, insurance, auditing, etc., many of which have established their subsidiaries in the region.

Exports through marketing affiliates have, as the interview survey suggests, not been confined to US manufacturers, but were also typical for some of the leading European companies, particularly in industries like chemicals and pharmaceuticals and others which were characterized by oligopolistic market structures at the global level. In general, it appears that the differences in export channels between European and US manufacturers were primarily the result of size differences of exporters and of the non-availability of internationally well-established agency houses in the US.

In contrast, Japanese manufacturers were traditionally more reluctant to establish fully-owned marketing affiliates. They exhibited a preference for joint-ventures with local partners in the target market. Collaborating with local partners - frequently wholesalers and distributors - did not primarily result from ownership restrictions but rather reflected the attempt of Japanese manufacturers to integrate their local partners' domestic market expertise into their sales affiliates. This was particularly important for manufacturers catering to the demand for standardized goods. As a result, the average Japanese equity share in Japanese affiliates in commerce located in developing Asia was comparatively low with 75.2 per cent in 1982 [MITI, a,1983]. This was clearly lower than in all other areas, and notably the OECD countries, with the only exception of Africa, where similar reasons as in Asia and foreign ownership restrictions may have determined the preference for joint-ventures. It was also lower than the corresponding survey figures for US and European marketing affiliates [von Kirchbach, 1985, Annex Table 4].

#### *e. Exports via Assembly or Production Affiliates*

One of the most fundamental changes in foreign trade patterns of ASEAN countries has been the increasing share of imports of intermediate goods.

This process has been fostered by both import substitution and export expansion and reflects the industrialization process throughout the region. Against this background, exports of intermediate goods in combination with assembly or *production in affiliated local companies* (Channel 5) have become one of the most important export marketing strategies for foreign exporters.

The surge of intermediate goods imports followed the reorientation of ASEAN economies towards import substitution and domestic-market oriented industrialization behind tariff walls. This pattern began in the late 1950s in the Philippines and continued in the mid-1960s in Thailand, Malaysia and Indonesia. The region's demand for intermediate goods imports was further increased by the rise of export-oriented industrialization, which began in the East Asian developing countries in the early 1960s, followed by Singapore, Malaysia and the Philippines in the late 1960s and early 1970s, and started to affect Thailand and Indonesia in the late 1970s (for a comprehensive overview, see Ariff, Hill [1985]).

Under the import-substitution regime, intermediate goods exports to Asia to affiliated production units were, in fact, the only remaining opening to the domestic markets of ASEAN countries. Automobiles were a prime example considering the restrictions on imports of completely built-up cars throughout the region and the growing number of increasingly stringent local content requirements [ESCAP, 1982]. More generally, high and partly prohibitive effective protection rates have triggered off a large-scale export substitution process on the part of overseas manufacturers, as the various analyses of investment determinants of foreign companies in the countries under review confirm [von Kirchbach, 1983].

Participating in the rapidly growing demand for intermediate imports by export-oriented manufacturing units later on required equity investment in the ASEAN region, just as import-substituting industrialization did before. During both phases, the creation of captive markets integrated into the overall industrialization patterns turned out to be the most successful way for participating in the region's economic growth. Industrialization in general and the industrial export boom in particular have been fuelled to a significant extent by foreign-affiliated companies, although

multinational corporations cannot be considered as having been the driving force behind the entire region's export success [Hiemenz, 1987]. Yet, the contributions of foreign affiliated companies to industrial exports varied from 37.3 per cent in 1980 in Thailand to 53.4 per cent in 1982 in Malaysia and 89.7 per cent in 1983 in Singapore [von Kirchbach, 1986].

These high shares prove that foreign companies have swiftly reacted to the new opportunities arising from the industrialization strategies applied in ASEAN countries. The region experienced a substantial inflow of FDI into their manufacturing sectors which increased at a rate of 15-20 per cent annually in 1976-1983 [Groß, 1985, pp. 3-10].

As a result, foreign-affiliated companies have become the leading type of importers in many of the countries under review. In Thailand, foreign-affiliated manufacturers handled 38 per cent of all imports in 1980 (Table 7), notwithstanding the fact that Thailand attracted the smallest amount of FDI among the ASEAN countries (Table A8). In Malaysia, foreign-controlled limited companies in the manufacturing sector handled 24.5 per cent of Malaysian imports in 1980 (Table 8). In the Philippines, 35.8 per cent of all imports in 1970 were done by foreign-affiliated companies [von Kirchbach, 1983, p. 275]. In Singapore, this share is likely to have been much higher, considering that 90 per cent of total manufactured exports were handled by foreign-affiliated companies in 1983 [Dept. of Statistics, Singapore, 1983].

These figures leave no doubt about the importance of foreign assembly and manufacturing affiliates as export marketing channels. Again, this marketing strategy has been pursued in varying degrees by Japanese, US and European manufacturers, respectively. In 1983, Japanese FDI in ASEAN manufacturing amounted to US \$ 4.23 bill. compared to 1.46 and US \$ 0.21 bill. for US and German multinational companies, respectively [Groß, 1985, Table 1]. In relative terms, Japanese FDI in ASEAN manufacturing amounted to 25 per cent of total manufacturing FDI, whereas these shares were only 1.6 and 1.0 per cent for US and German FDI. Even if one looks at total FDI in ASEAN countries, the ranking of in-



vestors from different home countries remains the same (US \$ 10.65, 7.96, and 0.6 bill., respectively).

The argument made here is that FDI may substitute direct exports of final goods but creates new demand for intermediate goods which more than offsets losses of exports in the final goods category. An indication for this assertion can be derived from the 1975 Input-Output Table for ASEAN countries compiled by IDE [1982]. In 1975, Japanese manufacturers accounted for 46.9 per cent of intermediate goods imports of the region's manufacturing companies from overseas manufacturers, compared to the 26.9 per cent share of Japanese imports in total imports of the region. And while Japanese manufacturers exported 87.5 per cent more final goods to the countries concerned than US manufacturers, the former's exports of intermediate goods surpassed those of US manufacturers by about 200 per cent. These results dovetail into the findings of the trade channel analysis for Thailand (Table 9). Japanese exporters have channeled the largest share, namely 52.2 per cent, of their exports to Thailand through affiliated manufacturing companies, compared to 39.4 per cent for US and 25.4 per cent for European exporters. Further evidence for the export-creating role of FDI as well as a detailed discussion of the mechanisms at work will be supplied in Chapter IV below. At this juncture it is, however, safe to state that exports of intermediate and also capital goods via affiliated manufacturing units have proved to be a particularly successful if not the most important export marketing strategy for OECD firms interested in ASEAN countries. It is in this field that Japanese companies have secured a clear edge over their Western competitors.

### **3. The European, Japanese, and US Approaches to the ASEAN Region**

The preceding sections show that the distribution and marketing channels for European exports to the countries under review have been narrow in scope and not fully adapted to the growth pattern of the region. This comparative disadvantage has been tightly intertwined with the

Synoptical Table 1 - The Role of ASEAN Economies in the International Division of Labour of European, Japanese and US Companies

	Major function of economies						
	primary sector companies	manufacturers				service companies	
		location for investment and production	market for final goods	location for investment and production for			
				host market	home market		world market
for companies from							
Europe	0	X	0	0	0	0	
Japan	X	X	X	0	X	X	
US	X	X	0	X	0	X	

X = important; 0 = not so important.

limited role that has been allocated to this region in the international division of labour by European companies. In a nutshell, most European companies have seen the region as an export market for final products, which was too small and too distant to warrant major commitments for its penetration. In contrast, Japanese and US companies have pursued a more comprehensive approach to benefit from the multiform economic potential of the region. The main differences are highlighted in Synoptical Table 1 and the trade channel analysis of Thai imports by country of origin presented in Table 11.

The domestic markets of the countries under review have been coveted by Japanese, European and US manufacturers, alike. The reliance of many European manufacturers on the traditional, foreign agency houses, however, has not worked to the formers' advantage, especially if compared to the Japanese approach of using the combination of sogo shosha and Asian distributors, or to the preference of US companies for exporting through their own marketing affiliates. More importantly, European manufacturers have not attached much importance to Southeast Asia as a location for investment and production. This has deprived European com-

Table 11 - Thai Imports by Country of Origin and Trade Channel, 1980

Trade channel	Country of origin					
	Japan	EC	US	developing Asian and Pacific countries	others	total
Sogo shosha affiliates' own business	1.8	1.0	0.4	0.3	0.3	0.6
Independent agency houses	1.9	16.3	1.5	1.0	1.1	2.5
Marketing affiliates	10.7	12.2	3.8	36.1	2.6	9.7
All FTCs (b)	14.4	29.5	5.7	37.4	4.0	12.8
Asian FTCs (b)	1.0	0.1	0.5	0.4	0.1	0.4
State trading	1.2	0.3	1.1	-	0.2	0.5
BOI promoted trading companies	0.1	0.1	0.7	0.3	0.1	0.2
Other local trading companies	10.9	11.2	7.5	3.3	4.4	6.3
Total local trading companies	12.2	11.6	9.3	3.6	4.7	7.0
All trading companies	27.6	41.2	15.5	41.4	8.8	20.2
TNCs (c) with FTCs (b) participation	30.0	11.1	6.0	3.4	2.8	8.4
Other TNCs (c)	21.8	13.6	33.0	25.7	68.8	45.0
Asian TNCs (c)	0.2	0.7	0.4	0.1	0.4	0.3
Local manufacturing companies	20.4	33.4	45.1	29.4	19.2	26.1
All manufacturing companies	72.4	58.8	84.5	58.6	91.2	79.8
Subtotal, all companies	100.0	100.0	100.0	100.0	100.0	100.0
	(17,504.5)	(8,816.0)	(17,550.4)	(15,932.6)	(50,282.2)	(110,085.5)
Total Thai imports	(39,977.3)	(24,663.3)	(32,130.9)	(44,103.3)	(52,705.3)	(193,580.1)
Percentage of subtotal in total	43.9	35.7	54.6	36.1	95.4	56.7

(a) Percentage share in imports of all trade channels; numbers in brackets: Baht mill., calculated on the basis of the exchange rate  $\text{฿ } 20,476 = \text{US } \$ 1$ . - (b) FTCs: Foreign Trading Companies. - (c) TNCs: Multinational Corporations.

Source: See Table 7.

panies of participating in the region's economic growth in several ways:

- Firstly, the phase of import substitution or rather domestic-market oriented industrialization behind tariff walls required overseas suppliers to switch from exports of final goods to exports of intermediate goods to affiliated production or assembly units located in the final markets. Japanese manufacturers were most successful in this area, as may be gathered from their substantial investment in domestic-market oriented manufacturing units in the region as well as from the large amount of their intermediate-goods exports.
- Secondly, the region became, in the late 1960s and early 1970s, an increasingly attractive low-cost production base for labour-intensive production steps. US companies in particular, have used the region's labour force for re-exports to the US market. This was less typical for European manufacturers, partly because they have rather used countries in the European periphery as low-cost production bases (see Chapter VI below). In the 1970s, the more advanced countries in the region evolved into full-fledged industrial export platforms for the world market. Although some European companies have participated in this development, Southeast Asian developing countries have not become as important a low-cost production base for European companies, as it has for US manufacturers (with the emphasis on exports to the US) and for Japanese companies (with the emphasis on production for the world market).
- Finally, in contrast to Japan and the US, EC investment in ASEAN countries was concentrated not in manufacturing or mining but in banking, and this sectoral concentration had a much smaller effect on export expansion than investment in the primary and secondary sector (for details, see Langhammer, Groß [1986, pp. 22-26]).

Overall, Japanese companies have been far more skillful than their competitors in following the tides of economic development in Southeast Asia, including the often dissociated development patterns in different sectors of the same country. In practically none of the economies under review was there a smooth transition from import-substituting to export-oriented industrialization. Instead, industrial export orientation has generally begun with the introduction of export incentives which co-existed with

deeply entrenched disincentives for exports. Export processing zones in otherwise rather inward-looking economies exemplify this situation. While Japanese economic relations with the region have adapted to these various developments, European companies have generally followed a highly selective approach in their marketing strategies as well as their economic interface with ASEAN countries in general. They have concentrated on final goods markets, on particular phases in economic development, on high price segments in a given market and on a narrow range of distribution channels. As a result, the involvement of European companies has frequently been below the "critical mass", beyond which crossfertilization of different projects takes place and economies of scale amplify the impact of otherwise disconnected activities.

## IV. FDI as an Engine of Export Growth

### 1. The Theoretical Background

The analysis presented in Chapter III points at market presence in terms of FDI in marketing affiliates and assembly or production subsidiaries as key determinants for export success in ASEAN countries. Because of its strategic nature, the relationship between FDI and exports of the home country needs to be assessed in greater detail and in a broader context. In order to draw policy conclusions, one has to know whether the trade effects of FDI are common to all branches of manufacturing industries and to all major regional markets, not just the ASEAN region. For this reason, the subsequent analysis includes trade and investment in both industrialized and developing countries and traces trade effects down to the level of individual industries.

Theoretically, export expansion through FDI may accrue in at least four different ways:

- 1) Foreign-affiliated companies and subsidiaries producing and selling final goods purchase investment and intermediate goods from their parent companies and act as intermediaries for sales of final goods directly produced by the parent companies (intra-firm trade).
- 2) When investment goods or intermediate inputs are not supplied by parent companies, foreign affiliates are likely to purchase these inputs rather from other suppliers in their home country with which the parent company might have a long-standing business relationship than from suppliers located in other industrialized countries.
- 3) Local investors may follow the example of foreign affiliates successfully opening up new markets domestically or abroad. These local imitators are usually inclined to copy their model and to purchase investment and intermediate goods from the home country of successful foreign subsidiaries.
- 4) The combined presence of many foreign companies from a particular country in a specific regional market increases the awareness of con-

sumers in this market for products from that country and helps to establish a kind of brand consciousness, not on a company but on a country basis.

The degree to which these considerations apply does, of course, depend on economic policies applied in home and host countries as well as on microeconomic determinants such as local content requirements established by the host country, the advantages to be derived from vertically integrated production processes, and last but not least, price differences between different potential sources of supply. One would expect trade effects of FDI to be larger in the case of sophisticated products which offer possibilities for product differentiation and require a well-established after-sales service, than in the case of standardized products or raw materials with fairly uniform world market prices. Based on these factors, the trade effects of FDI may differ substantially among host countries and branches of manufacturing industries.

The empirical relevance of these assertions is briefly assessed in the subsequent section and then tested in two steps. Firstly, the importance of intra-firm trade for exports from Japan, the US and - as far as data permit - EC member countries to markets in industrialized and developing countries is reviewed for individual industries and related to the pattern of FDI among host countries. And secondly, total exports of all major home countries to various markets are related to FDI in these markets in a multiple regression approach to determine export multipliers of FDI by country and industry.

## **2. The Prima Facie Evidence**

A comparison of FDI in manufacturing and manufactured exports to ASEAN countries shows a high degree of similarity among countries and subsectors [Groß, 1986, pp. 157-163; Tables A8, A9]. The most important host countries for FDI have also been the most important destinations of manufactured exports, and this applies to the US, Japan, West Germany and the UK likewise. In 1984, US manufacturing FDI was con-

Table 12 - FDI and Exports to ASEAN Countries by Country of Origin and Industry, 1983 (US \$ mill.)

	FDI				Exports (a)			
	US (b)	Japan	West Germany	UK (c)	US	Japan	West Germany	UK
Total manufacturing industries	1462	4223	202	1228	7661	14486	2390	1585
Food	90	136	n.a.		17228	109	23	62
Chemical and allied industries	303	650	55	286	1037	1172	392	330
Metals and metal manufacturing	107	1343	n.a.	1	234	2758	147	96
Machinery except electrical	72	237	9	11 (d)	1904	3358	887	363
Electrical machinery	585	295	62	66	2614	2664	303	205
Transport equipment	86	304	3 (d)	0	942	2524	355	208
Other manufacturing	219	1259	73	692	702	1901	282	321

(a) SITC 5-8 and 0+11-04-08. - (b) Some information suppressed in published statistics were estimated on the basis of data for previous years. - (c) 1981, broken down by the sectoral pattern of FDI in 1978. - (d) Estimates.

Source: OECD [e, 1983]; Table A8; own calculations.

centrated in the Philippines and Singapore, the main markets for US manufactured exports in the ASEAN region. Singapore has also attracted large shares of Japanese, German, and UK FDI and has become a major destination for manufactured exports of these countries, too. Indonesia and Japan or Malaysia and the UK are other cases in point.

At the industry level, there seems to be a similar correlation between FDI and the destination of exports (Table 12). US companies have mainly invested in electrical machinery, and respective exports do in fact dominate total US manufactured exports to ASEAN countries in 1983. Japanese FDI was geared towards establishing metal manufacturing (particularly in Indonesia) while companies from other OECD countries hardly engaged in this activity. At the same time, Japan was the only important supplier of exports to ASEAN countries in the category "metals and



manufactured metals". Similar observations can be made with respect to machinery and transport equipment.

The relationship between FDI and exports is even more pronounced if only trade in intermediate products is considered (Table A7). The market share of Japanese companies in intermediate goods markets is generally higher than their shares in total trade of each sector. However, in sectors with high Japanese FDI (chemicals, metals, transport equipment) Japanese suppliers enjoy a dominating position, as do US suppliers in the electrical machinery sector. These latter findings seem to suggest a relatively close link between FDI and export expansion via intra-firm trade between parent companies and foreign affiliates.

### **3. The Importance of Intra-Firm Trade**

#### *a. Intra-Firm Exports - A Worldwide Phenomenon*

The empirical evidence of intra-firm trade has remained scanty for many years because the statistical basis on the general level of intra-firm trade is weak and biased in the sense that it does not provide a representative cross section of the operations of all multinational firms, irrespective of their home countries. The pioneering work of Helleiner [1973; 1979a; 1979b; 1979c; 1981] on intra-firm trade is exclusively confined to intra-firm imports of US multinationals during the period 1970-1977. Most of the other studies on intra-firm trade followed this line of analysis [e.g., Lall, 1978; Casson, 1986]. In the subsequent sections, an attempt is made to draw a truly representative picture of the importance of intra-firm trade by combining US data with information published by the Ministry of Trade and Industry (MITI) in Japanese and some scattered evidence on the behaviour of European multinationals (for details, see Appendix B).

Previous studies have found an important, even growing intra-firm component in US exports and imports during the 1960s and early 1970s

amounting to between 20 and 30 per cent of total trade [Lall, 1973, p. 183; Chung, 1978, p. 32; Goldsbrough, 1981, p. 575]. Growing importance of intra-firm exports has also been observed for UK-based and Swedish multinationals [Goldsbrough, 1981, p. 574; Swedenborg, 1979, p. 271]. Taking all OECD countries together, the intra-firm share in total exports has been estimated at 20 per cent [Stein, 1984, p. 66]. Our updated and more comprehensive data (Table 13) show that these trends have been continuing into the 1980s, and can also be found in the exports of other home countries than the US:

- Between 1974 and 1982, the share of parent company exports (intra-firm exports) amounted to approximately one quarter of total home country exports for the US (1), Japan and the UK (2).
- Shares for the US and the UK seem to have followed a slightly declining trend, whereas affiliated exports of Japanese parent companies seem to have increased in relation to total Japanese exports. In general, the overall share of one quarter has remained fairly stable.

