

*The Role of Korea and ASEAN in APEC**

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I. Introduction

In recent years, a striking feature of the Asia-Pacific region has been dynamic growth of the East Asian economies and growing interdependence of trade and investment among the regions' economies. It is also remarkable that these transformations have been mainly achieved by market forces. A consensus was reached to form a regional institution to enhance these developments and APEC (Asia Pacific Economic Cooperation) was thus created in 1989.

APEC has since evolved into a main framework to manage regional economic relations. It is still a fledgling institution, however, with such diverse and disparate member countries. Its future course is still uncertain and its institutional structure remains to be developed.

The purpose of this paper is to discuss

the role of Korea and ASEAN in APEC. They are by no means dominant powers in the region. However, they have been driving forces behind the recent market-led integration of the region, and could play important role in the shaping of APEC as middle states.

As a first step to explore their roles in APEC and possible areas of cooperation between them, some characteristics of the recent developments in trade and changing patterns of comparative advantage are considered in section 2. Section 3 discusses the evolution of APEC and the leadership of the two major powers : the United States and Japan. In section 4, the respective positions of Korea and ASEAN in APEC are examined and some possible areas of cooperation between them are discussed. Section 5 provides concluding remarks and some suggestions for further cooperation.

* เอกสารประกอบการสัมมนาทางวิชาการ “บทบาทของสาธารณรัฐเกาหลีและไทย ต่อความร่วมมือในภูมิภาคเอเชียและแปซิฟิก” เมื่อต้นเดือนตุลาคม 2537 ปี สถาบันเอเชียตะวันออกศึกษา จัดโดย โครงการเกาหลีศึกษา สถาบันเอเชียตะวันออกศึกษา มหาวิทยาลัยธรรมศาสตร์ ร่วมกับ The Korea Association of Southeast Asian Studies (KASEAS) วันศุกร์ที่ 14 ตุลาคม 2537 ณ ห้องนวัฒน์ โรงแรมอิมพีเรียล

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II. Korea and ASEAN; Changing Patterns of Comparative Advantage

Since the ASEAN¹ economies have adopted an outward looking development strategy in the mid-eighties, they have achieved a remarkable growth in production and exports of the manufactures. Korea, on the other hand, has experienced rising wages since the late-eighties and its traditionally strong, labor-intensive sector appears to be losing its international competitiveness. These developments have naturally caused a growing concern in Korea. It has been argued that ASEAN economies are now closely following the footsteps of Korea and other NIEs (Newly Industrializing Economies) and Korea would soon be caught up by ASEAN dynamism. It would lose its export markets and its export-led growth is doomed. The following discussion is devoted whether this argument is indeed well-founded. We will first discuss in a trade-theoretic framework.

[Theoretical Discussion]

As is well known, the modern theory of international trade is founded on Heckscher-Ohlin model. In this model, there are two factors (capital and labor) and two commodities (capital-intensive and labor-intensive). Factor proportions (capital/labor ratio) determine comparative advantages and patterns of trade. If we consider changing patterns of comparative advantage of Korea and ASEAN in this framework, there is indeed a clash of interests; a faster export-biased growth of ASEAN economies would erode Korea's traditional export markets.

If we consider the abundant endowments of natural resources in most ASEAN countries, however, this model seems to be inadequate to explain the trade patterns in this region. A more appropriate model in this context seems to be the three-factor, three-commodity model originally proposed by Krueger (1977).² In this model, there is an agricultural sector that employs labor and land (specific to agriculture). There are two

manufacturing sectors (labor-intensive and capital-intensive) that employ labor and capital (specific to manufactures). Thus, labor is mobile between all three sectors.

