

# Impact of the Single European Market on ASEAN and China

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## Abstract

This paper examines impact of the single European market, implemented at the end of 1992, on the four ASEAN countries of Thailand, Malaysia, Indonesia, and the Philippines, and China. The EC import elasticities with respect to EC income and prices are estimated for each of four ASEAN countries and China. Assuming a full implementation of the single European market, the trade creation, trade diversion, and net trade effects on the countries are estimated. The estimates suggest that the four ASEAN countries and China will expand their exports substantially to the EC by the single European market. They, however, may counter higher import restrictions, since they have relied on certain sensitive commodities subject to import restrictions at the national level. As a result, they will be forced to diversify their manufactured exports to the EC. Their diversification of exports will proceed smoothly due to an inflow of foreign direct investment. The international division of labor, which the four ASEAN countries and China substitute for EC production for relatively labor intensive industry while the latter supply capital intensive goods for the former, will progress further, helped by foreign direct investment from the EC.

## I. Introduction

The European Community (EC) in the 1960s substantially reduced the external tariffs, both stimulating intra- and extra-EC trade. The EC started the Generalized System of Preferences (GSP) in 1971, which had a broader product coverage scheme than other GSP schemes and was more generous in its treatment of developing countries. Partly due to benefits from the GSP scheme, developing countries have expanded their exports to the EC rapidly. The four ASEAN countries (ASEAN4) of Thailand, Malaysia, Indonesia and the Philippines and China developed their economies. Their economic development were partly due to expansion of exports to the EC under the GSP scheme. The EC market at present is one of the most significant export markets for them.

Pessimism about Europe, on the other hand, prevailed in the 1970s and the first half of the 1980s, which led the formation of a free trade area within the EC in 1975 and European participation in world-wide protectionism. Non-tariff import barriers have been increasingly used against products from non-EC countries, particularly in agriculture and the marine products, textiles, footwear, consumer

Table 1. Anti-dumping Investigations by Country of Exports

country of origin	1987	1988	1989	1990	1991	1987-1991
Japan	7	4	2	3	5	21
South Korea	5	5	1	5	1	17
Taiwan	3	1	1	1	2	8
Hong Kong	1	3	2	-	-	6
Thailand	-	3	-	2	-	5
Malaysia	1	-	-	-	-	1
Indonesia	-	1	1	1	-	3
China	-	7	5	4	4	20
Total	39	40	27	43	20	169

Source: Commission of the European Communities (1992a).

electronics, and automobile industries.

At the same time, anti-dumping actions by EC countries was increasing. Anti-dumping actions were initially directed at Japan in the early 1980s, and expanded to the Asian NIEs (South Korea, Taiwan, Hong Kong, and Singapore). Furthermore, the EC took anti-dumping actions against the ASEAN4 and China,<sup>1)</sup> when EC industry was threatened by exports from the countries.

According to the anti-dumping and anti-subsidy investigations by Commission of the European Communities (see Table 1), the member states of the EC imposed 20 actions against China, 5 actions against Thailand, and 3 actions against Indonesia during the period from 1987 to 1991.<sup>2)</sup> The total number of anti-dumping actions against those three countries was 28, which was more than the number of actions against Japan for the period.

The EC is a significant market for the ASEAN4 and China despite that it has been protected with high non-tariff barriers. The nature and scale of the EC market will change greatly now that the EC has formed a large single market at the end of 1992 by replacing the regulations, products standards and import quotas at the national level with the EC common commercial regulations. The implementation of the single European market would accelerate EC economic growth, enhance the competitiveness of EC industry, and attract investments from both inside and outside the EC. These are supposed to generate great positive or negative effects on non-EC countries. The single European market, hence, has been great concern issue for developing countries including the ASEAN4 and China.

There are several different views on the impact of the single European market on developing countries. Langhammer (1990)<sup>3)</sup> argues that the single European market would have a positive impact on developing countries since the positive trade creation effect would be bigger than the negative trade diversion effect. Wagner (1991) emphasizes that the possible impact depends on the external policy adopted by the EC after the single European market is established. Davenport (1990) argues that, it is plausible to assume that the trade creation effect and

trade diversion effect on developing countries will approximately offset each other. Davenport,<sup>4)</sup> and Molle and Morsink (1990) stress that for developing countries, the advantage of low labor costs will no longer be important in attracting foreign direct investments as it was. As a result, developing countries will lose international competitiveness and suffer from expanding exports to the EC.

Why are views on the impact of the single European market on developing countries so diverse? In this regard, it should be noted that the evaluation of the trade diversion effect, that is, intra-EC trade substituting for extra-EC imports, would vary from commodity to commodity. Therefore, the trade diversion effects will be different for each developing country according to its economic level in industrialization.

At first, the ASEAN4 and China had worried about negative impacts of the single European market. However, it seems that toward the end of 1992, the worry of EC suppliers substituting for non-EC suppliers were beginning to disappear. Now they feel that the single European market would give them greater new business opportunities than negative impact. The ASEAN4 and China were looking forward to the establishment of the single European market, although they were wary of a fortress Europe policy.<sup>5)</sup>

For further economic development of the ASEAN4 and China, economic cooperation in trade and investments with the EC will be significant. Recognizing this, the study is to examine whether the single European market would consequently have a positive effect or a negative effect on the ASEAN4 and China.