In interpreting such results it has to be considered that they are heavily influenced by trade in mineral fuels and some related raw materials. It is this commodity-based trade which is reported to be dominated by affiliated rather than unaffiliated trade [Helleiner, Lavergne, 1979, p. 298]. As a result, the share of affiliated trade may be different in the manufacturing sector which deserves special attention because of its dynamics as well as of its growing importance for developing countries' industrial development (3).

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(1) The US data cited here refer to a wider base of affiliated and parent companies, than has been previously reported in the literature, i.e. they include the trade of US multinational enterprises with all affiliates, not just trade with majority-owned affiliates (MOFA's) [Goldsbrough, 1981; Casson, 1986].

(2) For a discussion of the technical assumptions made to reconstruct intra-firm trade data from given sources, see Appendix B.

(3) As intra-firm trade is reported according to the industry classification of the affiliate, but not by product categories, it had to be assumed that trade with manufacturing affiliates consisted wholly of manufactured goods. The same assumption had been extended to single manufacturing industries.

Table 13 - Exports of Parent Companies to Foreign Affiliates in Total Home Country Exports and Industry Composition of Intra-Firm Manufactured Exports, 1974-1982 (per cent)

	US			Japan			UK (a)			West Germany		
	1977	1982		1974	1981		1976	1981		1977	1982 (b)	
	I (c)	I (c)	II (d)	I (c)	I (c)	II (d)	I (c)	I (c)	II (d)	I (c)	I (c)	II (d)
All industries	27.5	22.6		24.1	27.1		24.5	23.0		n.a.	n.a.	
All manufacturing industries	26.2	20.7	100	6.1	12.5	100	26.8	25.6	100	21.4	18.9	100
Food	13.2	16.0	3.6	7.8	12.3	0.9	21.9	25.6	7.3	n.a.	n.a.	
Chemicals	27.1	18.2	11.9	2.3	6.9	2.6	27.9	31.7	21.5	29.1	33.5	23.4
Metals	15.0	10.0	2.7	4.0	2.8	3.5	20.4	21.4	38.4	15.8	18.1	11.2
Machinery	14.0	10.9	16.0	1.1	6.1	8.8				7.5	6.5	7.5
Electrical machinery	21.7	28.8	14.2	9.8	13.7	20.4				59.9	21.8	9.2
Transport equipment	52.7	41.5	37.6	9.6	20.2	46.5	49.8	38.2	17.5	35.4	42.8	48.7
Textiles	7.4 (e)	10.3 (e)	1.3	7.5	2.0	0.7	14.7	21.1	15.3	n.a.	n.a.	
Precision instruments	31.9 (e)	21.9 (e)	6.1	2.7	19.9	8.3						
Other manufacturing	20.8	16.0	6.6		15.3	8.5						

(a) Excluding oil companies. - (b) Calculated from a reduced sample. The actual shares thus might be higher. - (c) Intra-firm exports as a proportion of total exports. - (d) Industry composition of intra-firm manufactured exports. - (e) Including majority owned affiliates only.

Source: OECD [e]; U.S. Dept. of Commerce [b]; MITI [a]; U.K. Dept. of Industry [var. iss.]; Dunning, Pearce [1981; 1985]; own calculations.

At first glance, estimates of US and British manufactured intra-firm exports do not suggest differences compared to the respective intra-firm share in total exports and its trend. Both the share and the trend in manufactured exports are in the same range as in total exports (1). Japan, however, deviates from this pattern. The affiliated part of its manufactured exports is by far smaller than that of the UK and the US, albeit considerably rising from 6.1 per cent to 12.5 per cent within seven years (2).

Yet, the most remarkable element in shares of intra-firm trade in manufactured exports common to all three home countries is the wide divergence in intra-firm shares between different manufacturing industries. To mention the extremes, US exports of transport equipment had an intra-firm share of more than 50 per cent in 1977 and still more than 40 per cent five years later, compared to industries like metals, machinery and textiles in which affiliated exports did not exceed 10 per cent in 1982. A similar variation between industries exists for Japan, albeit at a lower level than in the US. As far as the data base allows for a disaggregated analysis, similar differences emerge also for the UK and for West Germany (3).

In all home countries, intra-firm exports are most important in the automotive industry. This is essential, for it indicates that this industry has

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- (1) The fact that the importance of intra-firm exports of the UK seems to be larger in manufactures than in total trade can largely be explained by the omission of oil in total trade. The intra-firm share in total exports of petroleum companies has been estimated at 58.8 per cent (US) and 30.0 per cent (UK) in 1977; both shares were above average [Dunning, Pearce, 1981, p. 132].
  - (2) The low initial share of intra-firm exports in total Japanese exports, and its subsequent growth, was possibly due to the fact that increasingly small and medium-sized manufacturing companies set up overseas affiliates, backed by the financial and managerial expertise of the *sogo shosha*. The share of small and medium-sized parent companies (capital of less than 100 Mill. Yen) in the total number of sampled parents rose from 34.1 per cent (1971) to 44.1 per cent in 1976 [MITI, a, 1977, p. 34]. Moreover, large manufacturers tended to internalize operations which were previously left to the *sogo shosha* [Tsurumi, 1976, pp. 141-147].
  - (3) The 1982 sample had a somewhat smaller size than the 1977 sample, so that the actual intra-firm shares in German exports might be higher in 1982 than indicated in Table 13.

some characteristics regardless of its home country origin which are conducive to affiliated trade and which other industries are obviously lacking. It also seems that a dynamic expansion of the automotive industry gives rise to shifts from unaffiliated trade to affiliated trade. Such rising intra-firm trade shares can be observed in the case of the Japanese and the German automotive industry in contrast to the US and the UK, where this industry underwent serious adjustment processes (1).

The central role of the transport equipment sector in worldwide intra-firm trade can be shown by the weight of this sector in total US, Japanese and West German intra-firm manufactured exports (Table 13). In 1982, this sector comprised almost half of Japanese and of West German intra-firm manufactured exports and more than one third of the corresponding US exports. These observations indicate that industry-specific factors determine the structural pattern of intra-firm trade, at least in the US and Japan. Few industries (in addition to the petroleum sector) are conducive to affiliated trade, while the majority is not. On average, sophisticated "engineering" industries have higher intra-firm contents than resource-based and labour-intensive industries.

#### *b. Intra-Firm Trade with Developing Countries*

The industry-specific determinants of intra-firm trade discussed above (Section IV.1) suggest that the relevance of this trade differs depending on the level of development in partner countries, for sophisticated goods are predominantly traded among high-income countries. Intra-firm trade is assumed to be more important in North-North trade, where intra-industry specialization dominates, than in North-South trade. This hypothesis has been supported by several authors who argued with respect

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(1) The share of the US and the UK motor vehicle industry in total OECD automotive exports declined between 1976 and 1982 from 16.9 to 11.3 per cent (US) and from 6.1 to 4.5 per cent (UK). Conversely, the respective shares of the Japanese automotive industry rose from 17.1 to 25.3 per cent, and from 21.2 to 23.5 per cent in the case of West Germany.

Table 14 - Share of Intra-Firm Trade in Exports to Industrialized and Developing Countries, and Regional Composition of Intra-Firm Trade and FDI, 1974, 1977 and 1982 (per cent)

	US				Japan	
	1977		1982		1974	
	industrialized countries	developing countries	industrialized countries	developing countries	industrialized countries	developing countries
Share of intra-firm trade in						
Exports						
Total	35.7	13.9	28.9	12.9	n.a.	n.a.
Manufactured	35.8	11.7	27.5	11.3	5.8	6.6
Regional composition of						
Intra-firm exports						
Total	80.4	19.6	77.0	23.0	n.a.	n.a.
Manufactured	82.3	17.7	77.1	22.9	56.8	43.2
Exports						
Total	61.8	38.2	60.3	39.7	55.0	45.0
Manufactured	60.3	39.7	58.0	42.0	59.7	40.3
FDI						
Total	76.0	24.0	75.1	24.9	46.2	53.8
Manufactured(a)	81.4	18.6	76.9	23.1	37.1	62.9

(a) Defined by sector of affiliate.

Source: OECD [e]; U.S. Dept. of Commerce [b]; MITI [a, 1974]; Sekiguchi [1979].

to US intra-firm imports that until the mid-1970s intra-firm trade has been a phenomenon of greater, and growing, importance only for the trade between developed countries [Helleiner, 1979a, p. 397; 1979c, p. 163; Hill, Johns, 1985, p. 376]. Based on the evidence in Table 14 these findings of previous research can be broadened and updated:

- In the early 1980s, US exports to industrialized countries continue to contain a much higher intra-firm element than the exports to developing countries. This holds also if the analysis is confined to manufacturing exports.

- The opposite observation emerges for Japan in 1974. Intra-firm manufactured exports are slightly more important in exports to developing than to developed countries. This pattern is in line with the diverging regional distribution of Japanese and US FDI and total trade flows to developed and developing countries.

These observations are, however, far too general to provide clues with respect to the relationship between FDI, intra-firm trade, and export success. Therefore, the ASEAN countries were again chosen as sample for more detailed analysis. Data from the US benchmark surveys and the MITI census (1) allow to establish a few stylized facts about US and Japanese intra-firm trade with ASEAN countries (Table 15):

- US intra-firm manufactured exports are much more important for US trade relations with ASEAN countries than with the rest of the developing world. This holds also for Japan, despite of a declining trend of the intra-firm share in manufactured exports to ASEAN. The sectoral composition of the intra-firm content in US and Japanese manufactured exports to ASEAN countries on the one hand and to all developing countries on the other hand reveals that especially in the electrical machinery industry Japanese as well as US exporters are operating more on an intra-firm basis in Southeast Asia than in other developing regions. The opposite is true for US transportation equipment, as there are virtually no intra-firm exports to ASEAN countries in contrast to their importance in the transport equipment exports to Latin America or developed countries.
- In 1981, 1982 the US and the Japanese intra-firm manufactured exports to the total ASEAN region had a similar absolute magnitude (US: 1917 US \$ mill. in 1982; Japan: estimated at 1477 US \$ mill. in 1981). Yet, they accounted for sharply diverging shares of the respective total manufactured exports. 24.4 per cent of US but only 9.6 per cent of Japanese manufactured exports were intra-firm trade.
- With respect to past trends, the two home countries have also shown diverging tendencies in their intra-firm export shares. The intra-firm

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(1) The authors are indebted to Dr. Tran Van Tho who kindly provided survey data on the 1980/81 sales and purchases of Japanese affiliates in Asia.

Table 15 - Intra-Firm Exports to ASEAN Countries by Home Country and Industry, 1974-1982

	Intra-firm exports					
	US \$ mill.	in per cent of all intra- firm exports (a)	in per cent of total exports (a)	US \$ mill.	in per cent of all intra- firm exports (a)	in per cent of total exports (a)
	US intra-firm exports					
	1977			1982		
All manufacturing industries	D≥539	100	16.9	1917	100	24.4
Food products	7	1.3	6.4	D≥18	0.9	8.0
Chemical products	D≥13	n.a.	5.5	104	5.4	10.6
Non-ferrous metals	13	2.4	5.7	8	0.4	2.8
Machinery	22	4.1	2.3	146	7.6	6.3
Electrical equipment	D≥195	n.a.	50.1	1493	77.9	66.6
Transport equipment	9	1.7	2.8	24	1.3	2.9
Other manufacturing	D≥3	n.a.	9.1	D≥20	1.0	3.9
All sectors	921	.	4.6	2614	27.7	.
	Japanese intra-firm exports (b)					
	1974			1981		
All manufacturing industries	669	100	13.0	1477	100	9.6
Food products	32	4.8	58.2	4	0.3	3.1
Textiles and clothing	124	18.5	35.4	56	3.8	9.6
Wood products	3	0.4	3.0	0.2	0.0	0.1
Chemical products	39	5.8	6.2	54	3.7	4.2
Iron and Steel	73	10.9	6.3	168	11.4	6.8
Non-ferrous metals	19	2.8	23.8	53	3.6	20.7
Machinery	11	1.6	0.1	81	5.5	2.4
Electrical equipment	88	13.2	20.0	276	18.7	11.5
Transport equipment	158	23.6	20.7	370	25.1	12.6
Precision instruments	13	1.9	11.5	199	13.5	41.1
Other manufacturing	43	6.4	10.1	126	8.5	9.7
D: data not disclosed for reasons of confidentiality.						
(a) Percentage shares have been computed on the basis of estimated values of intra-firms exports. - (b) Estimated; see Appendix B for estimation procedures.						

Source: OECD [e]; U.S. Dept. of Commerce [b]; MITI [a, 1975]; unpublished Japanese census data; own calculations.



content of Japanese manufactured exports declined from 13.0 to 9.6 per cent (1974-1981), while the respective US shares increased from 16.9 per cent (1977) (including only countries for which intra-firm exports were disclosed) to 24.4 per cent (1982). If the exports of all sectors are taken into account, the US intra-firm export ratio rose from 14.6 to 27.7 per cent in the period under consideration.

- Irrespective of country of origin, two types of industries displayed high intra-firm export shares in the seventies: Firstly, those which have been either the corner-stones of export-oriented industrialization in the ASEAN host countries (food, textiles and clothing) or recently emerged as new export industries (electrical equipment); and, secondly, resource-based industries with a high-technology content (non-ferrous metals) and assembly industries with a high import content (transport equipment). Towards the 1980s, however, remarkable changes have taken place.
- Japanese affiliates in the traditional ASEAN export industries have diversified their imports away from their parent companies, driving the intra-firm export shares down. The skill-intensive production of precision instruments has shown, on the other hand, a strengthening of intra-firm vertical ties.
- In the US case, intra-firm exports are dominated by companies producing electrical machinery. The eminent share of electrical products in US intra-firm exports matches the dominant position of this industry among the US export platforms in Asian developing countries [Moxon, 1984, Tables 3 and 7] and supports the hypothesis that intra-firm trade is determined by industry-specific factors.

Since FDI is a necessary prerequisite for intra-firm trade, it is hardly surprising that rapid growth of FDI has been accompanied with growing intra-firm export shares (Tables 15 and A9). The manufacturing industry figuring most prominently in US FDI flows (electrical equipment) also exhibits comparatively large increases in the intra-firm export shares. The metal industry which had the lowest FDI growth is the only industry

with a declining importance of intra-firm exports (1). The same relationship holds for Japan. Her investment in the metals and machinery industries has grown overproportionately, and so have intra-firm export shares in these industries. Similarly, the Japanese investment in ASEAN countries into food processing, textiles and wood products has expanded less than average, and the intra-firm export shares of these industries show the most dramatic declines (2).

Both US and Japanese data lend support to the hypothesis that the intra-firm content in exports of an industry to ASEAN countries rises, if the industry is a dynamic investor in this region. Does this also mean, however, that intra-firm exports have contributed to the relative success of Japanese and US suppliers on ASEAN markets? The evidence on how changes in the intra-firm share in total exports are related to changes in market shares is not straightforward. But there appears to be some support for the hypothesis that at least for Japanese exports the intra-firm content in exports has grown simultaneously with Japanese gains in trade shares in ASEAN markets. If the export performance of a specific home country in a certain ASEAN host country market is defined as a "case", then it emerges that in about three quarters of the Japanese cases intra-firm exports showed more pronounced changes than total Japanese exports. This stands in marked contrast to the role of intra-firm trade for the US economy, as in about half of the US cases, intra-firm exports changed sluggishly in relation to overall US exports. This relation holds with the same strength for intra-firm exports of advanced industrial goods as for the exports of all industrial products together. Thus the impact of intra-firm exports on total exports seems to be home country-specific rather than industry-specific.

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- (1) For all US manufacturing industries the relationship between investment growth and relative intra-firm export growth is well-founded. A rank correlation analysis of FDI growth with changes in the intra-firm export ratios in manufacturing industries yields a correlation coefficient of 0.62 which is statistically significant at the 5 per cent level.
  - (2) Japanese direct investment growth in ASEAN countries and the changes in the shares of intra-firm exports in total Japanese exports to the ASEAN region were rank-correlated with a coefficient of 0.62 (significant at the 5 per cent level).

### *c. Preliminary Conclusions*

The evidence presented in the preceding sections confirms that FDI can be an engine of export success by promoting intra-firm trade between parent companies and foreign affiliates. However, such a causal relationship was observed only for a few branches of manufacturing industries and seems to be dependent on country-specific organisational structures of multinational companies. As a general explanation for the Japanese and US export performance the emergence of intra-firm trade does not provide a satisfactory answer. As intra-firm trade is only one of several channels through which FDI can promote export expansion of the home country (Section IV.1), a more comprehensive approach was chosen to capture all influences FDI may have on total export flows.

### **4. FDI and Export Expansion - A Multiple Regression Approach**

There are several studies analysing trade-creating or trade-substituting effects of FDI [e.g. Bergsten et al., 1978; Donges, Juhl, 1979; Lipsey, Weiss, 1981; 1984; Arnaud-Ameller, 1985]. All of them conclude that export-stimulating effects of FDI are overriding. Aside from some data problems, these studies generally neglect the competition of investors from several industrialized countries in individual markets. If investors from several home countries are active in one market, this may have negative effects on each investing country's exports to these markets as sales promotion efforts cancel each other out and local imitators are not necessarily forthcoming. Such influences are captured in the subsequent regression analysis which seeks to explain the export performance of US, Japanese, German, and UK companies in 34 markets of both industrialized and developing countries depending on FDI from all four home countries considered.

The following regression function was specified:

$$X_{ij}^h = a_i^h + b_i^h FDI_{ij}^h + \sum_k c_{ki}^h FDI_{ij}^k + d_i^h GDP_j + e_i^h GDPCAP_j$$

$X_{ij}^h$  denotes exports in category  $i$  of home country  $h$  to country  $j$ . Independent variables are total stocks of FDI by home country  $h$  ( $FDI_{ij}^h$ ) and by competing industrialized countries ( $FDI_{ij}^k$ ) as well as gross domestic product and per capita income of importing countries ( $GDP_j$  and  $GDPCAP_j$ ) as proxies for market size and level of development. FDI data have been drawn from the sources given in Table A8; export flows are those of OECD [e].

If trade-creating effects of FDI dominate substitution effects, the regressions should yield positive export multipliers for FDI of the home country under investigation and negative coefficients for FDI of competing industrialized countries. Both market size and level of development are supposed to have a positive impact on the volume of exports. The results of the regression analysis for 1983 presented in Table 16 basically confirm these expectations. Coefficients computed for total manufacturing and for six different branches of manufacturing industries show statistically significant export multipliers of FDI.

For total manufacturing these multipliers are in the range of 1.5-2 for US, Japanese, and German FDI, while FDI from the UK does not seem to have much of an impact on UK exports. There is, however, no uniform relationship between the size of the export multiplier and industry-specific characteristics of individual industries. The rather global character of the industry classification dictated by data availability is likely to veil any such relationship. Nonetheless, there are two tendencies worth mentioning:

- The first concerns research-intensive industries such as machinery and transport equipment which generally show higher export multipliers than less sophisticated industries such as food processing.
- The second tendency emerges from a comparison of these multipliers with the general export performance of individual industries measured by the Revealed Comparative Advantage (RCA) concept [Groß, 1986, p. 166]. In two thirds of all cases, FDI of successful export industries had an above average impact in exports while the opposite holds for industries with low or negative RCA values.