An important distinction of this model relevant in this discussion is that the existence of the third factor, land (natural resources) opens up the possibility of many different paths of development. Because of the intersectoral mobility of labor, labor allocated to manufacturing sector could be varied and so could the capital/labor ratio. Therefore, the land-abundant countries would not have to follow the usual steps of trade development of the land-scarce countries; exporting agricultural commodities at an early stage of development; moving into labor-intensive commodities and then into capital-intensive commodities as capital accumulates. It is also possible that even at an early stage of development, comparative advantage within manufacturing need not be in labor-intensive commodities.³

If we slightly alter this model by redefining land as natural resources and agriculture as natural-resource-intensive sector, the changing patterns of comparative advantage of ASEAN economies could be described as follows. The fall of commodity prices and the adoption of export promotion policies in the eighties had caused a movement of labor out of the resource-intensive sector into manufacturing, which resulted in an upsurge of labor-intensive manufactured exports.⁴ This change could be interpreted as a threatening catching-up process in the two-sector model. However, in a three-dimensional factor and commodity spaces, there could be many expansion paths to develop and therefore need not be a clash of interests.⁵

[Empirical Evidences]

Some tables given below would support this point and reveal complementarity rather than competitiveness between the two economies. Let us first look at the factor endowments. The population density could be used as a proxy for natural-resource endowments (Table 1). Sin-

gapore, of course, is an exception but it can be seen that the other ASEAN countries are abundant in natural resources compared to the resource-poor Korea.

The GDP per capita could be used as a proxy for overall capital/labor ratio (Table 2). The GDP per capita by market exchange rates reveals a considerable differences among the ASEAN countries and Korea. It also indicates that there exists a certain complementarity even in a two-factor, two-commodity model of trade.

The structure of industry also varies widely (Table 3). The primary commodity sector in four ASEAN countries still accounts for a significant share of the economies.

ASEAN economies with the exception of Singapore had relied heavily on the exports of primary commodities (Table 4). The share of manufactured exports has steadily increased but still lower compared to resource-poor Korea. The share of textiles and clothing has risen sharply in ASEAN countries, showing that their exports of labor-intensive commodities have grown substantially.

Turning now to the trade performance of Korea, the phenomenal growth of Korea's exports in the seventies began deceleration in the eighties (Table 5). The average annual growth rates of nearly 12 percent for 1980-92 would be still high compared to the world average, but it is level with ASEAN countries.

Since Korea had begun its export drive in the early sixties, it had been dependent upon markets of the industrialized countries. The United States had taken the lion's share, usually one third of its exports. Diversification of export markets has been a major concern of Korea, and changes are taking place in that direction. The importance of U.S. market declined from 35 percent in 1985 to 22 percent in 1993 (Figure 1). The share of developing economies in East Asia, on the other hand, increased noticeably during the period. The share of ASEAN in Korea's exports rose from 5 percent in 1986 to 11 percent in 1993 and China's share from 0.1 percent to 6 percent. In value terms, exports to ASEAN rose from

1,523 million dollars to 9,339 million dollars and to China from 40 million to 5,151 million dollars.

This trend is further corroborated by changes in trade intensity indices (Table 6).⁶ The intensity index of Korea's exports to the U.S. fell from 1.9 in 1985 to 1.6 in 1992. On the other hand, the intensity index for ASEAN rose from 1.5 in 1985 to 2.1 and for China from negligible to 1.5.

Korea's comparative advantage has been shifting in recent years, and can be seen at a more disaggregated level of factor intensities (Table 7). The share of unskilled-labor-intensive commodities in Korea's exports fell noticeably from 37 percent in 1988 to 31 percent in 1992 due to the rising labor costs in recent years, and the exports of human-capital intensive commodities were also affected. On the other hand, the share of physical-capital-intensive and technology-intensive exports increased reflecting the industrial structure dominated by large-scale firms.

The change in comparative advantage could also be seen by the net export ratio (Table 8).⁷ The ratio ranges from +100 (export only) to -100 (import only), and an increase in the ratio could be interpreted as strengthening of comparative advantage. It shows the overall erosion of competitiveness of Korean exports except technology-intensive sector.