## II. ASEAN and China Trade with the EC

The EC has succeeded in expanding intra-EC trade share against extra-EC trade share remarkably in the last decade. Table 2.1 shows that the share of intra-EC imports to total EC imports increased from 49.1 percent in 1980 to 52.5 percent in 1985 and 57.4 percent in 1991.

The surge of the intra-EC import share, however, was brought about primarily by a large increase in imports of agricultural products, raw materials, chemicals and manufactured goods for industrial use. Contrary to the high performance of intra-EC trade in those goods, the intra-EC trade share of finished manufactured goods is decreasing.

This can be observed from Table 2.2, through Table 2.6 that the share of intra-EC imports of agricultural products (SITC 0 and 1), crude materials (SITC 2 and 4), and chemical goods and manufactured goods for industrial use (SITC 5 and 6) increased, while the share of intra-EC imports of finished manufactured goods industries, such as machinery (SITC 7) and miscellaneous manufactured goods (SITC 8), decreased in the last two decades. Particularly in miscellaneous manufactured goods, the intra-EC import share decreased drastically, from 66.6 percent in 1970 to 51.8 percent in 1991.

These facts suggest that EC agricultural and raw material industries, partly helped by trade protection, have enjoyed an expansion of intra-regional trade, whereas labor intensive industry lost competitiveness in the last two decades de-

Table 2.1. Total EC Import Share by Origin

	(%)				
	1970	1980	1985	1990	1991
Intra-EC	50.2	49.1	52.5	57.9	57.4
Extra-EC	49.8	50.9	47.5	42.1	42.6
Japan	1.7	2.6	3.4	4.3	4.5
Asian NIEs	0.8	1.7	1.8	2.6	2.8
ASEAN4	0.8	1.0	1.0	1.1	1.3
China	0.3	0.4	0.4	0.9	1.2
Asia10	3.5	5.6	6.6	8.8	9.8
Total	100.0	100.0	100.0	100.0	100.0

Source: IDE trade data retrieval system (AIDXT).

Note: The Asian NIEs is South Korea, Taiwan, Hong Kong and Singapore, and the ASEAN4 is Thailand, Malaysia, Indonesia and the Philippines. The Asia10 consists of Japan, the Asian NIEs, the ASEAN4, and China.

Table 2.2. EC Import Share of Agricultural Products (SITC 0 and 1) by Origin (%)

	1970	1980	1985	1990	1991
Intra-EC	44.3	55.9	59.8	67.6	68.6
Extra-EC	55.7	44.1	40.2	32.4	31.4
Japan	0.8	0.2	0.1	0.1	0.1
Asian NIEs	0.5	0.5	0.4	0.3	0.3
ASEAN4	1.1	2.4	2.4	2.0	2.1
China	0.3	0.6	0.5	0.6	0.7
Asia10	2.8	3.7	3.4	3.0	3.2
Total	100.0	100.0	100.0	100.0	100.0

Source: The same as Table 2.1.

spite the safeguards taken by EC countries.

Although the share of extra-EC imports decreased, the Asia10 economy, which comprises Japan, the Asian NIEs, the ASEAN4 and China, increased the share of exports to the EC greatly in the last two decades. The share of EC imports from the Asia10 economies increased from 3.5 percent in 1970, 5.6 percent in 1980, 8.8 percent in 1990 and 9.8 percent in 1991. In particular the share of EC imports of machinery (SITC 7) in 1991 was 15.3 percent, and that of miscellaneous manufactured goods (SITC 8) was 20.2 percent.

The share of EC imports from the ASEAN4 and China was still low, although it increased at a high rate. Nevertheless the ASEAN4 and China occupied a significant import share of the miscellaneous manufactured goods. The combined

Table 2.3. EC Import Share of Crude Materials (SITC 2 and 4) by Origin (%)

	1970	1980	1985	1990	1991
Intra-EC	23.2	27.8	34.7	39.1	40.5
Extra-EC	76.8	72.2	65.3	60.9	59.5
Japan	0.4	0.4	0.4	0.3	0.4
Asian NIEs	0.5	0.6	0.6	0.4	0.4
ASEAN4	3.5	4.6	3.9	3.2	3.2
China	0.9	1.0	1.5	1.3	1.3
Asia10	5.4	6.5	6.5	5.2	5.3
Total	100.0	100.0	100.0	100.0	100.0

Source: The same as Table 2.1.

Table 2.4. EC Import Share of Chemical and Material Manufactured Goods (SITC 5 and 6) by Origin (%)

	1970	1980	1985	1990	1991
Intra-EC	58.4	62.8	66.4	66.6	65.9
Extra-EC	41.6	37.2	33.6	33.4	34.1
Japan	2.0	1.6	1.5	1.6	1.7
Asian NIEs	0.4	1.1	0.9	1.2	1.3
ASEAN4	0.3	0.6	0.6	0.6	0.7
China	0.3	0.4	0.6	0.7	0.8
Asia10	3.0	3.7	3.6	4.1	4.5
Total	100.0	100.0	100.0	100.0	100.0

Source: The same as Table 2.1.

share of EC imports from the ASEAN4 and China of miscellaneous manufactured goods was 7.6 percent in 1991, which was nearly to 8.1 percent of the Asian NIEs.