Table 16 - FDI and Exports - Cross Section Regression Results, 1983

	Constant	GDP	GDP/ capita	FDI from				$\bar{R}^2$	F
				US	Japan	West Germany	UK		
Total manufacturing									
US	839.8			1.500** (21.5)		-2.363** (-5.29)		0.93	231.0
Japan	1563.0				1.609** (3.45)	-1.097** (-2.42)		0.26	6.9
West Germany	-692.3	24.64** (4.33)	368.5** (3.13)	-0.385** (-2.29)	-1.878* (-1.90)	2.044* (1.84)	-0.978 (-1.21)	0.67	11.6
UK	663.7	5.613** (3.69)			-0.786** (-2.56)		0.288 (1.11)	0.41	8.2
Food									
US	-5.862	0.178 (1.37)		0.531** (17.1)			-0.122 (-1.56)	0.94	121.3
UK	-7.774	0.286 (1.39)					0.553** (4.19)	0.63	21.6
Chemicals									
US	146.4			0.525** (8.77)				0.70	76.9
Japan	103.5				0.302 (1.49)			0.04	2.2
West Germany	-143.2	0.1874** (2.22)	55.20** (3.10)	-0.200* (-1.80)		1.726** (3.41)		0.61	13.6
UK	17.86	0.629* (1.92)	21.30** (2.45)					0.30	7.3
Metals and Processed Metal									
US	-13.59	0.312* (1.74)		1.136** (17.9)		-3.094** (-6.91)		0.93	132.4
Japan	245.4				0.437* (1.93)	-2.534* (-2.02)		0.10	2.7
West Germany	-120.0	2.573** (6.90)	24.80** (3.47)	-0.557** (-2.19)		4.157** (2.67)	-1.184** (-2.81)	0.94	61.7
UK	7.561	0.322** (2.68)	8.825** (2.16)					0.40	8.6

Table 16 continued

	Constant	GDP	GDP/ capita	FDI from				$\bar{R}^2$	F
				US	Japan	West Germany	UK		
Machinery									
US	205.2			2.852** (15.3)	4.521** (2.35)	-10.02** (-5.93)		0.88	79.1
Japan	215.6	1.430** (2.92)			4.218** (3.91)	-4.297** (-4.10)		0.33	6.3
West Germany	-168.3	5.511** (4.48)	60.84** (3.45)	-0.669** (-2.65)	-3.490* (-1.77)	2.204 (1.18)		0.69	15.1
UK	-31.35	1.836** (3.75)	22.98* (1.84)	-0.294** (-2.28)			1.795** (2.30)	0.57	9.1
Electrical machinery									
US	184.2			1.163** (7.22)	1.844** (2.11)	-1.893** (-3.21)		0.65	20.4
Japan	95.18	0.797** (2.38)	17.59** (2.46)		5.310** (9.14)	-2.460** (-5.19)	0.834** (2.83)	0.77	18.7
West Germany	-56.00	1.891** (4.21)	31.79** (3.21)	-0.370** (-2.35)	-1.019 (-1.33)	0.507 (0.89)		0.62	11.4
UK	10.17	0.439** (4.07)	6.622** (2.48)	-0.105** (-2.20)			0.229** (2.56)	0.60	10.6
Transport equipment									
US	136.1			3.177** (23.0)	-1.661 (-1.28)	-2.726** (-4.59)		0.95	176.9
Japan	158.8		26.24* (1.94)	0.309** (3.37)	1.576* (1.99)	-0.812** (-2.24)		0.49	7.3
West Germany	-394.0	7.035** (5.37)	98.24** (2.74)	-0.725** (-2.97)	-4.228** (-2.11)	0.371 (0.39)		0.67	11.3
UK	9.221	0.763* (6.94)					-0.201** (-2.61)	0.84	37.0
							3.808** (6.47)		

\*, \*\* = statistically significant at the 10 and 5 per cent level, respectively; t-values are given in parentheses. Constant, GDP, and GDP per capita are measured in US \$ mill., US \$ bill., and US \$ 1000, respectively.

Source: Groß [1986, Table 5].

Table 16 also confirms the impact of competition among investors from different countries. The presence of FDI from other industrialized countries reduces the trade-creating effects of FDI from individual home countries in most cases, though to varying degrees depending on the respective size of FDI. A good example is West German FDI in total manufacturing which had only limited export effects because of the strong presence of Japanese and US investors whose export performance suffered in turn from the competition of German foreign affiliated companies. Applying these results to the ASEAN region, one can conclude that German exports were not stimulated considerably by German FDI in ASEAN countries because of the much larger engagement of Japanese and US multinationals, but market shares of German companies would have declined even more without FDI.

This conclusion is supported by a regression analysis based on pooled cross section and time series data for ASEAN countries (Table 17). Using OECD exports rather than GDP as an indicator of market size, the coefficients for FDI match the results of the above cross section analysis

Table 17 - FDI and Exports: The ASEAN Case - Results of Pooled Regressions

	Constant	Total OECD exports	FDI from				R <sup>2</sup>	F
			US	Japan	West Germany	UK		
US	-229.1	0.268** (6.41)	1.371* (2.73)	-5.370* (-2.50)			0.72	18.4
Japan	106.3	0.378** (9.68)	-0.557 (0.61)	1.221** (5.15)	6.170 (0.95)	-2.443** (-4.32)	0.90	36.7
West Germany	7.0	0.105** (12.2)	-0.787** (-3.90)	-0.173** (-3.67)	4.699** (3.80)		0.89	40.2
UK	41.8	0.048** (10.0)	-0.390** (-3.49)	-0.094** (-3.28)	1.907* (2.41)	0.250* (3.63)	0.86	25.5

\*,\*\* = statistically significant at the 5 and 1 per cent level, respectively; t-values are given in parentheses; n = 21.

Source: Groß [1986, Table 6].

for a broader sample of countries. The main actors on the scene, Japan and the US, influenced the export performance of all investing countries, while West Germany and the UK benefitted from their own FDI, but otherwise only played a marginal role. The impact of FDI is nicely demonstrated by comparing actual market shares (Table 2) with hypothetical shares computed on the basis of the coefficients for total OECD exports only. In 1983, growing import demand of ASEAN countries alone (as reflected in total OECD exports to the region), without additional FDI, would have given Japan a market share of 37.8 per cent which is much lower than the actual market share of roughly 41 per cent. For all other industrialized countries, actual market shares are below hypothetical shares due to the strong competition of Japanese foreign affiliates.



## V. The Direction of Investment Flows from Industrialized Countries

### 1. The Setting

The analysis presented in Chapters III and IV as well as a substantial body of literature (cited above) highlight the importance of FDI for successfully penetrating foreign markets. It is unlikely that European companies would use this marketing strategy for their products to a smaller degree than their Japanese or US competitors unless there were incentives to do so. The attractiveness of ASEAN markets based on low wage costs, availability of energy and raw materials, high growth of domestic demand, openness of the economy, rational exchange rate policies, political and economic stability, etc., has promised high returns to all foreign investors irrespective of their country of origin, and investment incentives granted by ASEAN countries did not discriminate among investors from different countries. When European companies have, nonetheless, neglected this region, they may have found more profitable trade and investment opportunities elsewhere.

The geographical distribution of stocks of FDI by country of origin and major economic activity presented in Tables 18 and A10-A12 (1) reveals a number of significant differences in the behaviour of multinationals from the major industrialized countries:

- Three quarters of FDI from major industrialized home countries except Japan were concentrated in developed countries (Table 18). FDI in

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(1) Throughout this study, the evidence on FDI is based on data supplied by home countries of multinationals. Although home country data on FDI are even more scarce than respective data supplied by host countries, the former have been preferred because host country data - albeit being used frequently - are severely deficient. Data supplied by the five ASEAN countries differ with respect to definition, coverage, and time period. In particular, stock data of FDI refer to registered or approved investment in Indonesia, Malaysia, the Philippines, and Thailand. Realized investment is, however, considerably lower and realization rates vary significantly among home countries and over time. For details, see the report prepared by Langhammer and Groß [1986, pp. 10-21] for the ASEAN/EEC High Level Working Party on Investment.

Table 18 - FDI in ASEAN Countries and Selected Regions by Home Country and Sector, 1983

	Total book value (US \$ bill.)	Developed countries (a)	Developing countries (a)		
			ASEAN	in Asia	Total
			in per cent of total book value		
Japan (b)					
All sectors	53.1	46.05	20.06	27.39	53.43
Manufacturing	17.0	37.52	24.91	34.21	62.15
Mining	10.3	27.73	51.20	52.31	71.73
Trade	8.5	84.28	2.38	7.69	15.55
Banking and finance	3.8	76.78	3.39	9.47	23.22
US					
All sectors	226.1	75.00	3.52	5.88	18.76
Manufacturing	90.1	79.61	1.62	3.24	18.91
Mining	66.5	64.40	7.21	7.95	21.85
Trade	28.5	79.47	1.85	5.87	18.43
Banking and finance	28.7	89.74	2.17	7.85	8.41
West Germany					
All sectors	48.4	77.08	1.20	2.22	12.86
Manufacturing	21.1	78.99	0.96	2.08	19.53
Mining	2.3	55.33	n.a.	0.58	21.90
Trade	9.5	93.75	1.15	1.70	5.24
Banking and finance	5.1	85.24	4.47	6.93	14.70
UK (c)					
All sectors	57.9	78.2	3.9	8.4	18.2
Manufacturing	32.8	83.6	3.0	5.3	13.5
Mining (d)	3.5	D	D	1.4	15.2
Trade	7.8	72.8	4.7	10.6	19.7
D: Figure suppressed to avoid disclosure of information relating to individual enterprises.					
(a) Without OPEC countries. - (b) Approved investment, 1982/83. -					
(c) 1981, without oil companies, banks and insurance companies. -					
(d) Without oil companies.					

Source: Ministry of Finance, Japan [1983]; Business Monitor [1984]; Deutsche Bundesbank [a], and unpublished data; U.S. Dept. of Commerce [b, 1985]; own calculations.

developing countries originating from the US and the European countries under review was rather directed towards Latin America (and a lesser degree Africa) than to Asia. This pattern hardly changed over time (Table A10).

- More than half of Japanese FDI was attracted by developing countries and by Asian developing countries, in particular. Yet, the US and Japan were the two leading investors in both the Asian and the ASEAN region due to the vast differences in the volume of total FDI (Table A11).
- The sectoral distribution of total FDI in developing countries is rather similar among all home countries (Table A12) with manufacturing FDI occupying the top position. In the ASEAN region, however, manufacturing played a by far less important role. Japanese and US FDI was concentrated in mining activities while banking and finance attracted almost 40 per cent of German FDI in the region.

These observations demonstrate a different behaviour of European and non-European investors with respect to their propensity to go overseas as well as the sectoral and geographical allocation of their funds. The question is whether these differences merely reflect firm-specific comparative advantages (such as propriety technology, patented trade marks, managerial or marketing know-how, control on market entry, etc.) or whether they are influenced by the economic environment facing investors from these countries. Environmental factors such as investment incentives granted by the home country or trade and exchange rate policies applied in these countries may have an impact on the volume, composition and direction of FDI by either improving or deteriorating the competitive position of investors in specific markets vis-à-vis their rivals from other industrialized countries. In this line of thinking, European businessmen often complain that the Japanese superiority in Asian markets is rather derived from excessive financial and administrative support granted by the Japanese government to Japanese investors than from a superior international competitiveness of Japanese companies.

The validity of these contentions is assessed in the subsequent sections by a critical examination of various kinds of investment incentives

granted by Japan, the US, West Germany, and the UK. In addition to fiscal, financial and some institutional measure promoting FDI, the analysis also includes export promotion schemes and foreign aid as far as these are availed by investors in connection with their production facilities abroad.

## **2. FDI Incentives in the Home Countries**

Fiscal incentives include tax privileges for income spent on or received from FDI while financial incentives usually accrue from access to credit at soft, i.e. subsidized, terms. A synopsis of these and other incentives listed in two OECD surveys [a; d] is provided in Synoptical Table 2. This overview yields some salient features (for details, see Agarwal [1986, pp. 32-41]).

- Tax incentives do not differ much among the countries under investigation. Tax laws generally attempt to avoid a discrimination between incomes generated at home or abroad.
- The German system is most liberal among the four home countries because, in addition to allowing for crediting of taxes paid abroad against local tax liability, it leaves the income saved on account of tax holidays and other such incentives in host countries untaxed even in those cases where no double taxation agreements exist to that effect with the respective host countries.
- In the field of financial incentives Japan has the largest number of institutions granting assistance to investors going abroad and these incentives are available to firms of every size whereas in other home countries such help is given primarily to smaller firms.
- The UK and the US as the traditional homes of multinational corporations appear to believe that firms willing to invest in other countries should do so mainly on the basis of their own resources rather than on the basis of state subsidies. Both countries hardly provide financial incentives to their investors going abroad.

Synoptical Table 2 - Main Incentives Available to Firms in West Germany, Japan, the UK and the US for FDI in Developing Countries, 1982

	West Germany	UK
Fiscal incentives	<ol style="list-style-type: none"> <li>1. Double taxation agreements with 29 developing countries.</li> <li>2. A tax deferment scheme (Developing Country Tax Law) was applicable to FDI in LDCs up to 1981.</li> </ol>	<ol style="list-style-type: none"> <li>1. Double taxation agreement with 78 countries.</li> </ol>
Financial incentives	<ol style="list-style-type: none"> <li>1. Cheaper government long-term loans to small and medium-size firms (2.5 per cent for FDI in LLDCs and 3.5 per cent for FDI in LDCs) up to a maximum sum of DM 2.5 mill.</li> <li>2. Subsidisation of pre-investment costs, e.g., feasibility studies.</li> <li>3. Participation in equity capital through government agency (DEG).</li> </ol>	<ol style="list-style-type: none"> <li>1. Economic aid is given to the British foreign investors in LDCs for infrastructure needed for their investment projects.</li> <li>2. Financial support is granted for pre-investment studies.</li> <li>3. Equity participation through government agency (CDC).</li> </ol>
Institutional incentives	<ol style="list-style-type: none"> <li>1. Investment guarantee scheme.</li> <li>2. Bilateral investment protection and promotion agreements with host developing countries.</li> </ol>	<ol style="list-style-type: none"> <li>1. Investment guarantee scheme.</li> <li>2. Bilateral investment protection agreements with host developing countries.</li> </ol>
Export incentives	<ol style="list-style-type: none"> <li>1. Guarantee of export credits through official agencies (Hermes and Treuarbeit).</li> <li>2. Rediscounting facilities for export financing by a private organisation of Commercial Banks (AKA-Ausfuhrkredit-GmbH).</li> <li>3. Subsidised export credits by government owned KfW for exports to developing countries.</li> <li>4. Coverage of exchange risk through a government agency (Hermes).</li> </ol>	<ol style="list-style-type: none"> <li>1. Export credit insurance by a government agency (ECGD).</li> <li>2. Cost escalation insurance by ECGD for capital goods with manufacturing periods of at least two years.</li> <li>3. Refinancing facilities for export credits by banks.</li> </ol>

Synoptical Table 2 continued

	US	Japan
Fiscal incentives	<ol style="list-style-type: none"> <li>1. Tax crediting without any double taxation agreement on income transferred to the US from the host country.</li> </ol>	<ol style="list-style-type: none"> <li>1. Double taxation agreement with 13 developing countries.</li> <li>2. Tax deferment on FDI in developing countries.</li> </ol>
Financial incentives	<ol style="list-style-type: none"> <li>1. "Direct Investment Fund" loans are granted to small US investors who are not able to raise private funds at appropriate terms.</li> <li>2. Financial participation in pre-investment costs of projects such as reconnaissance survey, feasibility studies and manpower training.</li> <li>3. Loans in the form of convertible and profit participation notes but no direct equity participation by US government agency (OPIC).</li> </ol>	<ol style="list-style-type: none"> <li>1. Several government or semi-government institutions (Eximbank, OECF, JICA, JODC, Japan Petroleum Development Corporation, Metal Mining Agency of Japan, etc.) grant long-term soft loans for FDI in LDCs.</li> <li>2. Subsidies for pre-investment costs such as feasibility studies and training of personnel for developing countries.</li> <li>3. Provision of financing for establishment of joint ventures by a semi-public agency (JODC).</li> </ol>
Institutional incentives	<ol style="list-style-type: none"> <li>1. Investment guarantee scheme.</li> <li>2. Bilateral investment protection agreements with host developing countries.</li> </ol>	<ol style="list-style-type: none"> <li>1. Investment guarantee scheme.</li> <li>2. Bilateral investment protection agreements with host developing countries.</li> </ol>
Export incentives	<ol style="list-style-type: none"> <li>1. Export credit insurance by Foreign Credit Insurance Association of about 50 insurance companies and by EXIM of USA.</li> <li>2. Official export credit financing by EXIM and the Private Export Funding Corporation (PEFCO).</li> </ol>	<ol style="list-style-type: none"> <li>1. Export credit insurance through a government agency (EID of MITI).</li> <li>2. Export credits at preferential rates by EXIM of Japan.</li> <li>3. Exchange risk insurance by EID.</li> </ol>

Source: OECD [a; d].

It would be interesting to compare the relative importance of subsidised loans and capital in FDI of the various home countries, but unfortunately the data for this purpose are not available. Japan is, however, an exception to some extent. It publishes data not on the basis of its actual FDI but according to projects reported to the government at preinvestment stage. Therefore, Japan has information how these projects are planned to be financed from different sources, and these data are published [MITI, a]. If it is assumed that all the loans granted to private foreign investors by the Japanese government are subsidised, and this assumption seems to be quite realistic (1), then it can be said that financial incentives have facilitated Japanese FDI considerably.

As shown in Table 19, the share of government loans in Japanese FDI amounted to 34 per cent in 1974. Since then it has, however, gone down to 11 per cent indicating the growing financial strength of Japanese firms and their increasing self-confidence to establish production facilities in other countries on their own initiative and risk. This is supported also by the fact that Japanese investors have been financing their FDI more and more from their own resources. The share of FDI financed from internal liquidity of the investing firms in total FDI increased from 33 per cent in 1974 to 63 per cent in 1982. However, in agricultural and mining, where investment risks are relatively high and in which the Japanese government is extraordinarily interested in promoting FDI, Japanese firms have continued to take advantage of public funds for their direct investment activities in other countries. In these two sectors government loans account for much higher shares in total FDI (agriculture 48 per cent and mining 39 per cent in 1982) than in manufacturing or all sectors taken together.

Among institutional incentives, guarantees against political or non-commercial risk are most useful for foreign investors. In all the four countries these risks include 1) expropriation of property including nationalisation and confiscation without adequate compensation, 2) war in-

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(1) The grant element in loans of the Overseas Economic Cooperation Fund (OECF), which is the most important public organisation in Japan for giving loans and equity capital for foreign investment, amounted to about 19 per cent in 1981 [OECF, 1982].