These figures partially justify Koreans' fear of ASEAN dynamism. There is an element of truth in the allegation that Korea is losing its export markets to ASEAN countries. They are competitive in the third market and this might be interpreted as a conflict of interests. On the other hand, this loss could be compensated by the increase of exports to ASEAN as shown above. Furthermore the growing proportion of these exports are intermediate and capital goods, which helps to make a smooth adjustment of Korea's industrial and trade structure.

There remains also another great potential for trade expansion between the two economies. The intraindustry trade, which does not reflect comparative advantage, is growing and

has future potential for expansion (Table 9).⁸ Foreign direct investment would contribute to increasing 'sourcing' type of intraindustry trade, while similar levels of income and demand would increase the intraindustry trade based on the economies of scale. The estimates of income by the purchasing power parity shown in Table 2 reveal that the gap could be narrower and there is a potential for the latter type intraindustry trade.

The above discussions reveal that despite the recent catching-up by the Asean economies, diversity of factor endowments remains wide and complementarity rather than competitiveness still prevails between the two economies. The interdependence has grown and the opportunity for closer trade relations remains. What are then the possible areas of trade cooperation? We will examine this in a wider framework of regional cooperation, APEC.

III. Major Power in APEC : United States and Japan

In his masterly analysis of the interwar period world economy, Kindleberger (1973) has pointed out that the international economic system needs leadership and the lack of leadership was partly responsible for the severity of the Great Depression. In an institution such as APEC with diverse and disparate member countries, leadership is essential to develop institutional structure and manage the complex interdependence. The two obvious countries that can provide such leadership are the United States and Japan. We will examine whether these countries are indeed able and willing to assume leadership role in turn.

[United States]

Since the end of the Second World War, the US had been a world economic power responsible for the management of the international economic system and reluctant to participate in any regional integration movement until the late 1980s. However, it had formed NAFTA (North American Free Trade Area) in the early 1990s and taken initiative in the APEC evolution. The

sudden change of US attitude and its initiative in APEC appears to be motivated mainly by the following concerns.

First, East Asian economic dynamism has exerted strong pull effect on the US economy since the early 1980s. US Pacific trade surpassed its Atlantic trade in the early eighties and the 'Westernization' of America has taken place. The rapidly growing East Asian markets has become a major attraction to the US industries and chronic trade deficits with East Asia has caused major problems to the US economy. The US of course managed these problems in bilateral frameworks. But it is cumbersome and costly sometimes, so the need to establish a regional framework of management has arisen. APEC could become a convenient vehicle.

Second, The US has begun its reciprocity movement since the early eighties to increase its exports by opening up foreign markets. Despite the adoption of outward-oriented policies, some of East Asian markets were heavily protected and became obvious targets. Bilateral trade negotiations have worked but turned out to be politically costly, for the US pressure provoked widespread anti-American sentiments. Furthermore, as the number of target countries for market-opening increases, the bilateral strategy seems to be inadequate because the transaction costs are high and free riders could leap the gains. APEC could be turned into an organization to conduct regional multilateral trade negotiations.

Third, the United States has been concerned about the rising regionalism in Europe and declining hegemonic power in managing the world economy. APEC could be utilized as a regional card to check inward movement of the EU(European Union). In fact, the leaders' meeting in Seattle last year could be seen as a pressure on the EU to conclude the Uruguay Round (Time, 1993:17)

Fourth, Japan has steadily expanded its economic involvement in East-Asian developing economies and created a Japan-centered trade and investment structure. If this integration process continues and results in a *de facto* economic bloc

excluding the US, it would jeopardize US Pacific interests and reduce US influence in the Asia Pacific.⁹ Also, the US was concerned that the creation of NAFTA might provoke the fear of regionalism in East Asia. There was a need to dispel such Asian fears and bind both sides of the Pacific together.

These are probably some motives behind the active participation of the US in APEC. From these Premises, the following US strategies would emerge.¹⁰

First, the US would prefer strengthening of the institutional structure of APEC. Meetings of various levels including summits have been proposed by the US and separate meetings of trade, finance, environmental ministers have also been proposed to discuss various issues.