Considering that almost of exports of the miscellaneous manufactured goods from the ASEAN4 and China are labor intensive goods such as clothing, footwear, and furniture, the ASEAN4 and China have harmed EC labor intensive industries in recent years. In the next decade, they will inevitably threaten labor intensive industries of the EC much more.

In addition, the EC has large trade deficits with the ASEAN4 and China. The combined trade deficits of the EC with the ASEAN4 and China were around 15 billion US dollars in 1991 which was larger than with the Asian NIEs and nearly 20 percent of the total EC trade deficits (Table 2.9).

For the ASEAN4 and China, the EC is the only market of which the export

Table 2.5. EC Import Share of Machinery (SITC 7) by Origin (percent)

	(%)				
	1970	1980	1985	1990	1991
Intra-EC	68.4	64.3	60.9	61.3	60.3
Extra-EC	31.6	35.7	39.1	38.7	39.7
Japan	2.7	7.1	9.2	9.8	10.1
Asian NIEs	0.2	1.6	2.3	3.6	3.9
ASEAN4	0.0	0.2	0.6	0.6	0.8
China	0.0	0.0	0.0	0.4	0.5
Asia10	3.0	9.0	12.1	14.4	15.3
Total	100.0	100.0	100.0	100.0	100.0

Source: The same as Table 2.1.

Table 2.6. EC Import Share of Miscellaneous Manufactured Goods (SITC 8) by Origin (percent)

	(%)				
	1970	1980	1985	1990	1991
Intra-EC	66.6	58.0	55.9	53.9	51.8
Extra-EC	33.4	42.0	44.1	46.1	48.2
Japan	4.0	6.0	7.4	4.4	4.4
Asian NIEs	5.5	10.0	8.7	7.7	8.1
ASEAN4	0.0	0.9	1.0	2.3	2.9
China	0.3	0.8	1.1	3.2	4.7
Asia10	9.8	17.7	18.3	17.6	20.2
Total	100.0	100.0	100.0	100.0	100.0

Source: The same as Table 2.1.

share is increasing among the three major markets of Japan, the US, and the EC. Table 2.10 shows that the share of the ASEAN4 exports directed to the EC increased remarkably from 11.8 percent in 1985 to 16.2 percent in 1991, and the figure for China increased from 8.4 percent to 9.5 percent although slightly. But, the share of the ASEAN4 exports destined to the US was decreased slightly from 19.9 percent in 1985 to 18.5 percent in 1991, and the figure for China changed very slightly from 8.5 percent to 8.6 percent (Table 2.11). The share of the ASEAN4 exports to Japan decreased drastically from 31.2 percent in 1985 to 23 percent in 1991, and the figure for China decreased 22.3 percent to 14.2 percent also (Table 2.12).

Table 2.7. EC Exports by Destination

(Million US dollar)

	1965	1970	1975	1980	1985	1990	1991
USA	5,211	9,612	17,412	37,532	64,719	93,802	84,914
Japan	523	1,410	2,899	6,617	7,920	28,445	27,020
Asian NIEs	394	1,110	2,858	7,917	9,944	28,477	30,713
ASEAN4	878	931	2,415	4,947	4,617	12,073	13,108
China	303	455	1,454	2,444	5,457	6,585	6,821
Asia10	2,098	3,907	9,626	21,924	27,938	75,580	77,663
Total	65,885	116,037	307,620	688,113	643,738	1,347,484	1,364,634

Source: IDE trade data retrieval system (AIDXT).

Table 2.8. EC Imports by Origin

(Million US dollar)

	1965	1970	1975	1980	1985	1990	1991
USA	8,612	13,351	28,040	63,667	52,975	99,881	106,855
Japan	798	2,083	6,846	19,653	22,647	60,572	65,524
Asian NIEs	397	941	3,887	12,920	11,557	36,335	41,124
ASEAN4	872	938	2,368	7,400	6,299	15,060	18,155
China	291	340	841	2,748	2,965	12,163	16,934
Asia10	2,358	4,301	13,942	42,721	43,468	124,130	141,739
Total	74,041	124,325	322,966	768,328	659,282	1,403,749	1,446,994

Source: The same as Table 2.7.

Table 2.9. EC Trade Balance with the World

(Million US dollar)

	1965	1970	1975	1980	1985	1990	1991
USA	-3,401	-3,739	-10,628	-26,135	11,744	-6,079	-21,941
Japan	-275	-673	-3,947	-13,036	-14,727	-32,127	-38,504
Asian NIEs	-3	169	-1,029	-5,003	-1,613	-7,858	-10,411
ASEAN4	6	-7	47	-2,453	-1,682	-2,987	-5,047
China	12	115	613	-304	2,492	-5,578	-10,113
Asia10	-260	-394	-4,316	-20,797	-15,530	-48,550	-64,076
Total	-8,156	-8,288	-15,346	-80,215	-15,544	-56,265	-82,360

Source: The same as Table 2.7.