Table 19 - Relative Importance of Various Sources for Financing of Japanese FDI, 1974, 1978 and 1982 (per cent) (a)

		Internal liquidity	Government loans	Private loans	Other
Agriculture, forestry and fishery	1974	26.7	32.7	40.7	0.0
	1978	23.3	31.4	43.3	2.0
	1982	25.5	47.9	26.1	0.5
Mining	1974	30.6	29.1	40.4	0.0
	1978	22.1	55.4	10.5	12.0
	1982	40.3	38.7	9.0	11.9
Manufacturing	1974	43.6	27.9	28.5	0.0
	1978	54.5	11.9	17.9	15.6
	1982	73.0	7.3	15.6	4.1
Trade	1974	17.3	48.6	34.0	0.0
	1978	33.5	6.8	56.1	3.5
	1982	37.0	18.9	42.8	1.3
Total	1974	33.0	34.2	32.8	0.0
	1978	49.7	12.7	26.5	11.1
	1982	62.6	10.9	22.4	4.1

(a) Figures may not add up to 100 because of rounding.

Source: MITI [a].

cluding revolution, rebellion and civil war but not a general war involving major powers of the world and 3) currency inconvertibility resulting in impossibility or delaying of the repatriation of capital and earnings from the host countries [OECD, a]. Equity participation, loans to subsidiaries or firms in which the investors have equity participation and re-invested earnings up to varying extents are guaranteed by all the countries. Portfolio investment is insurable in Japan if it is made in the exploitation of mineral resources to be imported into Japan under long-term supply contracts, and in the UK if the investor has equity holding of not less than a given minimum. In the mineral sector, portfolio investment is guaranteeable in Japan even against commercial risks like bankruptcy. However, in all the four countries guarantee is given only to new investment.



More than half of Japanese FDI in the Third World (53 per cent) was covered under investment guarantees in 1981 [OECD, d]. In the other three countries comparatively fewer investors have opted for getting their FDI in developing countries insured against non-commercial risks. In West Germany, the proportion of insured to total FDI in the Third World amounted in 1981 to 10 per cent and in the UK and the US only to 2 and 7 per cent respectively (1). Generally, smaller investors care more to get their FDI insured against non-commercial risks than big multinational corporations. Since they have a higher share in the Japanese FDI (see Section V.3) they may also be responsible for the relatively higher coverage of Japanese investment by protection guarantees.

In addition to these guarantees, all developed countries have many organisations which provide information and technical help to investors looking for investment opportunities in the Third World. This kind of institutional incentives is considered to be very useful for smaller investors with no or little experience in FDI. Most of the governments have established organisations which help right from the initial stage of finding suitable countries of location to the actual execution of production and marketing plans. In some countries these responsibilities are concentrated in relatively few organisations (e.g., the US) and in others they are spread over a larger number of institutions (e.g., West Germany) [OECD, d; BMZ, 1982]. Japan is the only country where special agencies are found which promote FDI in ASEAN countries (2).

Whether regionally specialised agencies of Japan are more efficient in promoting FDI to Southeast Asia than global agencies of other countries cannot be said *a priori*. What they do however indicate is that Japan has devoted more attention to this region from the early stages of its FDI activities than to others whereas the incentive policies and practices of other countries have been less selective in regional allocation of their

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- (1) The Japanese figure is not quite comparable with the other three because the former include probably also the credits insured against selected commercial risks in the case of foreign companies supplying Japan with natural resources.
  - (2) Three such agencies are: Japan ASEAN Investment Co., ASEAN Finance Corporation and ASEAN Japan Development Co. [Wagner et al., 1985].

FDI. This must have facilitated the said concentration of Japanese investment in ASEAN countries.

As far as export incentives are concerned, it may be mentioned that the relation between them and FDI is somewhat indirect but not less important than in the case of direct investment incentives. Export incentives in the developed countries usually consist of subsidised financing and insurance against political as well as commercial risks. They are given to promote exports of domestic goods especially of machinery and equipment which often require longer periods of repayment. In so far as investors satisfy their needs for capital equipment and other inputs by importing from their home countries and finance these imports by borrowing there, they can avail themselves of export incentives and reduce their investment risks and costs. Sometimes it may not be very difficult to take advantage of export financing even in the case of those goods which are bought by the investor in his home country out of his own funds to be accounted as equity capital in his foreign firm. Many developing countries impose restrictions on transfer of funds abroad, and special permits have to be obtained by foreign investors there for repatriation of earnings and capital. Under such circumstances foreign investors would naturally prefer to bring their equity share in form of capital equipment and other importable inputs and satisfy their needs for working capital by borrowing in local currencies on domestic markets of their host developing countries.

Although this point is difficult to prove at a general level for the four countries under review, scattered evidence suggests that many investors use export incentives to bolster their engagement abroad. Langhammer [1986b] shows that more than 50 per cent of total FDI in Indonesian manufacturing was implemented through imports of goods and that this financing in kind was rather linked to the equity than the loan share of Japanese FDI in this country. Likewise, a recent study of Indian FDI [Agarwal, 1985] highlights that more than half of this investment was made in the form of exports of capital equipment and other inputs which were entitled for export subsidies. And, US \$ 1.6 bill. out of 1.9 bill. US FDI assisted by the Overseas Private Investment Corporation (OPIC) were tied supplies of machinery and other equipment from the US

[UNCTC, 1983]. The true cause for this behaviour is, of course, not the exploitation of export subsidies as such, but rather the inconvertibility of currencies, indigenization rules, and other restrictions on FDI in host countries which provide incentives to foreign investors to make their capital contributions in goods rather than in financial assets.

As far as the costs of export credit and insurance facilities in different countries are concerned, the most important point to remember is that in 1978 an agreement called "Arrangement on Guidelines for Officially Supported Export Credits" was signed by the OECD members (excluding Iceland and Turkey) in order to avoid undue competition among them in granting favourable terms to their exporters. This agreement sets minimum limits for interest rates and down-payments as well as maximum limits with regard to credit maturities and local-cost financing allowances, etc. Any country granting more favourable terms than stipulated in this agreement has to notify the terms and reasons for that to other members beforehand [OECD, a]. As a result it can be expected that the costs of export financing in Japan, West Germany, the UK and the US would not differ significantly from each other.

However, the ratio of export credits insured against various kinds of risks and of those benefiting from preferential funding are substantially higher in Japan than in other countries considered here [OECD, a]. In 1980, about 45 per cent of Japanese exports were covered by export credit insurance. In the case of capital goods which are relatively more important for FDI this ratio was even higher. As far as preferential funding of export credits was concerned, most of the long-term export credits in 1981 benefited from it. In West Germany, less than 1 per cent of total exports was financed on preferential interest rates in 1980. In the same year, 12 per cent of the American exports benefited from various export incentives of which more than half was in the form of insurance and guarantees and the remaining as preferential credits.

Again, however, it cannot be concluded that these incentives reduce the cost of exporting risk capital from Japan more than from other home countries. The structures of premiums for various kinds of risk insurance in the case of export of both capital and goods are too compli-

cated in the home countries to allow any generalisation on the relative costs of such insurance in these countries. What is quite clear is that Japanese firms have availed themselves of export and other incentives more than the investors from the other three countries. Assuming that the average benefit conferred by the incentives schemes of the home countries is nearly the same or at least not significantly lower in Japan than in other countries, it can be safely said that Japanese firms establishing production facilities in developing countries have been subsidised through above incentives more than their counterparts from the other countries.

Notwithstanding the above conclusion, more important questions in the context of this study are 1) whether incentives are able to influence the flow of FDI and 2) why Japanese multinationals have invested proportionately more in ASEAN countries than the multinationals from West Germany, the UK or the US. In order to answer the latter question, it is not sufficient to have a positive answer to the first, but it has to be further considered whether Japanese incentives were relatively higher for ASEAN destinations (for which so far only one evidence was found that some institutions in Japan specialise in encouraging FDI exclusively towards ASEAN) or whether they were especially directed to FDI in this area.

### **3. Effectiveness of Incentives**

The literature on the effectiveness of home country incentives on outflow of FDI is very thin (1). Generally these incentives are not found to be very effective. In their survey of 80 investment projects in the Third

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(1) Most of the literature dealing with incentives is concentrated on those provided by host developing countries. In a very comprehensive survey of studies on incentives and their effects, the Committee on International Investment and Multinational Enterprises (CIME) of the OECD [c] concluded that besides locational choices, decisions concerning size and timing of investment may also be sensitive to incentives. All this does not, however, imply that the incentives offered by a country or a group of countries would attract FDI from

World undertaken by multinationals from eight developed countries including Japan, West Germany, the UK and the US, Reuber et al. [1973] concluded that the impact of many of the home country incentives seems to be marginal at best, although they may be of some help to smaller firms including those who have relatively limited experience in the developing countries.

Recently, CIME concluded [OECD, c] that the economic circumstances after 1974 have tended to render enterprises in general and multinationals in particular more sensitive to costs and risk factors. Since incentives, among other things, directly affect these factors, their impact on investment decisions is believed to have increased, and if the competition among governments for international investments increases, the role of incentives in such competition would be strengthened. This was concluded by the CIME in connection with the incentives policies of the OECD countries with regard to investments in their own economies. It seems, however, to be applicable also to their competition for cheaper investment locations in the Third World.

Thus, two points appear to be worth noting for the present purpose. Firstly, FDI by smaller firms is likely to be more responsive to incentives. But this does not mean that the investment decisions of these firms are determined differently than those of bigger multinational corporations. They all have firstly to decide whether to invest at home or abroad, if abroad, in a developed or developing country and then in what form - as a subsidiary or joint venture or something else. Only when these and a host of other such questions have been answered leading to a final decision to go abroad, do incentives granted by home and host countries come into the picture [BIAC, 1981].

Smaller firms generally have limited or no experience in FDI. They also lack the means to procure reliable information about investment opportunities in other countries. Therefore their beforehand apprehensions of risks - commercial as well as non-commercial - involved in committing

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one investing country more than from others provided the incentives are not regionally discriminatory for which there is no reason to assume in the case of ASEAN.

resources in production facilities in other countries, especially in the Third World, are likely to be higher than those of bigger multinational corporations, who are either already acquainted with investment conditions in developing countries or have their own resources to get the required informations. Under these circumstances, incentives such as the supply of necessary information by specialised public agencies, financial subsidies for feasibility studies and guarantees against political and other non-commercial risks could encourage smaller investors to give up their final doubts and invest abroad (1).

Secondly, some of the incentives (investment and export credits) tend to lower the costs of production for producers. Therefore, the impact of these incentives must be more pronounced in those branches of industry which are faced with a greater cost competition and in which a relatively larger amount of FDI has taken place primarily to take advantage of cheaper locations in LDCs. This is most likely to be the case where direct and indirect labour as well as environmental costs are relatively higher because they have increased rapidly in developed countries since the 1970s. The strong acceleration of energy costs could have encouraged investors to seek locations in some oil-rich developing countries.

Since both of these points apply more to the Japanese than to the German, British or American FDI [Kojima, 1978; Franko, 1984; Berger, Uhlmann, 1985] the incentives granted by Japan are likely to have been relatively more effective in promoting Japanese FDI to developing countries. At least one out of every three Japanese firms engaged in FDI is of smaller or medium size (Table A6). Though comparative data for other countries are not readily available, there can be hardly any doubt that this is a very high share. FDI of traditional investing countries like the US and the UK is dominated by larger corporations and even in the case of West Germany, which began investing overseas more or less at the

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(1) A survey of German firms having FDI in Brazil, Colombia, India, Indonesia, Mexico and Tunisia has shown, however, that firms of medium and bigger sizes have tended to make a greater use of investment incentives than smaller firms. This may be because of a higher representation of the firms of the former category in the sample [Kayser et al., 1981].

same time as Japan, the share of bigger companies appears to be higher [Berger, Uhlmann, 1985].

As far as the growing cost-consciousness, which may have raised the effectiveness of incentives, is concerned, Japanese firms in labour-intensive industries such as textiles, clothing, electronics, etc., started as early as the 1960s to establish production facilities in developing countries, especially in the Republic of Korea, Taiwan, Hong Kong and other Southeast Asian countries, in order to overcome the rapidly rising unit costs of labour at home (1). No doubt, firms in these branches of other developed countries have also moved to the Third World. Some of the German firms, for example, have created production facilities in the neighbouring Mediterranean countries even at the cost of existing capacities at home (see Chapter VI below). But on the whole, the share of labour-intensive branches in Japanese FDI appears to have been higher than in the German, British or the American FDI at least in the 1970s [Kojima, 1978; Hiemenz, 1987], and to that extent investment incentives are likely to have been more effective in Japan. A similar corollary exists for FDI motivated by high environmental costs at home. Density of industrial plants in Japan is believed to be very high and it was one of the first, if not the first, industrial countries facing severe pollution problems resulting in costly anti-pollution regulations and thus forcing many industries to look for less regulated and thus less costly locations in the Third World.

In the field of natural resources Japan is more dependent on outside resources than any other industrialized country (2). Consequently, it grants very generous incentives for FDI in this sector in order to get a safer access to input markets. The effectiveness of Japanese natural

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(1) This applies more in the case of small and medium-sized firms as they were harder hit by the rising costs of labour in Japan. The bigger firms were able to attract labour relatively easily because they could offer better working conditions [Marsh, 1983].

(2) A very high share of Japan's need for coal (82 p. c.), oil (100 p. c.), natural gas (91 p. c.), iron ore (99 p. c.), lead (83 p. c.), zinc (69 p. c.), tin (98 p. c.), aluminium (100 p. c.), nickel (100 p. c.), and wood and lumber (68 p. c.) has to be met by imports [Marsh, 1983].

resource policies including the incentives for FDI is reflected in a comparatively high share of this sector in total FDI (Table 18) and in undeterred economic growth of the Japanese economy in spite of the two oil crises in the 1970s.

Thus, the Japanese incentives may have been more effective in promoting FDI than those of West Germany, the UK and the US. According to Ozawa [1979], the majority of Japanese firms were too immature in size, technological sophistication and financial strength to undertake FDI on their own, and they have been able to do so only as a result of financial and managerial support mobilized by the government. Nevertheless, the discussion so far does not show why Japan commands a higher share of total FDI in the ASEAN countries which is the main point of discussion in this chapter. Incentives in Japan, as anywhere else too, are available for FDI in all developing countries and not exclusively for ASEAN countries. Therefore, it has to be examined whether these countries enjoy a privileged position in the implementation of incentive policies in Japan. However, this cannot be discovered from the Japanese incentive schemes, and empirical data on the regional distribution of financial subsidies, etc., which would enable the discovery of a regional bias, are not available. But there are statistics on regional distribution of Japanese economic aid. Aid can be - as shown in the following section - an important stimulator of FDI. In addition to that, its regional distribution may also reflect the geographical bias of a donor country in granting investment incentives because, firstly, the decision-making authorities in both cases may often be the same and, secondly, some of the costs of investment incentives are included in economic aid, at least in Japan. Therefore, the analysis of economic aid in the following section should not only enable the discovery of the relation between aid and FDI of donor countries but also to indicate whether any particular region, viz. ASEAN, enjoyed a privileged position in the implementation of incentives schemes by the home countries.



#### 4. Economic Aid and FDI

The hypothesis tested here envisages that economic aid stimulates FDI of the donor country into the aid-receiving country. There are several factors which suggest a positive and not a negative relation between these two variables [Dudley, Montmarquette, 1976]. Firstly, some of the constituents of bilateral aid (viz., grants for pre-investment studies, financing of some of the infrastructure required by the firms of donor countries in their host nations, subsidies involved in fiscal and financial incentives and some of the institutional costs for promoting FDI in developing countries) are directly associated with FDI of donor countries. Secondly, bilateral aid is executed partly by private firms of donor countries and the economic relations emerging between these firms and aid-receiving countries may lead to FDI of these firms in such countries. Finally, bilateral aid is mostly an indicator of good political relations between donor and recipient countries, which are necessary also for a smooth flow of private investment from the former into the latter. Aid has proved, besides other factors, an important determinant of FDI in some of the studies based on the data of recipient countries. Reuber et al. [1973], for example, came to the conclusion that there was a strong positive correlation between FDI and aid received by the countries included in his cross-sectional analysis. A very comprehensive treatment is given to this question in a recent study by Schneider and Frey [1985]. Bilateral official aid of the Western countries is found by them to have a strong stimulating effect on FDI in host developing countries.

In order to test the above hypothesis, FDI of the four donor countries Japan, West Germany, US, and UK were simultaneously regressed on their net official bilateral aid to the host developing countries and on per capita income as well as population of these countries. The focus of attention is on the relation between FDI and aid. But since FDI is usually determined also by basic economic conditions prevailing in host countries, the latter two variables are included in the equation. They represent the demand side in the host countries and are expected to have a positive relation to FDI.

Table 20 - Regression Results on FDI and Foreign Aid for Japan, West Germany, the UK and the US (a)

FDI <sub>1982</sub> (Japan)	=	-280	+ 1.55 X <sub>1</sub> <sup>*</sup>	+ 0.35 X <sub>2</sub> <sup>**</sup>	- 0.77 X <sub>3</sub>	R <sup>2</sup> = 0.48 (F = 10.9)	n = 33
			(5.52)	(2.44)	(0.85)		
FDI <sub>1984</sub> (W. Germany)	=	150	+ 0.004 X <sub>1</sub>	+ 0.05 X <sub>2</sub>	+ 1.82 X <sub>3</sub>	R <sup>2</sup> = 0.02 (F = 1.34)	n = 65
			(0.02)	(1.76)	(0.96)		
FDI <sub>1983</sub> (USA)	=	922	- 0.073 X <sub>1</sub>	+ 0.19 X <sub>2</sub>	+ 2.38 X <sub>3</sub>	R <sup>2</sup> = 0.005 (F = 0.44)	n = 32
			(0.4)	(0.99)	(0.79)		
FDI <sub>1981</sub> (UK)	=	143	- 0.08 X <sub>1</sub>	+ 0.04 X <sub>2</sub>	+ 1.20 X <sub>3</sub>	R <sup>2</sup> = 0.02 (F = 1.30)	n = 35
			(0.30)	(1.11)	(1.18)		

FDI: Foreign direct investment on cumulative basis.  
X<sub>1</sub>: ODA = Total net official bilateral development assistance on cumulative basis. For Japan, data were cumulated from 1960 to 1983 (fiscal year 1982/83) and for the UK from 1960 to 1981. For both of them, figures for 1968 are not included due to their unavailability. For West Germany, data refer to 1950-1984 and for the US from 1946 to 1983.  
X<sub>2</sub>: Gross domestic product per capita in 1982.  
X<sub>3</sub>: Population in respective years.

(a) Only those developing countries are included in the estimates which have total FDI and ODA of not less than US \$ 10 mill. in the case of Japan and the UK, DM 10 mill. in West Germany and US \$ 100 mill. in the case of the US. - \*,\*\* = statistically significant at the 1 and 2 per cent level, respectively; two-tailed test; t-values are given in parentheses.

Source: Ministry of Finance, Japan [1981; 1983]; OECD [b]; British Business [1984]; U.S. Dept. of Commerce [a, 1984, pp. 24-27]; USAID [1984]; BMWi [var. iss.]; BMZ [1985]; UNCTAD [1985]; IMF [1986].