Second, the US would likewise prefer a formal institutional structure rather than a loose consultative forum. In this legal framework, the US objective of trade liberalization could be effectively pursued and implemented.

Third, the US agrees to adopt the MFN (Most Favored Nations) principle of the GATT (General Agreement on Tariffs and Trade). However, the US is reluctant to allow free riders and in favor of using "*temporarily conditional MFN*" as a leverage against outsiders such as the EU.

Fourth, the US apprehension about Japan-centered, all-Asian economic bloc has been one of the main motives for the US participation in APEC. Hence, the US has strongly opposed the EAEC (East Asian Economic Caucus) concept despite the assurance that it would be a loose consultative forum to discuss economic problems of East Asia.

Given these paramount concerns and vital interests, the US is expected to play strong leadership in APEC. However, US leadership appears to be limited for the following reasons.

In the early postwar period, the US was able to dominate international economic systems by providing security umbrella politically and markets and capital economically. In the post-Cold War era, even though the US is still a unitary

superpower in military terms, the need to depend on the US militarily has been diminished and political factors would have limited influence on economic problems.

In the past, the US foreign economic policies, such as generous access to US markets were used as a tools of foreign policy. Nowadays, they seem to be employed as a means to solve domestic economic problems. The new aggressive reciprocity movement insisting bilateral trade balance is the case in point. The US is also one of the largest debtor countries. Lacking financial capacity, the US is unwilling to take the burden of providing international public goods unilaterally and demands burden sharing. The importance of the US market is diminishing in East Asia and the dependence could be reversed since the East Asian markets are expected to grow faster than the US market. All these changes indicate that the US is not in a position to play unitary leadership in APEC.

[JAPAN]

Although Japan was an important founding member of APEC, it has not played an active role commensurate with its economic might in Asia-Pacific. This passivity is curious considering its huge stakes in the region's economies. APEC markets now account for two-thirds of Japan's exports and foreign direct investment. Japan has also established an elaborate web of trade and investment in the region. Japan mainly exports capital and intermediate goods to neighboring countries of NIEs and ASEAN and imports raw materials and components produced mainly by Japanese affiliates. These countries, in turn, exports manufactured goods to the markets of the industrialized countries. This triangular pattern of trade has, of course, helped the export expansion of these developing countries as well as structural adjustment of the Japanese economy.

This trading pattern has a critical weakness, however, for it is dependent on the markets external to the system. It is bound to create trade imbalances, which frequently lead into trade disputes. It is not a self-generating system, so it may

not be sustainable. Since North America is the most important market in this pattern, a well-functioning regional institution binding both sides of the Pacific would be beneficial to sustain the system. Yet, Japan has been passive and reluctant to assume leadership role open to it. Three possible explanations for this behavior are given below.

First, the persistent tensions over trade imbalance with the US have prevented Japan to take a leading role in close collaboration with the US. Since some causes of this imbalance are structural problems, the prospect for improvement remains uncertain.

Second, if Japan is to assume leadership role, it has to take a larger share of the burden necessary for the maintenance of the system. One such obvious example is to provide markets for the regions' manufactured exports. But the Japanese market is still relatively closed as could be seen by the following figures (Ravenhill, 1993:121) : exports of manufactured goods to Japan in total exports of APEC was 44 percent in 1990, a rise from 23 percent in 1980. The comparable figures for the US was 67 percent in 1980 and 82 percent in 1990. Japan's index of intraindustry trade among APEC was 0.34 in 1990, considerably lower than the US (0.59) and other resource-poor countries such as Korea (0.51) and Taiwan (0.51). As the Yen appreciates and Japanese overseas investment increases, Japan's imports of manufactures would increase. But the structural change seems to be slow and insufficient.