Table 2.10. Share of ASEAN4 and China Exports Destined to the EC

(%)

	1985	1986	1987	1988	1989	1990	1991
Thailand	19.0	21.4	22.4	20.8	19.0	21.5	20.8
Malaysia	14.4	14.5	14.3	14.4	15.4	14.9	14.8
Indonesia	6.2	9.3	13.7	11.1	10.5	11.8	12.8
The Philippines	14.0	18.2	19.1	14.2	17.0	17.8	18.6
ASEAN4	11.8	14.6	14.9	15.4	15.1	16.0	16.2
China	8.4	12.8	9.9	10.0	9.2	9.2	9.5
ASEAN4 & China	10.5	13.8	12.7	13.0	12.7	13.1	13.4

Source: Direction of Trade Statistics, Yearbook, 1992, IMF.

Table 2.11. Share of ASEAN4 and China Exports Destined to the US

(%)

	1985	1986	1987	1988	1989	1990	1991
Thailand	19.7	18.1	18.7	20.1	21.6	22.6	21.8
Malaysia	12.8	16.4	16.6	17.4	18.7	16.9	16.9
Indonesia	21.7	19.6	19.5	16.2	13.1	13.1	12.0
The Philippines	35.9	35.6	36.1	35.7	37.8	37.9	35.6
ASEAN4	19.9	20.0	20.1	19.7	20.6	19.3	18.5
China	8.5	8.4	7.7	7.1	8.3	8.2	8.6
ASEAN4 & China	15.6	15.1	14.8	14.2	15.5	14.6	14.4

Source: The same as Table 2.10.

Table 2.12. Share of ASEAN4 and China Exports Destined to Japan

(%)

	1985	1986	1987	1988	1989	1990	1991
Thailand	13.4	14.2	15.0	16.0	17.0	17.1	18.3
Malaysia	24.6	23.3	19.5	17.0	16.0	15.3	15.9
Indonesia	46.2	44.9	43.1	41.7	36.0	42.5	36.9
The Philippines	18.9	17.7	17.2	20.1	20.3	19.8	20.0
ASEAN4	31.2	28.3	26.0	24.6	24.4	24.3	23.0
China	22.3	16.2	16.2	16.9	15.9	14.3	14.2
ASEAN4 & China	27.8	23.2	21.7	21.3	20.9	20.0	19.4

Source: The same as Table 2.10.



### III. Economic Consequences of the Single European Market

#### III-A. Formation of the single European market

The EC market was fragmented into twelve small markets by physical and technical trade barriers. Due to the fragmentation of the EC market, large European firms had to establish their factories in each major country of the EC. The fragmentation of the EC market, therefore, was an obstacle to EC suppliers that needed to produce at economies of scale, or to compete with non-EC suppliers. If a supplier wanted to sell his products in another EC state, he had to modify them to comply with the industrial standards or legal regulations of that country.<sup>6)</sup>

The single European market (SEM),<sup>7)</sup> which was accomplished by removing the internal trade barriers at the national level, will stimulate investments for exploiting economies of scale or restructuring industries by replacing inefficient old plants with large scale plants or highly equipped new plants. This will accelerate growth of the EC economy, reduce costs, and consequently enhance the competitiveness of EC industry.

Technical regulations and standardization within the EC increased drastically from about 3500 items in 1988 to over 10000 in 1991.<sup>8)</sup> Thus, European firms have suffered from the burden of internal trade barriers. The removal of internal trade barriers, therefore, is supposed to produce large effect on the EC countries.

#### III-B. Macroeconomic consequences of the SEM

Emerson et al. (1988)<sup>9)</sup> provide us with an analytical framework to evaluate the macroeconomic and microeconomic results from the implementation of the SEM created by the abolition of physical and technical trade barriers. The SEM contains the abolition of frontier controls, the supply effects (eliminating technical barriers and regulations, exploitation of economies of scale, the reduction of X-inefficiency,<sup>10)</sup> and the reduction of monopoly rents), opening up of public procurement, and liberalization of financial services.

Catinat, Donni and Italianer (1988)<sup>11)</sup> estimate the macroeconomic consequences according to the Emerson's framework, supposing a full implementation of the SEM. The macroeconomic consequences of the study, as shown in Table 3, follow that the GDP of the EC total could increase by 1.1 percent, 2.3 percent and 4.5 percent, in the one year, two years and six years after the completion of the SEM respectively, as the cumulative impacts of the SEM. Similarly, GDP implicit deflator would decline by 1.7 percent, 2.9 percent, and 6.5 percent, and import prices will decline by 1.33 percent, 2.12 percent, and 4.96 percent in the one year, two years, and six years after the implementation of the SEM respectively.

#### III-C. Microeconomic view

The SEM would not allow all EC suppliers to enhance their competitiveness against non-EC suppliers. The enhancement of competitiveness would be great in industries which have suffered from severe internal trade barriers in the form of products standards and technical regulations. On the contrary, it may be small in industries

Table 3. Macroeconomic Consequences from the Completion of the SEM for the EC Economy

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
GDP	1.13	2.31	3.16	3.64	4.10	4.52
GDP deflator(=A)	-1.68	-2.93	-4.04	-5.02	-5.84	-6.45
Import prices(=B)	-1.33	-2.12	-3.15	-3.93	-4.49	-4.96
Relative import prices (B-A)	0.35	0.81	0.89	1.09	1.35	1.49

Note: The table gives cumulative percentage deviation from the baseline projection.

Source: Catinat, Donni and Italianer (1988).

which have not suffered from such barriers.