Except in the case of Japan, the aid hypothesis is rejected by the regression estimates (Table 20). For Japan, the aid coefficient is positive and highly significant whereas for the other three donor countries it is statistically insignificant. Japan is famous for having used its aid for encouraging FDI [Marsh, 1983], especially in big projects in the field of natural resources such as, e.g., the Asahan Hydroelectric and Aluminium Project in Indonesia [Ozawa, 1980]. The methods applied in this case have come to be known as Asahan formula according to which one or more of Japanese firms first look for an investment opportunity in a country whose natural resources (Indonesia, Brazil) or location (Singa-

pore) are of great importance for them and Japan. The conceived project is usually very large so that its importance for the economy of the host country is quite obvious. Then the host government is approached to give it a national character, and to request the Japanese government to give aid for financing the project. Meanwhile, the initiating Japanese firms try to seek co-operation of other firms in Japan for forming a big consortium representing various kinds of interests which may be able to make a noticeable impact on the Japanese government. If the Japanese aid is not forthcoming, the host government approaches some other country or countries for aid, and the Japanese firms then finally succeed in pressurising their government to support the project and not to let it go to other countries. This is not to deny that other countries have also used their economic aid to support their private investments in the Third World. But the weight of such cases in German, British or American aid is not likely to be as heavy as in the Japanese aid.

The analysis of the regional distribution of aid of the four donor countries shows that ASEAN has enjoyed a very high regional priority in Japanese economic aid. In any case, it is far higher than the priority given to it by the other three donor countries. It receives about one third of total Japanese bilateral aid compared with its very low shares of about five per cent in the German, British and American aid (Table 21). Surprisingly, ASEAN has received nearly as much aid in terms of shares as FDI from Japan. As compared to this, West Germany has given more aid to ASEAN than FDI there and the UK as well as the US have invested in ASEAN more than what they have contributed to this region as bilateral economic aid. Within this region, Japanese aid and FDI are both concentrated in Indonesia. West Germany has invested relatively more in Singapore than in other countries of this region but granted relatively more bilateral aid to Indonesia. The British FDI is concentrated in the Commonwealth member countries of Malaysia and Singapore, but the aid appears to be more equally distributed among all the countries.

On the basis of the assumption made earlier that governments in home countries are likely to follow similar regional preferences in granting investment incentives as in giving economic aid and in light of the findings on the relation between aid and investment, it may now be con-

Table 21 - Share of ASEAN Countries in Total Gross ODA and Total FDI of West Germany, Japan, the UK and the US in Developing Countries (per cent)

		Indonesia	Malaysia	Philippines	Singapore	Thailand	Total
West Germany							
ODA	1975	3.77	0.32	0.61	0.07	0.70	5.47
	1980	2.45	0.25	0.39	0.13	1.76	5.00
FDI	1975	0.64	0.32	0.11	0.84	0.21	2.12
	1980	0.65	0.37	0.25	1.92	0.27	3.47
Japan							
ODA	1975	19.02	5.86	6.54	0.69	4.03	36.14
	1980	18.42	3.51	4.74	0.35	8.51	35.52
FDI	1975	20.69	3.52	3.95	3.24	2.42	33.83
	1980	22.45	3.30	3.12	4.75	2.01	35.63
UK							
ODA	1975	2.02	1.85	0.08	0.14	0.56	4.64
	1980	1.42	1.57	0.33	0.09	0.49	3.91
FDI (a)	1974	0.57	12.58	0.20	2.49	0.80	16.62
	1981	1.16	8.00	0.35	6.74	0.51	17.77
US							
ODA	1975	3.03	0.06	2.01	-	0.43	5.54
	1980	3.01	0.02	1.09	-	0.35	4.48
FDI	1977	3.09	1.46	2.63	1.62	0.75	9.55
	1980	2.47	1.19	2.37	2.26	0.68	8.97

(a) Data do not include investments in the oil sector.

Source: OECD [b]; Sekiguchi [1982]; Table All; own calculations.

cluded that Japan has successfully promoted more of its FDI to ASEAN than the other countries. The relatively strong position of US investors in the region indicates, however, that incentives do not play a decisive role in investment decisions. It would be a mistake to conclude that the role of economic aid in promoting FDI should be strengthened in other donor countries to match the Japanese efforts and success in the ASEAN region. Rather, attempts to promote FDI should be directed especially at improving the access of smaller and medium-size firms to comprehensive and reliable information about investment opportunities in ASEAN as well as in other developing countries and to capital markets in the home countries where they are likely to search first for funds for financing

their investment requirements abroad. Borrowing capability of firms for investments in a particular region depends also on creditworthiness of this region on the respective capital markets. Southeast Asian countries did not enjoy a high rating vis-à-vis the Latin American nations on the Western capital markets in the 1970s. So it is not surprising that the former received a relatively smaller share of FDI of the Western firms. The standing of this region has, however, improved in the 1980s.

## VI. EC - FDI and European Economic Integration

### 1. The EC as a Special Case

The evaluation of investment incentives has established some policy-induced reasons for the superior presence of Japanese companies in ASEAN countries, but has not succeeded in explaining the different attitude of European and US firms towards various regional markets. The neglect of developing and, more specifically, ASEAN countries (Table A11) suggests that there are additional incentives influencing investment decisions of European and, in particular, EC suppliers. To trace major determinants of this decision-making process, the alternatives open to EC companies have to be assessed and reasons for actual choices pinpointed.

EC-based firms can select among some options for production and investment which are not open in a similar way to non-EC-based companies. In addition to the general alternatives of either producing at home and exporting directly to other countries or investing abroad for re-import and export to third countries, EC suppliers can

- invest in other EC countries and particularly in backward regions of the Community where labour is relatively abundant and cheap, and make use of the free trade and free mobility provisions of the EC;
- engage in the new member countries of the EC, that is Spain, Portugal and Greece, as well as in other Mediterranean countries which are linked to the EC through preferential trading arrangements and which therefore enjoy a privileged market access; and
- establish production facilities in socialist European countries or negotiate subcontracts with local producers in these countries which are connected to individual EC member countries by government treaties.

The subsequent sections focus on the extent to which these alternatives have been pursued by EC companies, the economic policy determinants for the respective choices made and the impact of production and investment decisions on trade flows.

## 2. Producing at Home or Investing Abroad?

Each company operating in international markets has to make two sets of decisions concerning production and sales activities which are, of course, interrelated. Firstly, management has to optimize the volume and distribution of production activities among actual or potential locations of plants, i.e., the amount of output to be produced at home or abroad. Secondly, it has to decide on the amount of output to be sold at home or exported to foreign markets from both domestic plants and foreign affiliates.

There are several indicators available (1) which allow to assess whether EC firms

- have a higher propensity to produce at home than US or Japanese firms (Table 22);
- are more domestic market-oriented than their competitors in the US and Japan (Table 23);
- tend to supply their export markets more by direct exports from parent companies than by sales through foreign affiliates compared to the other suppliers (Table 23).

On average, i.e., for all industries, the ratios of domestic to total production presented in Table 22 yield a very high propensity of Japanese firms to produce at home and a rather low propensity of UK firms to do so. US and French firms appear to be in between the two poles, whereas West German firms also seem to prefer home production. For "total Europe" (including European firms based in non-EC countries), home production ratios are smaller compared to most individual EC countries. This result may indicate a relatively large attractiveness of home production within an EC market which has become more integrated over time.

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(1) The indicators presented in Tables 22 and 23 are derived from so-called overseas production ratios, overseas sales ratios and overseas market sourcing ratios collected by Dunning and Pearce [1981; 1985] for the world's largest industrial enterprises. The results are hence biased in favour of large firms and do not consider the market affiliation of small and medium-sized firms which were reported to be important overseas producers, especially in the Japanese case (Chapter V).

Table 22 - Average Home Production Ratios (a) for US, European and Japanese Firms, 1977 and 1982 (per cent)

	US		West Germany		France		UK		Europe (total)		Japan	
	1977	1982	1977	1982	1977	1982	1977	1982	1977	1982	1977	1982
Low research-intensive industries												
Food	79.3	74.9	-	-	66.6	73.0	63.1	66.2	43.6	42.4	97.9	95.2
Beverages	76.2	75.8	-	-	-	-	85.7	77.6	85.7	77.6	D	-
Tobacco	71.0	77.6	D	-	-	-	39.0	33.2	41.3	33.2	-	-
Textiles, apparel, leather goods	89.2	88.2	-	D	D	-	58.3	51.0	61.9	53.5	87.6	90.7
Paper and wood products	86.3	84.9	D	-	-	-	49.3	73.1	66.2	74.0	-	99.6
Publishing, printing	93.7	94.7	-	D	-	-	77.1	D	79.2	63.8	-	D
Building materials	78.9	75.3	D	-	48.0	D	69.6	55.8	60.5	51.8	97.0	93.1
Total	81.2	78.7	86.8	63.8	55.3	73.0	29.1	58.7	51.5	49.5	94.1	93.4
Medium research-intensive industries												
Industrial and farm equipment	76.9	75.5	92.9	96.7	-	-	59.4	61.1	69.2	67.0	97.2	88.6
Shipbuilding, rail-road and transportation equipment	95.0	D	-	-	D	-	-	-	99.9	D	92.9	D
Rubber	68.4	65.2	-	D	-	-	-	D	-	48.4	93.0	94.6
Motor vehicles	78.6	72.6	82.4	77.7	78.3	71.9	76.8	70.4	78.7	71.2	81.8	97.2
Metal manufacturing	88.6	82.0	90.7	89.6	74.7	86.6	66.4	59.4	83.0	78.0	96.6	96.9
Total	79.9	78.0	87.7	90.9	78.6	68.0	67.1	57.3	79.8	70.1	91.4	95.4
High research-intensive industries												
Aerospace	91.2	90.6	53.0	-	100	D	D	D	89.8	96.5	-	-
Office equipment	56.8	66.4	-	-	-	-	D	D	57.5	D	-	D
Petroleum	50.9	55.1	D	D	46.0	-	29.8	D	33.2	60.9	98.4	98.9
Professional goods	64.8	73.2	D	-	-	-	-	-	94.4	D	-	-
Electronics	78.8	75.1	80.4	75.7	91.0	D	68.2	65.6	72.1	61.5	95.7	89.3
Chemical, pharmaceuticals	73.4	62.3	65.8	49.2	66.6	D	60.1	41.8	59.5	41.6	95.6	95.4
Total	62.7	73.8	72.9	70.1	67.6	78.3	48.3	65.4	52.9	64.2	96.3	92.5
Total manufacturing	70.8	68.4	81.5	77.0	71.4	69.1	58.2	58.8	62.5	62.9	93.3	94.5

D: data suppressed because of confidentiality; information is included in the aggregates.  
(a) Percentage share of a firm's total production carried out in the home country, i.e., the share of parent company sales in total worldwide sales.

Source: Dunning, Pearce [1981, Table 6.1(a); 1985, Table 7.1.(a)]; own calculations.



Table 23 - Home Country and Direct Export Orientation of US, European and Japanese Firms, 1977 and 1982 (per cent)

		Low research- intensive indus- tries	Medium research- intensive indus- tries	High research- intensive indus- tries	Total manu- fac- turing
Home country sales orientation(a)					
US	1977	78.6	74.2	56.8	65.5
	1982	76.1	71.3	62.7	62.0
West Germany	1977	74.8	50.4	46.2	50.5
	1982	60.1	52.4	36.1	43.6
France	1977	46.4	50.8	50.2	51.2
	1982	68.5	46.1	44.8	48.6
UK	1977	53.1	50.6	33.0	46.4
	1982	60.7	45.5	42.5	49.1
Europe (total)	1977	42.8	47.5	35.4	42.2
	1982	45.5	43.4	34.8	42.7
Japan	1977	85.2	60.7	82.6	70.3
	1982	83.1	64.5	63.6	69.8
Direct export orientation(b)					
US	1977	12.3	21.8	13.8	15.5
	1982	14.1	24.5	28.7	16.5
West Germany	1977	47.6	75.2	49.7	62.6
	1982	9.2	80.5	53.4	57.7
France	1977	16.6	56.4	34.9	41.5
	1982	21.3	41.7	59.8	49.5
UK	1977	13.3	33.5	22.8	22.0
	1982	15.8	21.7	39.8	23.8
Europe (total)	1977	15.1	61.6	27.1	35.2
	1982	14.1	47.5	46.1	37.5
Japan	1977	60.4	78.2	78.9	77.4
	1982	63.1	87.1	77.2	80.2
(a) Sales of the parent company in the home country market as a percentage of total worldwide sales. - (b) Parent company exports as a percentage of sales of overseas affiliates and associated companies plus parent company exports, i.e., the proportion of the firm's total foreign market supply accounted for by direct exports from the home country.					

Source: Dunning, Pearce [1981, Tables 6.3 and 6.4; 1985, Tables 7.3 and 7.4]; own calculations.

This general pattern also holds for subsectors disaggregated by their research intensity. One would assume that low research-intensive industries would show lower home production propensities because of their large unskilled labour and raw material absorption and the availability of

these inputs abroad, in particular in developing countries. However, the evidence does not support this assumption. Home production propensities vary considerably among low research-intensive industries and countries. They sometimes even exceed the average of home production propensities for total manufacturing. Protectionism (textiles), large, fully integrated domestic markets open for mass production (US), and the importance of non-traded goods in low research-intensive industries (beverages, publishing, printing, building materials) may explain relatively high propensities to produce labour-intensive and raw material-intensive goods rather at home than abroad. On the other hand, high research-intensive goods are often produced by leading innovators with affiliates scattered all over the industrialized world which supply export markets. Such decentralized production activities tend to reduce propensities to produce at home.

Producing at home is, however, not equivalent to domestic-market orientation. The latter indicator (Table 23, top half) shows for the majority of multinationals that sales of the parent company in the home country market cover only a smaller part of their worldwide sales than home country production, and that this part has been generally declining further in 1977-1982. Again, Japanese firms seem to be relatively domestic market-oriented, especially in low research-intensive industries, while the opposite applies to European firms which in high research-intensive industries sold about two thirds of their total output outside the local market. An above average outward-orientation of European firms is apparent in all major industries, though it is more pronounced in high research-intensive than in low research-intensive industries. This can hardly be surprising since companies based in European countries with small domestic markets have to be more outward-oriented than firms based in the large, integrated US market. However, the outward orientation of European companies rather reflects large intra-EC trade and investment flows than a similar overseas engagement of these companies [Dunning, Pearce, 1985, p. 135].

Both indicators, sales orientation and propensity to produce at home, seem to contradict the hypothesis that European companies owe their losses in world trade to a lack of own foreign affiliates and to excessive

domestic market-orientation. A comparison with large Japanese firms would even suggest the contrary: in 1977-1982, European companies have produced relatively less at home and sold more on foreign markets than Japanese and US firms. Outward-orientation as such is, however, a necessary, but not a sufficient condition for sustained international competitiveness. What matters, too, according to the analysis of international marketing strategies provided in Chapters III and IV is the presence in foreign markets through foreign investment.

The two indicators presented so far cannot determine the weight of parent company exports relative to sales of foreign affiliates, i.e., whether export markets of the European, Japanese and US firms are supplied more by direct exports of the parent companies or by sales of foreign affiliates. This information is provided by the third indicator, namely the share of parent company exports in total sales in foreign markets (Table 23, bottom half). It is this share of direct exports in foreign market supply which reveals the most striking differences between the US, Europe, and Japan in that order. US firms supply foreign markets by more than 80 per cent through sales of own affiliates abroad, while Japanese firms have relied to almost the same extent on parent company exports to penetrate these markets. The strategy of European companies is less clear-cut. UK firms show a pattern of foreign market supply similar to the US, i.e., a high amount of overseas production, whereas France and West Germany take an intermediate position with direct exports and overseas production fairly split.

Looking at all European companies, the sales pattern is characterized by an increasing share of own affiliates in the supply of low research-intensive goods to foreign markets and by increasing proportions of direct exports in high research-intensive goods. In sum, the sales pattern of European firms seems to resemble more the US than the Japanese type. Sizeable differences exist between the UK, on the one hand, which disposes of a relatively large stock of foreign affiliates, and continental Europe, on the other, where the propensity to export directly from parent companies is more pronounced. Yet, these indicators do not provide sufficient evidence on the actual marketing strategies of multinational corporations from different countries since they fail to distin-

Table 24 - Share of EC and Developed Countries in FDI of Major EC Member States (per cent)

		EC	Developed countries	Type of data
West Germany	1976	34.3	73.9	Stock data at year end
	1980	33.9	77.2	
	1984	28.8	73.3	
UK	1974	21.9	79.3	Stock data at year end
	1981	18.8	81.4	
Netherlands	1973	50.1	81.4	Stock data at year end
	1980	44.7	80.4	
	1983	38.6	82.6	
France	1977	31.5	84.5	Net flow data from the balance of payments.
	1984	29.4	87.6	
	1971-1978	32.2	71.4	Cumulated net flow data
Italy	1983	43.9	56.3	Net flow data from the balance of payments

Source: Deutsche Bundesbank [b]; British Business [1984]; De Nederlandsche Bank [var. iss.]; Ministère de l'économie, des finances et du budget [var. iss.]; Nezeys [1984]; Banca d'Italia [1984].

guish between markets in developed and developing countries. If the earlier hypothesis about "fortress Europe" is correct, intra-EC trade and investment flows are likely to dominate total flows. The importance of this distinction between destinations in developed and developing countries is demonstrated both with respect to FDI and trade in Tables 24 and 25.

Table 24 shows the shares of EC and industrialized countries in total FDI of companies based in selected EC member states. The scattered and not strictly comparable evidence suggests that the EC was a major destination for investment of EC-based companies, but this destination has rather become less attractive over time.

In fact, the share of the EC in total foreign investment of those three member countries publishing stock data declined during the late 1970s while other developed countries, mainly the US, could maintain their

Table 25 - Share of Intra-EC Trade in Total Non-Fuel Exports of EC Member States, 1975, 1980 and 1985 (per cent)

	1975	1980	1985
West Germany	44.3	48.7	47.5
France	49.7	52.0	49.3
Italy	48.1	50.7	46.5
Netherlands	72.3	71.8	69.1
Belgium	72.4	72.7	68.9
UK	32.0	39.2	40.4
Denmark	46.5	51.2	44.2
Ireland	80.4	75.6	67.1
Greece	-	47.0	54.2
EC	49.9	52.8	51.0
Note: EC Exports to			
US/Canada	6.5	6.5	11.4
EFTA	11.5	12.5	10.7

Source: EUROSTAT [a].

position as host countries of the EC-based firms or even improve it. For France, flow data display the same trend.

Obviously, the process of economic integration within the EC has eroded incentives to invest in member states in order to circumvent trade barriers against direct exports. In other words, the removal of intra-EC trade obstacles raised the relative attractiveness of direct exports compared to investment because harmonization of investment legislation and free capital movement could not keep pace with the liberalization of trade between EC member states. Trade orientation towards member countries reached its peak by 1980 when almost 53 per cent of total non-fuel exports of EC member countries went to other partner countries in the Community (Table 25). Countries like the Benelux states or Ireland even shipped up to three quarters of their exports to other member states. During the first half of the 1980s, however, intra-EC trade slightly declined relative to trade with other developed countries, mainly North America, but intra-EC trade still accounted for more than 50 per cent of

total EC trade in 1985. There is little doubt that the accession of Spain and Portugal to the EC will reinforce this direct export orientation towards member states. If EC exports to the remaining countries of the European Free Trade Association (EFTA) are added to intra-EC trade (1), European market economies have been the destination for almost two thirds of total EC exports in the past decade.