Third, the political structure of Japan seems to be inadequate to conduct an assertive diplomacy. Emphasizing that the domestic structures are important determinants of foreign economic policies, Pempel has remarked that a coalition of Liberal Democratic Party, bureaucracy and big business had been instrumental to Japan's successful foreign economic policies (pempel, 1978:139-90). But the Japanese polity has been undergoing a change in recent years and still in confusion. In the absence of strong political leadership, the foreign economic rela-

tions are increasingly managed by decentralized bureaucracy. Under the circumstances, it would be preposterous to assume that Japan would take leadership role in APEC.

IV. Middle States Cooperation: Korea and ASEAN

If neither the US and nor Japan could assume leadership, alone or in collaboration, some form of collective leadership must be developed that can stabilize the system. Kindleberger (1973:305) is skeptical of the collective leadership for the world economic system. However, for a regional institution such as APEC, collective leadership or multiple leadership as termed by Keohane and Nye (1977), could ensure stability in the system, if collective economic security in the Asia-Pacific is accepted as a principle. On the basis of this principle, it could be designed as a positive-sum game to all members. It is here that active participation and cooperation by middle states are required and the role of Korea and ASEAN could be found.

[ASEAN]

Since its inception, ASEAN has grown to such a stature that it now plays a pivotal role in the regional affairs and it seems highly inappropriate to call it middle states. Moreover, ASEAN economies have shown such dynamism in recent years that they have been a main force behind the market integration process in the Asia-Pacific region.

The emergence of APEC at the height of ASEAN dynamism posed a challenge to its cohesion and provided an opportunity to fuel its dynamism (Tan et al, 1992) : it was cautious fearing asymmetrical dependence, heightened tension and North-South polarization within APEC; it was practical recognizing the need to participate in a wider forum for its outward-oriented growth. Eventually, it decided to participate actively on the following principles and strategies.

First, ASEAN has adopted "*open regionalism*" as a basic principle of APEC. The

principle reflects its concern that a liberal global trading environment is essential for its outward-oriented growth strategy. It would oppose EU-type trade bloc or community concept. Unlike the US position that conditional MFN principle could be applied as a negotiating leverage, it is against the idea on the ground that it would lead to futile interblock confrontation.

Second, as to the institutional structure of APEC, ASEAN has proposed that its should remain a loose consultative forum like OECD (Organization for Economic Cooperation and Development). This is in marked contrast to the US attempt to build a strong institutional structure. Clearly ASEAN is aware of the danger that APEC would be dominated by major powers issuing mandatory directives.

Third, ASEAN has emphasized the principles of equality, equity and mutual benefit, taking into account the differences in stages of development and socio-political systems of the member countries. It follows from this principle that APEC should pay more attention on developmental issues such as human resource development and transfer of technology.

It also follows from above principles that APEC should take gradual approach in strengthening the institution and implementing its agenda. This slow track approach is also in contrast to the US approach.

The differences in principles has become manifest in building APEC structure and setting its agenda. For instance, import liberalization is an agenda that the US is greatly concerned. ASEAN is also committed in the principle of free trade and has in fact implemented liberalization measures unilaterally in recent years. It has been reported, however, that both sides disagreed on how to proceed this process (Far Eastern Economic Review, 1994:77) : The US tries to turn APEC into a formal negotiating body for trade liberalization while ASEAN views it as a club for promoting regional growth by more diversified means; the US wants to set a timetable for liberalization while ASEAN prefers an open timetable for its implementation.

A more controversial issue is the EAEC (East Asian Economic Caucus) concept. The concept has been toned down since it was first proposed by Malaysia. Its proponent, Ariff argues that it is not a trade bloc and should be taken as an insurance policy in case Western Europe and North America insulate themselves (Star, 1994). Nevertheless the US has expressed strong opposition to the idea and the concept has not yet materialized.