Emerson et al. (1988) summarize the importance of internal trade barriers by industry. The survey concluded that investment goods, especially electrical and mechanical engineering products, public and commercial transport goods, precision and office equipment have suffered from heavy technical barriers due to different safety regulations from country by country. On the other hand, some intermediate goods like refined oil, plastics, metals, paper and printing, artificial fiber, leather, and textiles have not suffered appreciably from technical regulations. Furthermore, footwear, clothing, timber and furniture have not been affected by technical barriers.

Another study by Pratten (1987)<sup>12)</sup> assesses the effects of economies of scale by industry. The study presents that the effects of economies of scale would be substantial in the motor vehicle, transport, chemical, metal, office machinery, paper and printing industries, while they would be small in textiles, footwear, clothing, leather and leather goods.

Langhammer (1990) argues that the SEM would lead a large number of factories enjoying economy of scale and rationalized product lines in the EC. However, this positive effect will be accompanied by a rise in labor costs. Consequently, relatively labor intensive industry will lose its competitiveness in the EC, and production will be shifted to non-EC countries, mainly to developing countries.

These studies are consistent with each other and suggest that the SEM would substantially enhance EC competitiveness for capital intensive industries, but inappreciably for labor intensive industries,<sup>13)</sup> and that the enhancement of EC competitiveness will be small against developing countries of which exports of manufactured goods are mainly labor intensive goods.

## IV. Impact of the Single European Market on ASEAN and China

### IV-A. Elasticities of EC imports from ASEAN and China

In the previous section, we saw that the SEM would accelerate EC economic growth, reduce prices, and consequently enhance competitiveness of EC industry.

This acceleration of economic growth of the EC brought about by the implementation of the SEM would increase extra-EC imports as well as intra-EC trade (trade creation effect). The enhancement of competitiveness would increase intra-EC imports and decrease extra-EC imports, because extra-EC imports would be replaced with intra-EC imports when EC suppliers become more competitive against non-EC suppliers (trade diversion effect). It is sure that the SEM therefore would increase intra-EC trade. However, whether extra-EC imports, that is, exports to the EC would increase vary from country to country. A plausible consequence of the implementation of the SEM would be an increase of intra-EC trade relative to extra-EC imports.

But will the SEM consequently produce a positive effect or a negative effect on the ASEAN4 and China? How much the ASEAN4 and China would benefit or lose from the implementation of the SEM depends on the combined results of trade creation and trade diversion effects.

In measuring those effects, first of all, the income and price elasticities of EC import demand from the ASEAN4 and China are estimated, assuming the following import demand function for the EC<sup>14)</sup>:

$$\log(M/P_m) = a_1 \log Y + a_2 \log(P_m/P) + a_3,$$

where  $M$  is EC imports from each trading partner of the ASEAN4 and China,  $P_m$  is its import prices, and  $Y$  and  $P$  are GDP in real terms and GDP deflator of the EC, respectively. The characters  $a_1$  and  $a_2$ , hence, represent the elasticities of EC import demand with respect to income and relative import prices, respectively.

Due to data availability, export prices (export implicit deflators) of the trading partners were used instead of EC import prices for the estimates of EC import demand.

Table 4.1 summarizes the estimates of EC import demand functions. The estimated elasticities of EC imports with respect to EC' GDP were high for the ASEAN4 and China. Particularly the elasticities of imports from Thailand and China were high of 4.34 and 4.33, respectively. The elasticities of EC imports from Indonesia, Malaysia, and the Philippines were 3.02, 2.92, and 2.66, respectively.

The elasticities of EC imports with respect to the relative import prices were -0.40 for Thailand and -0.54 for Malaysia. The elasticities for Indonesia, the Philippines and China were almost of the same of -0.81, -0.86, and -0.88, respectively.

These estimates of the EC import elasticities<sup>15)</sup> suggest the following implications. First, acceleration of EC economic growth will stimulate exports from the ASEAN4 and China to the EC greatly. Among them, Thailand and China respond sensitively to growth of the EC economy. Secondly, an enhancement of competitiveness of EC industry will affect exports from China, Indonesia, and the Philippines to the EC substantially, while it will affect those of Thailand and Malaysia moderately. Thirdly, Thailand will be the largest beneficiary among the ASEAN4 and China from the establishment of the SEM.

Table 4.1. Estimated Results of Imports of the EC from ASEAN4 and China  
(estimate period is 1970 to 1990)

	a <sub>1</sub> Income elasticity	a <sub>2</sub> Price elasticity	a <sub>3</sub> constant	Rho Statistics	Durbin Watson Statistics	Adjusted R-squared
Thailand	4.34 (10.34)	-0.40 (-2.13)	-17.49 (-5.53)	0.71 (4.86)	1.46	0.98
Malaysia*	2.97 -0.05 (10.15) (-4.21)	-0.54 (-3.91)	-9.96 (-4.61)		1.43	0.90
Indonesia	3.02 (4.91)	-0.81 (-8.11)	-8.64 (-1.85)	0.78 (5.95)	1.38	0.98
The Philippines	2.66 (3.33)	-0.86 (-3.71)	-6.56 (-1.08)	0.89 (10.52)	1.72	0.92
China	4.33 (7.50)	-0.88 (-6.45)	-18.98 (-4.03)	0.79 (5.86)	1.03	0.99

Note: The method of maximum likelihood estimation for regression with autocorrelated errors was applied in the period from 1970 to 1990 except for Malaysia. A coefficient dummy parameter assigning 0 before 1981 and 1 after 1982 was employed for the estimate of EC import demand from Malaysia.