Such a strong trade orientation towards Europe of course reflects the ongoing process of economic integration supported by geographical proximity and lacking communication barriers. Post-war Europe has in fact developed a pattern of inter-country specialization which flourished because of income similarities. While such similarities may explain the intensity of trade relations (Linder trade) they do not determine the product composition of trade. In this respect intra-European trade gained further attractiveness since the high income level of most partners stimulated the emergence of intra-industry specialization instead of inter-industry specialization, a typical feature of trade between countries at different income levels (Heckscher-Ohlin-trade) (2). Differences between the two patterns of specialization are especially relevant with regard to their vulnerability against protectionist tendencies. Inter-industry specialization may threaten the further existence of industries and thus provokes industry-specific coalitions of both employers and trade unions against import liberalization. Intra-industry specialization opens two-way trade options and provides export outlets for industries under import competition. These advantages of intra-industry specialization have not only accelerated growth of intra-European trade, but also introduced a clear policy bias against extra-European trade. Trade liberalization between the EFTA and the EC, for instance, never provoked such industry-specific protectionist pressures as did the liberalization of imports from low-income countries outside Europe.

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(1) Free trade arrangements in industrial goods between EFTA countries and the EC provide similar access conditions for EC-EFTA trade in manufactures compared to intra-EC trade.

(2) Various studies have suggested the high degree of intra-industry specialization that accompanied the European integration process [Balassa, 1966; Finger, Kreinin, 1979].

As a result, European economic integration gave rise to the said "fortress Europe" perceptions of both managers and politicians. The strategy was to exploit the potential of intra-European trade fully before penetrating into new export markets abroad. The statistical evidence of slightly decreasing intra-EC trade shares in the early 1980s (Table 25) does not contradict this view. It was mainly the North American market which became more open because of the real appreciation of the US currency, as well as some "captured" markets of Mediterranean and African countries associated with the EC which gained shares in EC trade, but not markets in Latin American or Asian developing countries.

These observations lead to important conclusions. EC suppliers are not domestic-market oriented if this market is defined as national market, but they have acquired an intra-EC orientation (including countries associated with the EC) or - at best - an intra-European orientation. There are a number of reasons some of which have already been mentioned why it may have been attractive for EC suppliers to narrow their production and sales activities to Europe. One such reason is the potential for intra-industry specialization among high-income partners. Another stems from the removal of trade barriers in Europe which have promoted intra-EC and intra-European trade as a substitute to intra-regional investment and partly replaced imports from third countries by local European imports (trade diversion). And finally, there were other incentives for the inward-orientation of EC companies which are related to distributional policies of the Community and the geographical proximity of socialist countries with special trade policy relationships to EC member states.

### **3. Investing in Backward Regions of the EC**

Economic integration in Europe has not only favoured intra-EC trade at the expense of third country trade, but also stimulated direct exports rather than intra-EC investment, as stated above. The latter finding does, however, require an important qualification. While European locations have lost shares in total investment flows, the European integration

has nonetheless provided new safety nets for industries under competition from low cost suppliers from the Third World. One such protected pocket for traditional industries has emerged from regional policies within the EC and another from the EC association of some Mediterranean and overseas (mainly African) developing countries.

The EC integration has aimed at reconciling allocational and distributional targets. In particular, agglomeration tendencies that could arise as a result of liberalizing intra-EC trade should be mitigated by regional policies in favour of backward areas. Both the EC Commission as well as national governments provide regional subsidies which are expected to make backward areas within the EC more attractive for private investment. Economically, regional subsidies are equivalent to interventions in factor price ratios between the periphery and agglomeration areas. They lower the cost of the scarce factor in backward regions, that is human and physical capital relative to unskilled labour, and may result in stimulating demand for the complementary factor, labour. Private investment absorbing unskilled labour in backward areas of the EC competes directly with investment in third countries where a similar abundance of unskilled labour prevails. Other determinants of investment being equal, public interventions in relative factor prices through EC regional subsidies can therefore negatively affect investment in developing countries outside the Community. This holds in particular if labour-intensive segments of production processes are shifted to backward areas in the Community and processed parts can be re-exported free of border restrictions as is the case within the EC but not for third countries.

Whether regional subsidies granted by the EC have in fact been instrumental in directing FDI to backward EC areas instead of developing countries is difficult to prove empirically. The interdependence of numerous investment criteria and motives as well as lacking information on the degree of substitutability between potential investment projects render it impossible to determine what would have happened without the regional subsidies. Since grants and loans provided by six different EC sources of regional funds (1) are sizeable, it seems justified, however,

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(1) European Regional Development Fund, the European Investment Bank, the European Agricultural Guidance and Guarantee Fund, the



to assume a less than marginal impact of these subsidies on investment flows, and anecdotal evidence seems to point in the same direction.

A major beneficiary of regional subsidies was Ireland (1). In 1983, the total amount of the Community's financial participation in investment in Ireland amounted to ECU 2048 mill. (2) (about US \$ 1.7. bill.), i.e., about 45 per cent of Ireland's gross fixed capital formation in the same year. There is evidence that Ireland has increasingly attracted investment from other EC member states. In 1976-1984, the stock of West German investment in Ireland grew by about 15 per cent annually, whereas investment in the EC as a whole grew by about 12 per cent. In shares, however, Ireland has remained a minor host for German investment in the EC (less than two per cent).

A second clue can be derived from the observation that during the last decade labour-intensive industries such as textiles, clothing and especially parts of electrical consumer goods which strongly compete with imports from developing countries have been established in the periphery of the Community. Again, the Irish example is illustrative. Ireland has become one of the two EC member states which extensively apply for national escape clauses against textile imports from developing countries (Art. 115 EEC Treaty) (3). The application of such clauses means that the common protection level against third country imports can be temporarily exceeded by the member state and that border controls against

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European Coal and Steel Community, the European Atomic Energy Community and the so-called New Community Instrument.

- (1) Ireland is the only EC member state which as a whole is defined as receiver of EC regional subsidies. Other member states which comprise both backward and agglomeration areas can therefore not be taken as reference cases for investment inflows because such flows cannot be attributed to either area.
- (2) The figures are total investment costs for projects benefiting from the Community's financial contributions. This of course is not equivalent to the benefits in economic terms, which would be the grant element, that is the amount saved compared to the situation where the funds had been borrowed on the private capital market at market terms. See for a detailed statistical breakdown of EC regional subsidies [EUROSTAT, c].
- (3) France is the other member state. Both countries account for about 80 per cent of all national escape clauses applied, for instance, against Asian developing countries during the 1981-1985 period [Langhammer, 1986a, Table 7].

indirect imports via other member states strictly limit the volume of textile imports in Ireland. As Ireland has begun to invoke Art. 115 EEC Treaty frequently only since the early 1980s, this suggests that some newly installed capacity in textile production would become obsolete without additional protection. It is rather likely that capital invested in this labour-intensive industry does not only originate from national sources but also from companies in other EC member states which were attracted by favourable investment allowances.

With Greece, Spain and Portugal as new members, regional subsidies are likely to gain in importance in the future. Given the already relatively high amount of EC investment in these countries, more regional subsidies for the Southern part of the Community could easily promote an enlarging flow of investment to this region, especially since free access to Spanish and Portuguese markets will still be restricted during the first years of membership.

#### **4. Investing in Associated Non-Member Countries**

EC companies considering the relocation of parts of their production processes cannot only shift capital to backward regions within the EC, but also to neighbouring countries of the Mediterranean basin associated with the EC. All Mediterranean countries (including Yugoslavia, but with the exception of Libya) have negotiated preferential trading arrangements or even free trade agreements with the Community. Textile exports of Mediterranean countries to the Community are still subject to restrictions under the Multi-Fibre Agreement (MFA), but have been granted higher ceilings for annual increases than MFA exports from other developing countries. Further advantages accrue from less restrictive regulations for clothing exported for outward processing if EC firms are involved. Furthermore, the privilege to control that textile exports would not become "disruptive" has basically been passed from the importing EC coun-

tries to the authorities of the Mediterranean countries themselves (1). Such a relatively loose form of trade surveillance was intended to conform formally with the MFA trading arrangements, but has in fact provided further scope for circumventing the worst consequences of the MFA restrictions. Finally, the proximity to the EC market - in terms of relatively low information costs - has provided an additional advantage to Mediterranean countries vis-à-vis potential host countries in developing Asia.

A comparison of growth rates of EC investment in the Mediterranean basin with investment in all developing countries reveals that, e.g., West German investment grew slightly faster in the former than in the latter area (1976-1984: 14 per cent annually and 12 per cent, respectively). However, investment figures cannot reveal the whole extent of business relationships between EC firms and Mediterranean countries since outward processing accounts for a sizeable proportion of trade. Outward processing does not necessarily require equity participation of EC suppliers in local firms (as the case of Yugoslavia shows, which is the most important partner for this activity in the Mediterranean basin). Yet, equity participation seems to be common in Tunisia, the second most important Mediterranean partner in outward processing for French, German, Dutch and Belgian firms [Joekes, 1982, pp. 105 f.].

Since the EC collects information on exports for outward processing, some insights can be gained as to the significance of this division of labour for countries in the Mediterranean basin and elsewhere (Table 26). In 1982, Mediterranean countries absorbed about 47 per cent of total EC clothing exports for outward processing, and this percentage increased to almost two thirds three years later. In fact, the overwhelming part of outward processing in clothing was made in the vicinity of the EC, both in the Mediterranean region and European socialist countries which received another 30 per cent share of EC clothing exports for outward processing in 1985. Overseas developing countries in Asia and Latin America have only negligibly participated in this international

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(1) For the treatment of Mediterranean countries in the EC trade policy for textiles, see Joekes [1982].

Table 26 - EC Exports under Outward Processing Regimes in Clothing and Electronics to Selected Destinations, 1982 and 1985 (per cent)

Destination	Clothing BTN 61(a)		Electronics BTN 85(a)	
	1982	1985	1982	1985
EC	2.7	3.3	18.6	2.9
Mediterranean countries (including Yugoslavia, Portugal and Spain)	47.4	63.2	10.0	9.4
European socialist countries	18.3	29.5	1.5	2.8
ASEAN	0.1	0.3	35.6	39.7
Indonesia	-	-	-	0
Malaysia	-	-	10.7	9.7
Philippines	0.1	0.3	8.0	0
Singapore	-	-	14.6	26.8
Thailand	-	-	2.3	3.2
World	100	100	100	100
(a) Brussels Tariff Nomenclature.				

Source: EUROSTAT [b]; own calculations.

division of labour with the EC as demonstrated by the less than 1 per cent share of ASEAN countries.

These observations cannot be generalized, though. Outward processing does not only take a place in neighbouring countries. The choice of partners is industry-specific rather than country-specific. The other major industry in which outward processing is important, electronics, reveals a completely different regional pattern of EC exports (Table 26). Mediterranean countries have not attracted outward processing of electronics to a considerable extent, nor have European socialist countries. Roughly 40 per cent of exports for outward processing of electronics commissioned by EC firms were directed to ASEAN countries in 1985, with Singapore receiving the lion's share.

Such distinct differences of regional patterns between two industries suggest that neither lacking information nor geographical remoteness constitute serious locational disadvantages for ASEAN vis-à-vis other developing countries which are in the neighbourhood of the Community. The ultimate choice of locations for outward processing rather depends on institutional factors giving a competitive edge to one area over the other. The discriminatory treatment of developing countries with respect to market access in the EC constitutes one of these factors. Such discrimination clearly exists in textiles where Mediterranean countries enjoy a privileged market access compared to all Asian countries, but a similar discrimination does not apply to trade in electronics.

A further institutional factor which is likely to gain in importance in the future is the EC support granted to Mediterranean countries through development aid which is to promote industrialization in recipient countries. EC development aid for the Mediterranean countries could become more readily available as a compensation for the loss of agricultural export markets in the EC when Portugal and Spain are fully integrated into the Common Agricultural Policy of the EC and replace Mediterranean substitutes. If the inflow of aid succeeds in promoting industrialization in Mediterranean countries and if these countries support the establishment of export-oriented industries by appropriate incentives, this region will become even more attractive for investors from EC countries which want to make use of the preferential access of this region to industrial markets in the EC.

## **5. Outward Processing in European Socialist Countries**

As Table 26 suggests, European socialist countries are the second largest group of countries which process clothing on behalf of EC firms for re-exports to the Community. This importance is not reflected in investment statistics of EC countries which indicate only tiny shares of

socialist countries in total FDI (1). Obviously, state-owned firms in socialist countries produce for European markets without equity links to European companies.

There are four major characteristics of East European-EC economic relations which have a direct bearing on EC economic relations with developing countries. One is the complementarity of factor endowments of both areas. Socialist countries supply either resource-intensive or labour-intensive goods as most developing countries do. The prices of these goods do, however, not necessarily reflect production costs but rather the aim of socialist governments to earn foreign exchange. Administrative price fixing independent of actual factor costs is a major reason for the keen competition of European and developing countries on EC markets. At times, supply bottlenecks in socialist countries may erode their price advantages thus hampering the export performance of these countries more than the protectionist trade policy of the EC does [Yannopoulos, 1985]. However, such bottlenecks may also arise in some developing countries and therefore do not constitute a permanent disadvantage of socialist countries.

Secondly, the political stability of socialist countries guarantees the economic survival of the socialist partners in outward processing activities and thus reduces costs of uncertainty for Western producers or traders. Political risks of expropriation do not exist.

The third important element characterizing business relationships with European socialist countries is bilateralism and the role of governmental agreements as an indispensable prerequisite for trade and capital transactions. The common umbrella of these agreements is industrial co-operation (2). This co-operation includes a wide range of contractual commitments for trade and production, such as

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(1) For instance, West German investment in European socialist countries amounted to only 0.03 per cent of total FDI in 1984. Figures for other EC members, if available, are in the same range.

(2) It has been estimated that by 1980 20 per cent of the growth of East-West trade was due to industrial co-operation agreements [UN, c, 1980, pp. 80 f.]. - See for a more detailed analysis of the various forms of co-operation UN [c, 1981; 1982].

- compensation arrangements which stipulate the acquisition of plants and equipment based on loans of Western suppliers and the reimbursement of these loans through buy-back arrangements;
- licensing (or transfer of know-how with payment in resultant products);
- sub-contracting;
- joint ventures;
- co-production, specialization and co-operation based on a functional division of tasks among Eastern and Western partners;
- marketing arrangements;
- "tripartite" co-operation contracts for projects carried out in third countries, predominantly in Mediterranean countries;
- reciprocal trading arrangements.

Fourthly, the German Democratic Republic (GDR) enjoys a politically rooted duty-free access to the West German market and hence indirectly - as the customs union principle applies - also to other EC member countries. The fact that such a de facto customs union between the two German states could encourage the outward processing of textiles in the GDR which are then re-exported to EC member states, particularly to France, has given cause for concern [Conseil Economique et Social, 1982, p. 242].

In the manufacturing sector, industrial co-operation arrangements have mostly covered automotive and chemical industries, but also light industries such as clothing and footwear. Again, there is only scattered evidence on the impact of such contractual commitments on East-West trading relations. The UN Economic Commission for Europe (ECE) has estimated that in 1977 the four major Western trading partners (France, West Germany, Italy and Japan) have supplied somewhere between 13 and 39 per cent of their capital goods exports to East European countries under compensation agreements and that the USSR bought between 16 and 47 per cent of their capital goods imports from Western countries under such agreements [UN, c, 1981, p. 11]. In another study, large-scale product buy-back agreements were reported to have covered 15 per

cent of West German trade with the USSR at the end of the 1970s [Altmann, 1979].

Bilateralism and the heavy interference of statal and para-statal agencies in private business on both the EC and the East European side constitute a preferential element of EC-East economic relations compared to EC-South relations. This preferential element can be described as assured access to output and input markets in socialist countries, lack of uncertainty with respect to political stability to the widest possible extent, risk-sharing of public agencies, and a lack of competitive pressure once the agreements are signed. However, only about six per cent of total extra-EC exports have been directed to the socialist countries up to now. This indicates that there are severe obstacles against the penetration of markets which in terms of per capita income, population size and degree of industrialization seem to offer a much larger potential for trade. Among these obstacles is the inertia of bureaucracies, the lack of quality, the lack of foreign exchange, indebtedness, security considerations (COCOM-List), and the diverging assessments between sellers and buyers about future prices of goods to be bought back from the socialist countries.

## **6. International Competitiveness and European Economic Integration**

The establishment of the EC has, no doubt, created a host of new opportunities for export expansion and relocation of production facilities which were swiftly exploited by European suppliers of manufactured products. The stepwise liberalization of trade among member countries, the successive enlargement of the EC from six to now twelve members, the harmonization of economic policies, the provision of financial solidarity, and last but not least the European Monetary System (EMS) have promoted economic integration among EC member countries [Langhammer, 1987]. European companies have behaved perfectly rational when they perceived the advantages of preferential access to a steadily expanding European regional market and increasingly engaged in an intra-industry division of labour among member countries and with the EFTA.



The European market did not only provide scope for a rapid expansion of direct exports, but - due to regional differentials in economic development and the association of neighbouring, mostly developing countries - also for a diversification of the geographical distribution of production facilities under the common umbrella of the EC.

European economic integration has, however, a second side to it which offers some bleak perspectives. Trade expansion among EC member countries took place in a regional market protected against unimpeded competition from suppliers in other industrialized or developing countries. Trade protection in its manifold forms and high growth of regional demand stimulated by successive enlargements of the EC have provided an economic environment in the past 25 years in which European industries could flourish or at least survive even if they had already lost their comparative cost advantages in Europe (for details see, e.g., Donges et al. [1982] or Wolf et al. [1984]).

The MFA, the European Steel Cartel, numerous national subsidy programs as well as informal national export self-restraint agreements for Japanese automobiles are only a few examples of how export restrictions for Japan or NICs have sustained scope for trade in manufactures among EC countries and, thus, have allowed some industries with comparative disadvantages vis-à-vis suppliers from third countries to remain net exporters. Without this substantial administrative support, parts of these industries would have been relocated to other countries, in particular of the Third World, much earlier, and there would have been more resources in Europe for the emergence of new international competitive industries. Delayed structural adjustment appears to be one of the major reasons for the inferior performance of EC suppliers on ASEAN markets.

Another disquieting effect of the policy-induced regional orientation of European companies results from the impact of trade protection and subsidies on the dynamic behaviour of firms. A competitive edge over suppliers from other countries may be achieved by a single major innovation, but cannot be maintained without continuous improvements of products, production processes, marketing, organization, diversification of locations, etc. The pressure to innovate is, however, reduced if compe-

tion is diminished by trade barriers. Protected industries enjoy an artificial advantage over their competitors from abroad, and the lack of competition supports an indifferent attitude towards increases of production costs in these industries [Leibenstein, 1978]. There is a tendency to waste resources since managers rather seek to maintain the established lines of production and markets than to be dynamic entrepreneurs, and workers are less prepared to search for new and possibly even better paid jobs in other companies or other industries. When the waste of resources and slow productivity growth result in a creeping erosion of competitiveness endangering the survival of firms, the answer usually is not the required structural adjustment but rather demand for more protection. Hence, a cumulative process is set in motion which creates incentives to invest in lobby activities instead of productive capacity (rent-seeking) and ultimately causes high economic costs for the whole country in terms of foregone income growth and additional employment opportunities which Tullock [1967] has already described 20 years ago.