These differences notwithstanding, ASEAN has strongly supported APEC cause and actively participated in its evolution. As the most influential middle power in APEC, ASEAN has at times taken initiatives and applied its diplomatic dexterity to stabilize the APEC system. It seems that ASEAN countries have acquired considerable experiences in the course of ASEAN evolution. In the absence of strong leadership in APEC, such efforts have contributed for the stability of the system but they could become more effective if other middle states cooperate. Let us now consider Korea's position and possible areas of middle states cooperation.

[Korea]

As korea has grown increasingly dependent on the regional economies, it has welcomed the proposal to create APEC and actively participated since its inception. Korea, however, does not belong to any subregional groupings and without coalition it could only play some limited roles. Nevertheless as a forerunner of developing countries that have pursued outward-oriented growth strategy, it could contribute to building an appropriate structure for APEC by performing a mediating role among diverse member nations. Its positions concerning some APEC issues could be described as follows.

First, Korea has supported the principle of open regionalism. As Korea has been benefited greatly by the liberal trading system, it is of vital importance for the Korean economy to maintain the system. Since Korea is a small country, it is also not in a position to use the conditional MFN principle as a bargaining

leverage. Rather, Korea should adopt the unconditional MFN as a principle and thus contribute to strengthening of the liberal international trading order.

Second, as to the institutionalization issue of APEC, if a formal institutional structure could provide a multilateral framework to conduct trade negotiations based on rules rather than power, it should be preferred to informal structure. Korea had experienced numerous bilateral trade negotiations with such powerful trade partners as the US or EU. The outcomes were generally unfavorable to Korea as expected from their bargaining positions. If a formal structure with independent international bureaucracy could be established, it would enhance rules-based trading system and APEC could be a better place for Korea to discuss trade disputes.

Third, let us examine Korea's position on the import liberalization issue. Korea was once accused as a free rider and a mercantilist, for despite its success in export drive, it had maintained a considerable import barriers until the early 80s. Since then, partly on its own initiative, and partly under heavy pressure from the US, it has considerably reduced its import barriers. Its average statutory tariff rates were reduced to 8.9 percent in 1993 from 23.7 percent in 1983. Import liberalization ratio which is the proportion of items subject to automatic import approval was raised from 80 percent in 1983 to 98 percent in 1993. Indeed, Korea has already fulfilled tariff cuts required by the Uruguay round far ahead of the schedule.

There remain some formal and informal barriers, however, and one such example is protection of agriculture. Protection of rice and some agricultural imports remains still high even after the conclusion of the Uruguay Round. There are some economic and political reasons for it. Although industrialization and urbanization have steadily reduced employment in agricultural sector, it still accounts for 15 percent of total employment. Most of them are small farmers dependent on rice production.

Attempts to reduce agricultural sector

have not been successful because almost half of the remaining farm population are over fifty years old and thus lacking intersectoral mobility. It has also been politically difficult because they belong to lower income group and reducing their income without adequate compensation would have caused considerable discontent. Thus Korea has obtained a grace period for tariffication of rice imports and only 4 percent of the Korean market would be open until 2005 at the Uruguay Round. Unless drastic measures are found to reduce the side effects of structural adjustment and political resistance, agricultural protection would remain sensitive issue for Korea. If APEC starts regional trade liberalization, the issue would certainly be raised. How could Korean policy makers face this pressure seems to be an open question.

Fourth, Korea has not yet openly supported the EAEC concept. Even if Korea could understand the logic behind the concept, it would still be faced with the following dilemma: in the face of strong opposition by North America and Australasia, it would be in a difficult position to support the concept considering its strong political and economic ties with these countries; historical fears of Japan's domination still linger in their minds, so EAEC may not be a readily acceptable idea.

Last, as to the developmental issues Korea should actively support promoting these measures, because sustaining growth in East Asia including China and Indochina would greatly benefit Korea. Its experiences as a NIEs pursuing outward-oriented growth strategy could be a valuable contribution to other developing economies.