Sources: United Nation, *International Trade Statistics*; OECD, *Foreign Trade by Commodities*; OECD, *National Accounts 1960-1990*, PARIS 1992; NESDB, *National Income of Thailand*; Ministry of Finance, Malaysia, *Economic Report*; Central Bureau of Statistics, *Statistical Year Book of Indonesia*; National Statistical Coordination Board, Philippines *National Accounts of the Philippines*; China, State Statistical Bureau, *Statistical Yearbook of China*, 1992.

#### IV-B. Trade creation and diversion effects

Next, the trade creation and trade diversion effects on the ASEAN4 and China are estimated by simply applying the macroeconomic consequences of the SEM, estimated by Catinat, Donni, and Italianer (1988), to the estimates of EC import elasticities as presented in Table 4.1. Export prices of the ASEAN4 and China are supposed to be constant, assuming that the SEM will not affect prices of products imported from the countries.

Table 4.2 summarizes the estimates of the trade creation effect on the ASEAN4 and China. As shown in Table 4.2, the trade creation effect is expected to be very strong for the ASEAN4 and China. Especially, Thailand and China are expected to increase their exports to the EC by nearly 19.62 percent and 19.57 percent in the six years after the completion of the SEM respectively. Similarly, Indonesia, Malaysia, and the Philippines are expected to increase their exports to the EC by 13.65 percent, 13.20 percent and 12.02 percent, respectively.

Table 4.3 gives the trade diversion effect. The effect will be small for the ASEAN4 and China. Exports to the EC would decrease by 2.58 percent for Thailand, 3.48 percent for Malaysia, 5.22 percent for Indonesia, 5.55 percent for the Philippines, and 5.68 percent for China in the six years after the implementation of the SEM, as cumulative percentage effect.

Table 4.2. Trade Creation Effect of the Completion of the SEM

	(%)					
	year 1	year 2	year 3	year 4	year 5	year 6
(EC GDP)	(1.13)	(2.31)	(3.16)	(3.64)	(4.10)	(4.52)
Thailand ( $a_1 = 4.34$ )	4.90	10.03	13.71	15.80	17.79	19.62
Malaysia ( $a_1 = 2.92$ )	3.30	6.74	9.23	10.63	11.97	13.20
Indonesia ( $a_1 = 3.02$ )	3.41	6.98	9.54	11.00	12.38	13.65
The Philippines ( $a_1 = 2.26$ )	3.01	6.14	8.41	9.68	10.91	12.02
China ( $a_1 = 4.33$ )	4.89	10.00	13.68	15.76	17.75	19.57

Note: Each table gives cumulative percentage effect of the completion of the SEM. The figures are obtained by applying the estimates of EC GDP by Catinat, Donni and Italianer (1988) in Table 3 to the income elasticity of EC imports ( $a_1$ ) in Table 4.1.

Table 4.3. Trade Diversion Effect of the Completion of the SEM

	(%)					
	year 1	year 2	year 3	year 4	year 5	year 6
(EC GDP deflator)	(1.68)	(2.93)	(4.04)	(5.02)	(5.84)	(6.45)
Thailand ( $a_2 = -0.40$ )	-0.67	-1.17	-1.62	-2.01	-2.34	-2.58
Malaysia ( $a_2 = -0.54$ )	-0.91	-1.58	-2.18	-2.71	-3.15	-3.48
Indonesia ( $a_2 = -0.81$ )	-1.36	-2.37	-3.27	-4.06	-4.73	-5.22
The Philippines ( $a_2 = -0.86$ )	-1.44	-2.52	-3.47	-4.32	-5.02	-5.55
China ( $a_2 = -0.88$ )	-1.47	-2.58	-3.56	-4.42	-5.14	-5.68

Note: The figures are obtained, supposing export prices of ASEAN4 and China are constant, by applying the estimates of EC GDP deflator by Catinat, Donni and Italianer (1988) in Table 3 to the price elasticity of EC imports ( $a_2$ ) in Table 4.1.

Consequently, the net trade effect, which is the combined effect of the trade creation and trade diversion effects, as shown in Table 4.4, is expected to lead a significant increase in exports from the ASEAN and China to the EC. Thailand would be the biggest beneficiary in the increase of exports among them from the SEM (17.04 percent increase of exports to the EC in the six years after the completion of the SEM), followed by China (13.89 percent increase), Malaysia (9.77 percent increase), Indonesia (8.43 percent increase), and the Philippines (6.47 percent increase) in the six years after the implementation of the SEM.

Table 4.4. Net Trade Effect of the Completion of the SEM

(%)

	year 1	year 2	year 3	year 4	year 5	year 6
Thailand	4.23	8.86	12.09	13.76	15.45	17.04
Malaysia	2.39	5.16	7.05	7.92	8.82	9.77
Indonesia	2.05	4.61	6.27	6.94	7.65	8.43
The Philippines	1.57	3.62	4.94	5.36	5.89	6.47
China	3.42	7.42	10.12	11.34	12.61	13.89

Note: Calculated from Table 4.2 and 4.3.