These considerations highlight the dangers inherent in the "successful" economic integration of EC member countries behind a protective shield against competition from outside. Easy access to the regional market renders exports to or investment in third countries less attractive and inevitably impedes the necessary process of structural adjustment both in traditional and in newly emerging export industries. Higher costs of production in many sectors of the economy do, however, not only erode the competitiveness of EC suppliers in overseas markets outside the EC such as ASEAN, but will ultimately even endanger the market position of these suppliers at home [Wolf, 1983, p. 18]. The changes of export market shares presented in Chapter II bear witness that such an outcome is no longer a threat but already a fact. EC losses of market shares are not restricted to a few industries or far-off regions in which Japanese or US competitors may have a special advantage, but extend - with few exceptions - across markets and industries while companies from Japan as well as the US have in fact already succeeded in penetrating EC markets in a wide range of products, albeit starting at a lower level than in other markets. The competitive strength of overseas suppliers on EC markets indicates that "fortress Europe" cannot be defended against superior competitors by protectionist policies, at least not in the medium run.

## VII. Summary and Policy Conclusions

This study provides an analysis of the competition between European, Japanese, and US companies in the relatively open and fast growing ASEAN economies. The purpose of the analysis is to determine reasons for the weak export performance of European suppliers in this region over the last 15 years and to assess whether the declining competitiveness of these suppliers in a not unimportant overseas market is market-specific or rather symptomatic for a general tendency.

The evidence presented in the preceding chapters suggests a bit of both. Many European companies have - other than their competitors in Japan and the US - underestimated the growth potential of the ASEAN region, and they have viewed these countries primarily as markets for exports of final goods rather than participating on a broader basis in the increasingly diversified economic potential of the region. The neglect of South East Asia was, however, not merely incidental but had some deeper roots which are related to the process of economic integration taking place in Europe for more than 25 years. Economic integration in Europe appears to have created - among other things - some artificial competitive advantages for European companies in European markets which threaten to gradually erode the international competitiveness of manufacturing industries in Europe. For this reason, the lessons from the ASEAN region deserve to be taken seriously.

In 1970-1984, the EC share in OECD exports to ASEAN countries declined by 7 percentage points or 25 per cent while Japan lost 1.5 percentage points and the US gained roughly 2 percentage points (Table 2). European losses of market shares were even larger in advanced industrial goods in which Europe is supposed to possess comparative cost advantages. There are many determinants of a country's export performance in individual markets ranging from the distance between supplier and destination over marketing strategies of individual companies to the macroeconomic environment both in exporting and importing countries. In the ASEAN case, geographical proximity may have been one of the roots for the Japanese dominance in the region, but cannot explain the export

performance in sophisticated manufactures over time as an analysis of transport costs indicates. Looking at marketing strategies, European companies have always tended to opt for the easier alternatives in Southeast Asia compared to their overseas competitors: no representation in the region rather than cooperation with local companies, reliance on European agency houses rather than establishing marketing affiliates, direct sales rather than investment abroad, and positioning of products in the top-price, top-quality market segment rather than adapting them in terms of product characteristics and pricing. This reluctance to commit resources to the development of the markets under review accounted for a major part of the competitive disadvantages of European companies vis-à-vis their Japanese and US competitors in the ASEAN region.

Against this background, one may argue that the prospects of European companies in the ASEAN economies are not entirely bleak. Redressing marketing strategies in the sense of making greater marketing commitments in the region should be easier to achieve than, e.g., reversing a general decline of competitiveness. However, the major disadvantage of European suppliers in Southeast Asia was their failure to exploit the economic potential of the region through FDI. The EC share in FDI in ASEAN countries was negligible and has not substantially risen in recent years while Japan and the US continued to be the two leading investors in the region. It was primarily their strong presence in the ASEAN markets which provide Japanese and US companies with a competitive edge over their European competitors. To recover lost ground in the region will not be an easy task for European companies since their competitors from other industrialized countries are so well established in all ASEAN markets and the peak of the region's economic growth lies in the past. Nonetheless - and this is the *first lesson* derived from our analysis - there is scope for improving the European export performance in ASEAN countries by reorganizing trade channels, adapting prices and products, as well as by investing more in manufacturing subsidiaries.

FDI to penetrate protected foreign markets has proven to be the most important single marketing strategy not only in Southeast Asia but worldwide and across industries. FDI may reduce the potential for direct exports but creates new demand for intermediate and capital goods not

only by affiliated companies (intra-firm trade) but more generally between the home country of the foreign investor and the host country in which investment takes place. The evidence on the positive relationship between FDI and export expansion presented in the literature is clear-cut, and the econometric analysis in Chapter IV has further strengthened the case. It shows, furthermore, that FDI is all the more important for defending market shares when investors from other countries are already engaged in the markets concerned such as in the ASEAN economies.

A review of the scattered data on the geographical distribution of FDI shows that European companies were generally more reluctant than, e.g., their Japanese competitors to invest in developing countries, and when they did so, their preferred locations were slowly-growing and debt-ridden Latin American and African economies, but hardly Asia. Furthermore, EC investment in ASEAN countries focussed on the tertiary sector (banking and finance) which does not appear to be as export stimulating as investment in manufacturing or mining, the main target of Japanese and US firms in the region. This pattern of specialization in developing countries revealed by European investors is hardly conducive to sustain export expansion in the Third World, and the heavy Japanese investment in Latin America in recent years (1) threatens to endanger even well-entrenched traditional markets for European exports to developing countries.

Since it is safe to assume that European companies are as keen as their competitors to make use of profitable trade and investment opportunities, the influence of the respective economic environment on company strategies comes into focus. Macroeconomic trade, investment and labour market policies differ among home countries of investors and, hence, may promote, divert, or even discourage certain overseas activities of multinational companies based in these countries. The influence of host country policies can be neglected as host countries do generally not discriminate among multinationals by country of origin. An evaluation of in-

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(1) In 1983-1985, registered Japanese FDI in Latin America amounted to almost US \$ 6 bill. compared to a bit over US \$ 4 bill. in all of Asia [MITI, c].

vestment and export incentive policies applied in the EC, Japan, and the US in fact reveals some distinctive features. Administrative support for FDI has been larger in the case of Japan than in other industrialized countries under review; it was more focussed on small and medium-sized firms; and it had a clear regional bias in favour of Asian developing countries. The policy-induced benefits for FDI in Asia have mostly accrued from a combination of investment incentives and foreign aid policies in Japan.

The subsidisation of private investors is of course not a policy recipe to be adopted by other industrialized countries. However, there is a lesson to be learned from the Japanese experience. Successful penetration of overseas markets may not only depend on the skills of a few big multinational corporations but also on the participation of small and medium-sized firms in trade and FDI. Therefore, a *second lesson* emerging from this study concerns the removal of obstacles preventing small and medium-sized firms in Europe from engaging in trade and investment activities in developing countries. Insufficient information on trade and investment opportunities may constitute one of these obstacles, but more important are better access to domestic capital markets in home countries for financing foreign activities of these firms.

The export success of US companies which have been granted even less institutional support than their European competitors suggests, however, that other influences need to be considered to explain the weak performance of EC companies in Southeast Asia. Over the last 25 years, these companies have greatly benefited from the progressing economic integration in Europe as is evident from close trade links between the EC member countries; the EC and the EFTA together accounted for two thirds of total EC exports in 1984. The liberalization of internal EC trade, the free trade union with the EFTA, and two succession enlargements of the EC in conjunction with trade protection against suppliers from third countries have provided large incentives for trade within the EC and for direct exports rather than FDI as respective data show. The export bias (i.e. exports of goods instead of capital) has detrimental long-run effects in the international competitiveness of European companies since it impedes the formation of human capital in terms of over-

seas managerial expertise and perception as well as participation in world-wide development trends. The scarcity of internationally experienced managers constituted a major obstacle to exports and foreign investment of small and medium-sized firms and may have contributed to the late discovery of Asia's economic growth potential in Europe.

Economic integration behind substantial trade barriers has generally raised the profitability of production within the EC vis-à-vis production in third countries. This investment-diverting effect has been further aggravated by generous regional subsidies granted by the EC to stimulate investment in backward regions of the Community; by preferential trading arrangements with Mediterranean countries which offer location advantages similar to those in other developing countries, but enjoy free access to EC markets; and by co-operation agreements with East European socialist countries which provide an umbrella for outward processing activities of EC companies. All those artificial incentives have rendered investment in particular in developing countries less attractive and explains at least partly the preference of European companies for direct exports over direct investment in ASEAN countries.

The increasing orientation of European firms towards European markets which shows up in trade and investment data presented in Chapter VI nourishes some doubts with respect to the future competitiveness of European manufacturing industries on world markets outside the EC. The artificially reduced competition with major US and Japanese suppliers on European markets is likely to slow down the innovative vigour of European companies, to slacken productivity growth, and to promote rent-seeking behaviour. These dangers are far from being merely hypothetical as the substantial inroads of Japanese suppliers into EC markets for many manufactured products underline. When the international competitiveness declines it becomes increasingly difficult even to defend the domestic markets against more advanced suppliers from other countries. In this sense European losses of export shares in ASEAN, EC and world markets have to be viewed as writing on the wall which points at the importance of dismantling artificial distortions of competition in Europe as a prerequisite for the sustained international competitiveness of European companies. This is a *third lesson* from this study.

A *fourth lesson* concerns the recommendations made by the ASEAN-EC High Level Working Party for promoting trade with and investment in ASEAN countries. In a nutshell, this Working Party perceives a lack of information as major bottleneck for business relationships with Southeast Asia and recommends - among other things - the establishment of an ASEAN Investment Data Bank and a so-called European business centre in ASEAN capitals. The above reasoning clearly contradicts this assessment, and there is also solid empirical evidence that a lack of information does not distort company decisions. EC outward processing of textiles and clothing was predominantly undertaken in Mediterranean countries because of preferential re-export facilities granted to these associated countries. In electronics, however, where such preferences do not exist the bulk of EC outward processing was carried out in ASEAN countries and hardly any of these activities were attracted by Mediterranean countries. The example highlights once more the economic rationale of decision making at the firm level. As soon as there are less incentives for producing within the EC or in associated countries, firm-internal assessment of alternative locations for foreign investment will change, too. What matters is a removal of distortions, trade and otherwise, sheltering European markets against outside competition, and this is an area for which national governments and the EC Commission bear responsibility.



## Appendices

### A. Measurement of Transport Cost Differentials

For each exporting country, the US, Japan, West Germany and the largest individual EC supplier next to West Germany, first an average import-weighted ad valorem rate of transport costs (T) is calculated:

$$T = \frac{\sum_i \left( \frac{M_i^{cif}}{M_i^{fob}} - 1 \right) M_i^{cif}}{\sum_i M_i^{cif}} \cdot 100$$

where  $M_i^{cif}$  and  $M_i^{fob}$  are Philippine import values in the commodity  $i$  on a cif and fob basis respectively. This rate reflects the level of transport costs and allows for comparing the changes in transport costs for each exporting country over time. However, due to different import weights it does not yet allow for calculating transport cost differentials between exporting countries.

Such differentials are derived in the next step in which an average import-weighted deviation of transport costs in European and US exports to the Philippines from the respective costs in the competing country's exports is estimated, i.e., the relation between the cif/fob value ratios (minus unity) in imports from different origins in identical items. For the average commodity ratios a common weight, the value of imports from Japan, is used in order to exclude a possible source of distortions. Algebraically, the average import-weighted transport cost differential TCD can be written as:

$$TCD = \frac{\sum_i \frac{R_{ia}}{R_{ib}} \cdot M_{i,jap}^{cif}}{\sum_i M_{i,jap}^{cif}}, \text{ where}$$

$R_{ia}$  and  $R_{ib}$  are cif/fob value ratios in Philippine imports of commodity  $i$  from country  $a$  and country  $b$  respectively, and  $M_{i,jap}$  is the value of imports from Japan in commodity  $i$ . The transport cost differential is tested for its statistical significance in order to conclude on the extent and stability of different transport costs in imports from different sources of origin.

In a third step, for those product groups for which a statistically significant deviation in the ratios from unity could be observed the average cost advantage is calculated. This rate represents a preferential tariff margin enjoyed by countries with lower transport costs.

## **B. Main Data Sources and Estimation Procedures for Intra-Firm Trade**

US sources report intra-firm trade to be sufficiently disaggregated by country and by industry for two benchmark years, 1977 and 1982 [U.S. Dept. of Commerce, b]. The sample includes virtually all non-bank affiliates of non-bank US parents. Whereas trade statistics provide a breakdown by commodity groups, regionally disaggregated intra-firm trade was available only classified by industry of the affiliate. Therefore, it was assumed that intra-firm trade with affiliates in any particular industry could be classified as belonging to the corresponding commodity group. This assumption proved also necessary for the other home countries.

With respect to Japan, the largest investor in the non-petroleum sector of ASEAN countries, intra-firm trade of Japanese affiliates can only be derived from a sample survey on the activities of overseas affiliates [MITI, a]. The most disaggregated geographical breakdown available in this sample is "developing countries in Asia". Since only the sales and purchase structures were recorded, the absolute volumes had to be reconstructed using the overall exports and imports of the affiliates in any region. To bring the estimates down to the ASEAN level, intra-firm exports were estimated for single ASEAN countries by assuming that within Asia and within each manufacturing industry, intra-firm exports were

distributed by country as was Japanese FDI in the respective industry (see Ministry of Finance [var. years], for Japanese FDI).

The third home country publishing informations on intra-firm trade is the U.K. [Dept. of Industry, var. years]. This source provides data on related exports based on the analysis of returns from an overseas transaction inquiry. The coverage of the sample survey is rather complete, as the companies surveyed reported direct exports amounting to more than 80 per cent of recorded UK exports. Most of the exports not covered by the sample appear to be unrelated, as there are certainly much more exporting UK enterprises with no overseas affiliates than registered in the survey (609 in 1981).

From a sample of the world's largest enterprises [Dunning, Pearce, 1981; 1985], German intra-firm exports can be reconstructed. Sectorally disaggregated sales data, export ratios and internal export ratios, based on increasingly reduced samples, can be combined such as to arrive at an estimate of intra-firm exports under the assumption of a homogenous sample.

## C. Appendix Tables

Table A1 - Basic Performance Indicators of ASEAN Countries, 1965-1984

	Annual average growth rates						Share in developing countries' manufactured exports	
	GNP/capita	GDP		manuf- turing valued added		manuf- turing exports		
	1965- 1984	1965- 1973	1973- 1984	1965- 1973	1973- 1984	1965- 1983	1965	1983
Indonesia	4.9	8.1	6.8	9.0	14.9	25.5	0.6	1.3
Malaysia	4.5	6.7	7.3	.	8.7	24.7	1.8	3.2
Philippines	2.6	5.4	4.8	8.5	4.3	25.4	1.0	2.0
Singapore	7.8	13.0	8.2	19.5	7.6	22.2	8.0	10.0
Thailand	4.2	7.8	6.8	11.4	10.0	26.5	0.7	1.7
ASEAN (a)	4.6	7.8	6.7	10.5	10.6	25.3	12.1	18.2
For comparison:								
Lower middle- income countries (c)	3.0	6.8	4.2	8.5	5.9	20.7 (b)		
Upper middle- income countries (c)	3.3	7.7	4.5	9.5	5.3			
(a) Average weighted with the 1984 GDP of the individual ASEAN countries. - (b) All developing countries. - (c) Definition according to World Bank [1986].								

Source: World Bank [1986]; UN [b, May 1984]; own calculations.

Table A2 - Average Annual Growth Rates of Philippine Imports from the US, Japan, West Germany and the World, 1970-1981

		Imports from			
		US	Japan	West Germany	World
Total manufactures					
Growth rate		13.1	13.9	14.6	14.8
Share in total imports	1970	29.6	37.7	7.6	100
	1981	25.3	34.6	7.6	100
Chemicals					
Growth rate		18.6	13.4	13.0	17.7
Share in total imports	1970	29.3	32.3	10.5	100
	1981	31.8	21.4	6.7	100
Manufactured goods chiefly classified by material					
Growth rate		8.4	10.3	17.8	12.6
Share in total imports	1970	21.4	50.2	1.7	100
	1981	14.2	40.2	2.8	100
Machinery and transport equipment					
Growth rate		12.2	15.9	14.5	14.5
Share in total imports	1970	33.8	32.8	10.6	100
	1981	27.2	37.4	10.7	100
Miscellaneous manufactured articles					
Growth rate		16.5	22.3	20.4	19.3
Share in total imports	1970	41.8	26.8	3.9	100
	1981	32.0	35.2	4.3	100

Source: UN [a, 1970; 1981]; own calculations.

Table A3 - Imports of Major Foreign-Affiliated Agency Houses (a) in Selected Asian Countries by Industry, 1980 (b)

	Republic of Korea (n = 9)	Malaysia (n = 13)	Thailand (n = 19)
	US \$ mill.		
Food and beverages	4.0	50.2	42.2
Primary goods	4.0	-	-
Processed goods	-	50.2	42.2
Other consumer goods	-	57.7	51.0
Non durables	-	37.5	7.0
Durables	-	20.2	32.8
Other/not identified	-	-	11.3
Medical supply	-	4.4	24.1
Intermediate goods	42.9	55.9	31.4
Chemicals	24.4	53.0	24.6
Steel products	0.5	-	-
Other/not identified	18.0	2.9	6.8
Machinery	131.6	35.4	75.2
Transport equipment	-	4.2	6.9
Other/not identified	10.5	6.2	14.4
Total	189.0	214.0	245.2
	per cent		
Share in total imports	0.8	2.0	2.6
Approximate share in total imports from Europe	8	6	10
(a) Excluding the Japanese sogo shosha and other Asian trading companies. - (b) See von Kirchbach [1985, Table 3] for the list of companies included in the survey. While the samples in the Republic of Korea and Malaysia include the majority of the major agency houses, the sample in Thailand includes all major agency houses. Figures include commission business as well as business on own account.			

Source: Interview survey.

Table A4 - Sales, Overseas Bases and Overseas Employment of Japanese General Trading Companies, 1981/82

	Total sales (a)	Domestic sales	Imports to Japan	Exports from Japan	Offshore sales (b)	Number of overseas bases		Number of employees in overseas bases	
	(US \$ mill.)	percentage share in total sales				worldwide	in Asia	Japanese	local
Mitsubishi	59580	38.9	33.3	18.8	9.0	157	30	964	4408
Mitsui	53651	42.5	24.1	19.4	14.0	150	32	981	2452
C. Itoh	50043	43.5	23.2	18.7	14.6	111	14	844	1950
Marubeni	46846	36.0	18.9	27.1	18.0	136	23	1044	2545
Sumitomo	44480	50.0	15.3	25.9	8.0	125	23	642	1474
Nissho-Iwai	30151	37.4	27.4	18.1	17.1	128	25	668	1621
Toyo Menka	15072	37.9	25.3	24.3	12.5	85	23	422	1079
Kanematsu-Gosho	13258	50.1	23.6	13.8	12.5	71	13	328	976
Nichimen	11918	29.9	22.7	24.6	22.8	77	21	314	806
Total	324999	41.4	24.0	21.2	13.4	1040	204	6207	17311

(a) Exchange rate: ¥ 246.50  $\hat{=}$  US \$ 1. - (b) Third-country trade between countries other than Japan.