[Scope for Cooperation]

The foregoing discussion has revealed that Korea and ASEAN have much common interests in APEC. To recap:

- a) creating a global liberal trading order and maintaining continued access to the markets of the industrialized countries;

- b) achieving increased discipline on contingency protectionist measures by establishing rules-based trading system;
- c) preventing fragmentation of the world economy into "*Fortress Europe*" or "*Fortress America*";
- d) Implementing unilateral or regional trade liberalization taking each nation's stages of development into account;
- e) Facilitating regional trade further by lowering of informal barriers and providing regional infrastructures;
- f) promoting economic reforms in the transition economies of the region.

There are also some new issues that are likely to be discussed in APEC of GATT such as environmental standard or workers' rights. Although completion of the Uruguay Round is expected to enhance discipline in the world trading system, trade policies are usually dominated by domestic concerns and pressures by special interest politics. If there remain considerable differentials in growth rates between industrial and East Asian economies, protectionism would reassert itself in the post-Uruguay Round trading environment. In these circumstances, it could be beneficial for middle states to discuss these issues in the APEC framework rather than

they are confronted with agreements struck among major powers in a wider framework. These and other common interests could be pursued independently but a better strategy would be cooperation among middle states.

V. Concluding Remarks

Contrary to some allegations that ASEAN dynamism is eroding Korea's export markets, the foregoing discussion has established that there remains strong complementarity between these economies. As dynamic open economies, they have much common interests in a liberal trading system conducive for their outward-oriented strategy. APEC could become an effective framework to ensuring stability of the region's trading system.

In the absence of dominant powers to lead APEC, active participation and cooperation by middle states such as Korea and ASEAN would be essential for the stability of the system. Managing interdependence is of course complex affair and they are not powerful enough to take the responsibility. However, ASEAN is experienced in managing regional cooperation while Korea is experienced in negotiations with major powers. By pooling their experiences and resources, they could become an effective stabilizer in APEC.

Table 1 Population Density

(thousand per sq.km)

Country	Population density
Singapore	2,800
Malaysia	56
Thailand	113
Philippines	214
Indonesia	97
Korea	441.4

Source : World Bank (1994)

Table 2 GDP per Capita

(dollars, 1992)

Country	market exchange rate	PPP estimates
Singapore	15,730	16,720
Malaysia	2,790	8,050
Thailand	1,840	5,890
Philippines	770	2,480
Indonesia	670	2,970
Korea	6,790	8,950

1) PPP : purchasing power parity

Source : World Bank (1994)

Table 3 Structure of Production 1992

(percentages)

Country	Agriculture & Mining	Industry	Service
Singapore	0	39	61
Malaysia	27	35	38
Thailand	13	36	51
Philippines	28	32	40
Indonesia	34	26	40
Korea	8	44	48

Source : ISEAS, Regional Outlook 1994 - 1995

The Bank of Korea, Economic Statistics Yearbook (1994)

Table 4 Structure of Merchandise Exports

(percentages)

Country	Primary Commodities		Manufactures		Textiles & Clothing	
	1970	1992	1970	1992	1970	1992
Singapore	70	22	30	78	5	5
Malaysia	93	39	7	61	1	6
Thailand	92	34	8	66	1	17
Philippines	93	27	2	73	1	10
Indonesia	98	53	2	47	0	18
Korea	24	7	76	93	36	20

Source : World Bank (1994)

Table 5 Growth of Exports

(average annual growth rate)

Country	1970 - 1980	1980 - 1992
Singapore	4.2	9.9
Malaysia	4.8	11.3
Thailand	10.3	14.7
Philippines	6.0	3.7
Indonesia	7.2	5.6
Korea	23.5	11.9

Source : World Bank (1994)**Table 6 Intensity Indices of Korea's Exports**

	ASEAN	U.S.A.	JAPAN	CHINA
1985	1.5	1.9	2.3	
1992	2.1	1.6	2.4	1.5

Source : UN International Trade Statistics Yearbook (1992)

Table 7 Composition of Korea's Exports 1988, 1992

(percentages)

	1988	1992
natural resource intensive	10	9
unskilled labor intensive	37	31
physical capital intensive	13	16
human capital intensive	21	19
technology intensive	19	25

1) The Commodity classification of the factor groups follows UNCTAD method.