These estimates are considered to underestimate the actual net trade effect. Firstly, the EC will not enhance its industry against the ASEAN4 and China. EC suppliers would not reduce their prices appreciably in labor intensive industries, such as clothing, footwear, various kinds of athletic goods, leather goods and furniture which are the major export commodities of the ASEAN4 and China. Thus, the ASEAN4 and China are not supposed to lose their competitiveness against the EC. Secondly, not only EC suppliers but also non-EC suppliers would be affected by the removal of internal trade barriers. With the removal of internal trade barriers, non-EC products can be circulated without any border controls, as EC products are, once they have entered into any EC country. Non-EC suppliers would also benefit from the removal of technical barriers if their products meet EC requirements and standards. For instance, non-EC suppliers can ship their export goods with a large unit. That is, the relative prices (export prices of the ASEAN4 and China to EC GDP deflator) may not rise as much as we supposed in estimating the trade diversion effect. The actual net trade effect of the SEM on the ASEAN4 and China would generally be larger than the estimates as shown in Table 4.4, but less than the figures of the estimated trade creation effect in Table 4.2.

## V. EC Commercial Policy towards ASEAN and China

Nearly 95 percent of the 282 trade barriers was lifted in creating the SEM at the end of 1992. The almost complete appearance of the SEM would produce huge positive effect on the ASEAN4 and China. However, much depends upon EC commercial policy.

The EC, in principle, takes the liberalization of imports as the starting point for the Community rules. That is, achieving greater uniformity in the rules for imports requires the removal of some 6500 national quantitative import restrictions. This liberal EC policy, however, runs the risk of aggravating economic difficulties in certain industries within the EC that have been protected by the import restrictions imposed by the EC member states. Those industries would face serious difficulty in competing with imports from developing countries including the ASEAN4 and China.

Then, the EC has applied EC wide quotas and surveillance measures to certain products originated in countries which are not subject to the constraints of a market economy.<sup>16)</sup> The regulations targeted certain goods like gloves, footwear, table ware, kitchenware, radio receivers, bicycles, and toys originating in China. However, the EC-wide import regime is hindered by the fact that, although the EC member states are required by the Community regulations to take the measures at the Community level, the members are still acting at the national level.<sup>17)</sup> Seven countries have blocked shipments of Chinese shoes and bicycles. The Commission of the European Communities must negotiate with those EC countries which have not obeyed the Community's regulations.

The EC has succeed in abolishing import restrictions at the national level completely, except for few cases such as the Multilateral Fiber Accord (MFA). The EC has extended, for two years from 1993 to 1995, the MFA, subjecting textile exports from 20 countries including the ASEAN4 and China to national quotas.<sup>18)</sup> The EC-wide quotas are to follow in 1995. This measure was announced because the EC could not monitor all textile imports into the EC.

Import restrictions at the national level have partly persisted sometimes in keeping with and sometimes against EC regulations. This arouses fears that import barriers in the EC could be higher for certain sensitive goods. The MFA may be extended beyond 1995, for example. It can not be denied also that the EC may implement import restrictions at the Community level especially for certain sensitive goods since the unemployment problem has been getting worse in the EC.

The ASEAN4 and China have relied on certain sensitive commodities, for which the EC's unemployment problem has been getting worse, for the bulk of their exports to the EC so far.<sup>19)</sup> They must, therefore, diversify their export commodities or eventually face some limitation in the expansion of their exports to the EC.

Lastly, the investment diversion effect of the SEM needs to be considered. The SEM will attract investments from intra-EC and extra-EC regions to the EC primarily for capital intensive industries including service industries. The view that developing countries will no longer attract foreign direct investments after the SEM, however, is not realistic. As long as developing countries maintain their advantage of low labor costs, they will attract foreign direct investments. Foreign direct investments will continue to flow into the ASEAN4 and China.

ASEAN started the ASEAN Free Trade Area (AFTA) at the beginning of 1993 although tariffs were not reduced in 1993 according to the initial schedule. Liberalization of trade, investments, financial markets and capital markets, and privatization programs will be continuously launched in ASEAN. The Chinese government, basically, will proceed with its open door policy and promotion of a market economy.

Due to these efforts, the ASEAN4 and China will succeed in attracting foreign direct investments, and as a result, will achieve high economic growth with a diversification and an increase of exports from the ASEAN4 and China to the EC. European firms, on the other hand, will increase their investments to the ASEAN4 and China targeting their huge markets since they become to regard the four ASEAN countries and China as more significant markets than before. This

will expand EC exports directed to the ASEAN4 and China.

The four ASEAN countries and China will substitute for EC production of relatively labor intensive goods, while the EC will supply capital intensive intermediate and capital goods for the countries. The economic cooperation in trade and investment of the four ASEAN countries and China with the EC will proceed further and the international division between the two sides will be deepened.

## VI. Summary and Conclusion

This study discusses impact of the single European market, which has been formed at the end of 1992, on the four ASEAN countries (Thailand, Malaysia, Indonesia, and the Philippines) and China. The trade creation, trade diversion and net trade effects on the four ASEAN countries and China are estimated by applying the macroeconomic consequences of the single European market on the EC economy, measured by Catinat, Donni, and Italianer (1988), to the import elasticities derived from the demand functions of EC imports originated in the four ASEAN countries and China. The obtained results suggest that the four ASEAN countries and China, especially Thailand and China, would expand their exports to the EC greatly.