Source: Japan Foreign Trade Council, unpublished data.

Table A5 - Imports of 21 Affiliates of Japanese Trading Companies in the Republic of Korea, Malaysia and Thailand by Products, 1980

	US \$ mill.	Percentage distribution
Food and beverages	329.1	7.4
Primary goods	282.0	6.4
Processed goods	21.6	0.5
Other/not identified	25.5	0.6
Other consumer goods	34.7	0.8
Fuels and minerals	129.1	2.9
Coal	123.3	2.8
Other/not identified	5.8	0.1
Intermediate goods	1962.2	44.3
Chemicals	739.3	16.7
Steel products	1161.2	26.2
Other/not identified	50.4	1.1
Machinery	1266.3	28.6
Transport equipment & parts thereof	35.4	0.8
Other goods not classified	152.6	3.4
Other/not identified	523.9	11.8
Total	4433.2	100.0

Source: Interview survey.

Table A6 - Share of Small and Medium-Size (a) Firms in Japanese FDI According to Sectors, 1976/77

	Number of firms	Share in total (per cent)
Agriculture, forestry and fishery	14	58.3
Mining	1	4.5
Manufacturing	241	38.0
Trade	92	31.5
Miscellaneous	26	48.1
All sectors	374	36.5

(a) Firms with total capital of less than ¥ 100 mill. in agriculture, forestry, mining, manufacturing and miscellaneous, of less than ¥ 30 mill. in trade and of less than ¥ 10 mill. in retail sale and servicing.

Source: MITI [a, 1977].

Table A7 - ASEAN Imports of Intermediate Products, 1977 (a)

	Industrialized countries (b)	US	Japan	West Germany	UK
	US \$ mill.	per cent			
Total manufacturing	8035	23.8	48.3	8.3	6.8
Food	60	27.1	4.3	11.4	11.3
Chemicals	2034	22.4	37.7	13.3	9.4
Metals and metal manufacturing	2006	9.5	72.1	5.4	4.5
Machinery excluding electrical	495	33.3	33.3	10.3	10.5
Electrical machinery	710	51.5	26.0	6.6	3.9
Transport equipment	1255	22.2	51.5	9.4	8.3
Other manufacturing	1475	29.8	45.0	4.1	5.0
For comparison:					
Total imports of manufactures	14851	20.1	44.6	8.8	6.8
(a) According to UN [d]. - (b) UN definition.					

Source: UN [a, 1977]; own calculations.



Table A8 - Sectoral Composition of FDI in ASEAN, 1976-1984 (US \$ mill).

	Indo- nesia	Malay- sia	Philip- pines	Singa- pore	Thai- land	ASEAN
West Germany, 1976						
All sectors	30	30	9	95	17	181
Total manufacturing industries	23	21	4	32	7	87
Chemicals and allied industries	12	D	2	D	5	19
Machinery except electrical	.	.	.	3	.	4
Electrical and electronic equipment	D	D	.	10	.	20
Transportation equipment	.	.	.	D	.	D
Professional goods(a)	.	6	.	18	.	24
Textiles and clothing	.	.	D	.	.	4
Trade	4	6	2	14	10	36
Banking and finance	.	.	.	28	.	33
Other	.	.	.	1	.	10
West Germany, 1984						
All sectors	76	102	26	357	37	598
Total manufacturing industries	63	61	15	73	11	223
Chemicals and allied industries	39	13	7	2	8	69
Machinery except electrical	.	.	.	8	.	9
Electrical and electronic equipment	5	28	.	40	.	76
Transportation equipment	.	.	.	D	.	≤2
Professional goods(a)	.	8	.	12	.	20
Textiles and clothing	.	.	3	.	.	4
Trade	7	18	6	60	14	105
Banking and finance	.	.	.	208	.	227
Other	.	.	.	15	.	.
D: suppressed to avoid disclosure of data of individual companies.						
(a) Including toys, music instruments, metal goods.						

Table A8 continued

	Indo- nesia	Malay- sia	Philip- pines	Singa- pore	Thai- land	ASEAN
Japan, 1976/77 (a)						
All sectors	2703	356	354	305	228	3946
Mining	1755	102	197	0	5	2059
Total manufacturing industries	682	205	92	221	172	1372
Food	21	12	13	3	36	85
Chemicals and allied industries	51	12	19	10	17	109
Metals and metal manufacturing	115	24	21	11	11	182
Machinery except electrical	5	3	2	36	3	49
Electrical and electronic equipment	13	31	5	39	3	91
Transportation equipment	19	4	4	82	9	118
Other manufacturing	458	119	29	39	92	737
Trade	7	7	2	10	15	41
Banking and finance	65	3	16	7	7	98
Other	194	39	47	67	29	376
Japan, 1982/83 (a)						
All sectors	7268	764	721	1383	521	10657
Mining	4836	120	308	0	5	5269
Total manufacturing industries	2001	533	290	1009	390	4223
Food	31	20	15	21	49	136
Chemicals and allied industries	102	177	66	275	30	650
Metals and metal manufacturing	1136	59	75	43	30	1343
Machinery except electrical	21	9	5	183	19	237
Electrical and electronic equipment	41	66	8	172	8	295
Transportation equipment	72	10	72	114	36	304
Other manufacturing	598	192	50	201	218	1259
Trade	35	21	6	82	58	202
Banking and finance	69	9	21	20	10	129
Other	327	81	46	272	58	834
(a) Fiscal years; as reported to and approved by the Ministry of Finance.						

Table A8 continued

	Indo- nesia	Malay- sia	Philip- pines	Singa- pore	Thai- land	ASEAN
	UK, 1978 (a)					
All sectors	29	608 (b)	18	293 (b)	50 (b)	998
Mining	D	24	0	0	0	
Total manufacturing industries	28	465	13	186	7	
Food	D	77	0	20	1	
Chemicals and allied industries	7	54	D	96	4	
Metals and metal manufacturing	0	0	0	1	0	
Machinery except electr.	0	D	0	1	1	
Electrical and electronic equipment	0	18	D	15	1	
Transportation equipment	0	0	0	0	0	
Other manufacturing	D	D	D	D	D	
Total non-manufact. (c)	1	143	5	107	43	
Trade	4	36	3	106	42	
Other financial institutions	0	D	D	D	D	
Other	D	D	D	D	D	
	UK, 1981 (a)					
All sectors	147	1136	44	851	65	2243
Mining	0	D	0	0	D	
Total manufacturing industries	D	330	33	478	15	
Food	D	D	D	41	D	
Chemicals and allied industries	D	85	17	346	6	
Metals and metal manufacturing	D	D	0	0	0	
Machinery except electr.	0	1	0	7	D	
Electrical and electronic equipment	0.4	38	D	43	D	
Transportation equipment	0	0	0	16	0	
Other manufacturing	D	D	D	25	D	
Total non-manufact. (c)	D	805	12	373	50	
Trade	D	52	1	249	49	
Other financial institutions	0	D	0	2	0	
Other	D	D	11	122	1	
D: suppressed to avoid the disclosure of data of individual companies.						
(a) Excluding oil companies, banks and insurance companies. - (b) The combined total of UK investment stocks including oil, banks and insurance companies in Malaysia and Singapore were in 1981: 2 733 US \$ mill.; in Thailand and Pakistan: 245 US \$ mill. (1981). - (c) Including mining.						

Table A8 continued

	Indo- nesia	Malay- sia	Philip- pines	Singa- pore	Thai- land	ASEAN
	US, 1976					
All sectors	1298	419	698	402	234	3051
Mining	1120	282	215	148	116(a)	1881
Total manufacturing industries	103	76	274	109	47	609
Food	2	3	88	3	9	105
Chemicals and allied industries	27	11	75	2	7	122
Metals and metal manufacturing	D	2	12	25	4	D
Machinery except electrical	0	3	1	24	0	28
Electrical and electronic equipment	12	38	25	45	11	131
Transportation equipment	0	1	D	0	1	D
Other manufacturing	D	18	D	10	17	D
Trade	9	39	87	51	31	217
Banking and finance	10	7	95	42	28	182
	US, 1984					
All sectors	4409	1153	1 185	2 232	967	9946
Mining	3892(a)	722	D	536	D(b)	D
Total manufacturing industries	152	370	443	1 013	D(c)	2013(e)
Food	12	D	104	D	-2	D
Chemicals and allied industries	38	29	178	95	46	386
Metals and metal manufacturing	D	9	23	75	D	D
Machinery except electrical	1	D	5	D	0	D
Electrical and electronic equipment	27	268	D	455	D	D
Transportation equipment	-1	D	D	D	0	D
Other manufacturing	D	41	D	D	D	D
Trade	51	96	55	305	76	583
Banking and finance	37	19(d)	261(d)	281	53	651
D: suppressed to avoid disclosure of data of individual companies.						
(a) Petroleum only. - (b) In 1983 US \$ 575 mill. out of total FDI amounting to US \$ 730 mill. - (c) In 1983 US \$ 35 mill. - (d) Banking only. - (e) Including FDI in Thailand in 1982.						

Source: Data obtained from the Deutsche Bundesbank; Ministry of Finance, Japan [1977; 1983]; Business Monitor [1981; 1984]; British Business [1984]; U.S. Dept. of Commerce [a, 1977; 1985; b]; unpublished data.

Table A9 - Annual Growth Rate of FDI in ASEAN by Sector and Host Country, 1976-1984 (per cent)

	Indo-nesia	Malay-sia	Philip-pines	Singa-pore	Thai-land	ASEAN
West Germany, 1976-1984						
All sectors	12.3	16.5	14.2	18.0	10.2	16.1
Total manufacturing industries	13.4	14.3	18.0	10.9	5.8	12.5
Chemicals and allied industries	15.9	.	17.0	.	6.1	17.5
Machinery except electrical	.	.	.	13.0	.	10.7
Electrical and electronic equipment	.	.	.	.	18.9	18.2
Transportation equipment	.	.	.	.	.	.
Professional goods (a)	.	3.7	.	-4.8	.	-2.3
Textiles and clothing	.	.	.	.	.	0
Trade	7.2	14.7	14.7	20.0	4.3	14.3
Banking and finance	.	.	.	28.5	.	27.3
Other	.	.	.	-7.5	.	.
UK, 1978-1981						
All sectors	71.8	23.2	34.7	42.7	9.1	31.0
Mining	.	.	0	0	.	.
Total manufacturing industries	.	-10.8	36.4	37.0	28.9	.
Food	.	.	.	27.0	.	.
Chemicals and allied industries	.	16.3	.	53.3	14.5	.
Metals and metal manufacturing	.	.	0	-100	0	.
Machinery except electrical	0	.	0	91.3	.	.
Electrical and electronic equipment	.	28.3	.	42.1	.	.
Transportation equipment	0	0	0	0	0	.
Other manufacturing	.	.	.	.	.	.
Total non-manufacturing	.	77.9	33.9	51.6	5.2	.
Trade	.	13.0	44.2	32.9	5.3	.
Other financial institutions	0	.	.	.	.	.
Other	.	.	.	.	.	.
(a) Including toys, music instruments, metal goods.						

Table A9 continued

	Indo- nesia	Malay- sia	Philip- pines	Singa- pore	Thai- land	ASEAN
Japan, 1967/77-1982/83 (a)						
All sectors	17.9	13.6	12.6	28.7	14.8	18.0
Mining	18.4	2.7	7.7	0	0	17.0
Total manufacturing industries	19.6	17.3	21.1	28.8	14.6	20.6
Food	6.7	8.9	2.4	38.3	5.3	8.1
Chemicals and allied industries	12.2	56.6	23.1	73.7	9.9	34.7
Metals and metal manufacturing	46.5	16.2	23.6	25.5	18.2	39.5
Machinery except electrical	27.0	20.0	16.5	31.1	36.0	30.0
Electrical and electronic equipment	21.1	13.4	8.1	28.1	17.8	21.7
Transportation equipment	24.9	16.5	61.9	5.6	26.0	17.1
Other manufacturing	4.5	8.3	9.5	31.4	15.5	9.3
Trade	30.8	20.1	20.1	42.0	25.3	30.4
Banking and finance	1.0	20.1	4.6	19.1	6.1	4.7
Other	30.9	73.2	19.2	84.0	42.3	42.9
US, 1976-1984						
All sectors	16.5	13.5	6.8	23.9	19.4	15.9
Mining	16.8	12.5	.	17.7	25.7(b)	.
Total manufacturing industries	5.0	21.9	6.2	32.1	-3.6(b)	17.0(c)
Food	25.1	.	2.1	.	.	.
Chemicals and allied industries	4.4	12.9	11.4	62.0	26.5	15.5
Metals and metal manufacturing	.	20.7	8.5	14.7	.	.
Machinery except electrical	.	.	22.2	.	0	.
Electrical and electronic equipment	10.7	27.7	.	33.5	.	.
Transportation equipment	.	.	.	.	.	.
Other manufacturing	.	10.8	.	.	.	.
Trade	24.2	11.9	-5.6	25.1	11.9	13.1
Banking and finance	17.8	15.5(d)	17.5(d)	26.8	8.3	18.8(d)
(a) Fiscal year; as reported to and approved by the Ministry of Finance. - (b) 1976-1983. - (c) Without Thailand. - (d) Banking only.						

Source: Table A8.

Table A10 - Annual Growth Rate of FDI by Regions (per cent)

	World	Devel- oped coun- tries	Developing countries (a)		
			ASEAN	in Asia	total
All sectors					
Japan (1977-1983)	18.3	19.4	18.0	17.7	17.5
US (1976-1983)	7.8	7.6	14.7	13.9	6.0
West Germany (1976-1982)	14.9	17.1	20.7	18.6	8.3
UK (1973-1981)	13.8	15.2	14.7(b)	n.a.	7.6
Japan (1977-1981)	17.1	18.3	15.5	15.8	16.2
US (1977-1981)	11.8	11.0	20.5	19.2	11.1
West Germany (1977-1982)	18.7	21.3	26.4	25.6	10.9
UK (1978-1981)	16.0	15.7	31.0	26.0	17.7
Japan (1981-1983)	20.7	21.6	23.2	21.7	20.0
US (1981-1983)	-0.5	0.6	11.5	9.4	-7.7
West Germany (1981-1982)	-0.4	-1.5	-0.8	0.4	-1.2
Manufacturing industries					
Japan (1977-1983)	18.7	25.1	20.6	17.4	15.9
US (1976-1983)	6.6	6.2	13.3	10.6	8.3
West Germany (1976-1982)	13.8	17.5(c)	16.0	14.6(c)	5.7(c)
UK (1973-1981)	13.2	13.7	n.a.	n.a.	7.8
Japan (1977-1981)	20.0	24.7	23.6	19.8	12.4
US (1977-1981)	10.5	9.7	24.0	18.1	14.4
West Germany (1977-1982)	18.3	23.0	21.0	18.1	8.5
UK (1978-1981)	11.8	12.8	8.5(d)	8.7	4.3
Japan (1981-1983)	16.1	26.0	14.9	12.6	11.3
US (1981-1983)	-1.2	-0.9	-3.2	0.2	-2.2
West Germany (1981-1982)	-2.7	-2.2	-6.6	1.4	-4.5
(a) Excluding OPEC countries. - (b) Malaysia and Singapore only. - (c) 1977-1982. - (d) Without Indonesia.					

Source: See Table 18; own calculations.

Table A11 - FDI by Home and Host Country, 1976-1984

	Indo- nesia	Malay- sia	Philip- pines	Singa- pore	Thai- land	Developing coun- tries (a)		
						ASEAN	in Asia	total
1976 (US \$ mill.)								
US	1298	419	698	402	234	3051	5346	28292
Japan (b)	2703	356	354	305	228	3946	5464	10793
UK (c)	29	635	10	126	40	840	2030	4288
West Germany	30	30	9	95	17	181	329	4201
1984 (US \$ mill.)								
US	4409	1153	1185	2232	967	9946	16156	53932
Japan (d)	7268	764	721	1383	521	10657	14552	28390
UK (e)	147	1136	44	851	65	2243	4827	10561
West Germany	76	102	26	357	37	598	1075	7291
Annual growth rates, 1976-1984 (per cent) (f)								
US	16.5	13.5	6.8	23.9	19.4	15.9	14.8	8.4
Japan	17.9	13.6	12.6	28.7	14.8	18.0	17.7	17.5
UK	26.1	8.7	23.6	31.4	7.2	15.1	13.2	13.7
West Germany	12.3	16.5	14.2	18.0	10.2	16.1	16.0	7.1
Regional distribution of investment, 1984 (per cent)								
US	8.2	2.1	2.2	4.1	1.8	18.4	30.0	100
Japan	25.6	2.7	2.5	4.9	1.8	37.5	51.3	100
UK	1.4	10.8	0.4	8.1	0.6	21.2	45.7	100
West Germany	1.0	1.4	0.4	4.9	0.5	8.2	14.7	100
(a) Developing market economies of Asia excluding Middle East. -								
(b) Fiscal year 1976/77 (31st of March). - (c) 1974, excluding oil com- panies, banks and insurance companies. - (d) Fiscal year 1982/83. -								
(e) 1981, excluding oil companies, banks and insurance companies. -								
(f) Or respective years.								

Source: Ministry of Finance, Japan [var. iss.]; U.S. Dept. of Commerce [a]; U.K. Dept. of Industry [1977]; British Business [1984]; Deutsche Bundesbank [b], and unpublished data; own calculations.



Table A12 - The Sectoral Distribution of FDI by Developing Regions, 1976-1983 (per cent) (a)

	World	Developing countries (b)		
		ASEAN	in Asia	Total
Japan				
1983				
Mining	19.4	49.4	37.0	26.0
Manufacturing	31.9	39.6	39.9	37.1
Trade	16.0	1.9	4.5	4.7
Banking and finance	7.2	1.2	2.5	3.1
1977-1983				
Annual average growth of total FDI	18.3	18.0	17.7	17.5
of manufacturing FDI	18.7	20.6	17.4	15.9
US				
1983				
Mining	29.4	65.7	39.8	34.3
Manufacturing	39.9	18.4	22.0	40.2
Trade	12.6	6.6	10.5	12.4
Banking and finance	12.7	7.8	14.1	5.7
1976-1983				
Annual average growth of total FDI	7.8	14.7	13.9	6.0
of manufacturing FDI	6.6	13.3	10.6	8.3
West Germany				
1983				
Mining	4.8	n.a.	0.1	7.5
Manufacturing	43.6	34.8	38.3	61.4
Trade	19.7	18.9	15.4	7.5
Banking and finance	10.5	39.3	35.0	11.2
1976-1983				
Annual average growth of total FDI	13.9	18.1	17.3	6.9
of manufacturing FDI	12.2	12.8	12.9(c)	3.4(c)

(a) In per cent of each country's total FDI in the respective region. -  
(b) Developing market economies of Asia excluding Middle East. -  
(c) 1977-1982.

Source: Deutsche Bundesbank [a]; Ministry of Finance, Japan [var. iss.]; U.S. Dept. of Commerce [a]; unpublished data and own calculations.

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