How much the single European market actually produce positive effects on those countries, however, depends on EC commercial policy after the implementation of the single European market. The four ASEAN countries and China fear that the EC or the member countries would form higher trade barriers to protect sensitive domestic industries from imports of manufactured goods. The four ASEAN countries and China are, therefore, forced to diversify their export commodities in order to expand exports to the EC. Diversification of manufactured commodities for exports will progress in the four ASEAN countries and China, helped by inflow of foreign direct investment. The EC, on the other hand, will increase investments and exports to the four ASEAN countries and China markets since they are expected to grow at high rates. Economic cooperation in trade and investment between the EC, and the four ASEAN countries and China thus will proceed further and international division between them will be deepened.



## Notes

- 1) Davenport (1990) summarizes EC anti-dumping cases by country by country from 1980 to 1988. It finds out that although anti-dumping initially were directed at Japanese companies, these actions were increasingly aimed at the Asian NIEs, the four ASEAN countries, and China.
- 2) See Commission of the European Communities (1992a).
- 3) Langhammer (1990) concludes that developing countries will gain from a new impulse to a structural change and economic growth in the world economy by the single European market. The gain will be larger than losses because of trade diversion effect.
- 4) Davenport (1990) insists that the pessimistic view, in which trade creation and trade diversion will be roughly offsetting, may be still optimistic for developing countries. The investment diversion will be stimulated by the cost advantage of working within the single market, by the fears of "fortress Europe" and by competition among the members of the EC for foreign direct investment.
- 5) See Far Eastern Economic Review, 8 October 1992.
- 6) See Commission of the European Community, "The removal of technical barriers to trade," *European File*, November 1988.
- 7) The single European market (SEM) is known by many names, the Internal Market, the 1992 Program, Europe 1992, and the EC market integration. The Single European Act which called for a program to create the SEM by the end of 1992 was agreed by all the EC member states in 1987.
- 8) Commission of the European Community (1993a).
- 9) The Commission of the European Communities published "The economics of 1992" in *European Economy*, No. 35, March 1988. The study was conducted under supervision of Paolo Checcini by Michael Emerson assisted by Michel Aujean, Michel Catinat, Phillipe Goybet and Alexis Jacquemin. The report provides analytical framework to evaluate the implementation of the SEM from both macroeconomic and microeconomic views, and presents the estimates of impacts of the completion of the SEM based on macroeconomic models and microeconomic investigations.
- 10) X-inefficiency which covers over-manpower, excess inventory and overhead costs arises when competitive pressure is weak and firms operate far below their potential.
- 11) Catinat, Donni, and Italianer (1988) is one of the background report for Emerson et al. (1988).
- 12) See Emerson et al. (1988).
- 13) Pratten (1987) shows that the expected reduction of production costs is substantial in automobile, aircraft, chemical, man-made fiber, metals, office machinery, electrical engineering, instrument engineering, printing, paper mills, cement, and flat glass industries. It is moderate in rubber, plastics, drink and tobacco, and small or limited in textile, footwear, clothing, leather and leather goods industries.
- 14) Langhammer (1990) used the equation form;  $\log M_r = a_0 + a_1 \log Y_r + a_2 \log$

$(P_m/P) + a_3 \log (P_d/P)$ , where  $M_r$ ,  $Y$ ,  $P_m$ ,  $P$ , and  $P_d$  are imports, GDP, import prices, GDP deflator, and domestic producer prices of the EC respectively. This formula supposes substitution between national products and intra-EC imports as well as substitution between intra-EC imports and extra-EC imports. But, the significant estimated results are hardly obtained from this formula, which make it difficult to argue the price elasticity or trade diversion effect.

- 15) Langhammer (1990) estimated 5.49 for the income elasticity of the EC import demand from developing countries. Such a high elasticity may be owing to the fact that developing countries include the Asian NIEs in his study. According to the author's estimation, the elasticities of the EC imports with respect to total GDP of the EC were 7.01 for South Korea and 6.02 for Taiwan. Matthews and McAleese (1990) estimated that the elasticities of import demand from developing countries for the EC ranged 2 to 4. Davenport (1990) applied the income elasticity of imports of 2 to 3 in calculating trade creation effect on developing countries.
- 16) See Commission of the European Communities (1992b), Proposal for a Council Regulation (EEC) on common rules for imports from certain third countries and repealing Council Regulations (EEC) No. 1765/82, 1766/82 and 3420/83, COM (92) 455 final, Brussels, 10 November 1992. These common rules are to be applied to 22 previously socialist countries.
- 17) See Commission of the European Communities (1993b).
- 18) See Commission of the European Communities (1993c).
- 19) According to *the Business News*, Indonesia, March 10, 1993, exports of Indonesia to the EC have been consisting of sensitive commodities that are sensitive to the manufacturing sector in the EC. IBI SC consultant from the Brussels hired by National Agency for Export Development, Indonesia, has stated that Indonesia should concentrate attention to the exports of non-sensitive products in penetrating the single European market.

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