Source : Calculated by Park (1994) using Korea Trade Association Data**Table 8 Net Export Ratio 1988, 1992**

	1988	1992
natural resource intensive	-37	-53
unskilled labor intensive	73	61
physical capital intensive	-16	-17
human capital intensive	58	44
technology intensive	-29	-24

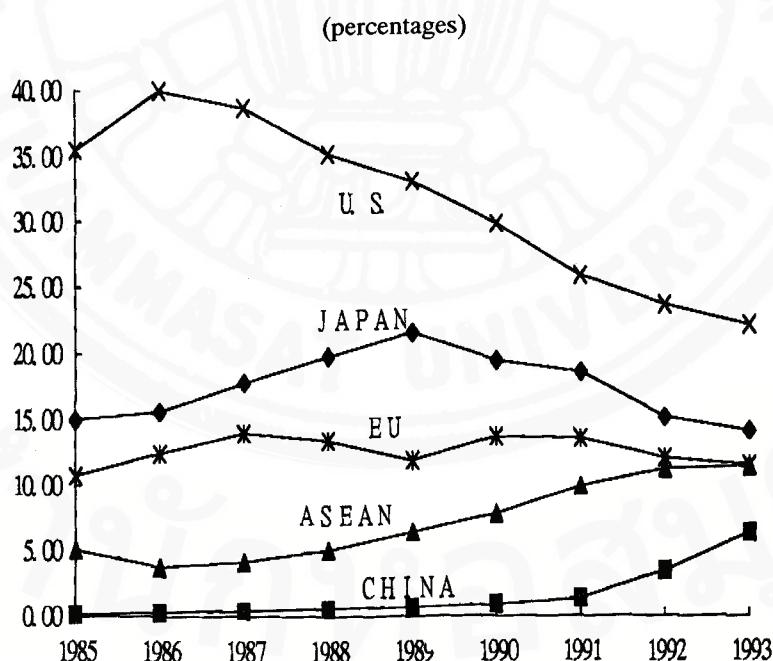
Source : Calculated by Park (1994) using Korea Trade Association Data

Table 9 Intraindustry Trade Indices, APEC only

(manufactures 1980, 1990)

Country	1980	1990
Singapore	0.66	0.74
Malaysia	0.47	0.62
Thailand	0.30	0.42
Philippines	0.19	0.44
Indonesia	0.8	0.17
Korea	0.41	0.51

Source : Ravenhill (1993)

Figure 1 Major Destination of Korea's Exports

Source : Korea Foreign Trade Association (1994)

Footnotes

1. Discussing trade patterns in this section, ASEAN refers to ASEAN-4 excluding Singapore and Brunei.

2. This model was subsequently developed and applied by, among others, Garnaut and Anderson (1980), Learner (1987) and Suh (1994).

3. Australia is an obvious example

4. See Suh (1994)

5. See Learner (1987)

6. The intensity index (I_{ij}) is defined for country i's exports to country j as the share of i's exports going to j (X_{ij}/X_i) relative to the share of j's imports (M_j) in world imports net of i's imports ($M_w - M_i$)

$$I_{ij} = \frac{X_{ij}}{X_i} - \frac{M_j}{M_w - M_i}$$

7. Net export ratio is defined as:

$$NER = \left[\frac{X_{ij} - M_{ij}}{X_{ij} + M_{ij}} \right] \times 100$$

8. Intraindustry trade is defined as :

$$IIT_i = I \frac{X_i - M_i}{X_i + M_i}$$

9. Newsweek ran a cover story under the headline; "Sayonara, America : Japan is Building an Asian Yen Block and the United States is the big loser", (Newsweek, 1991).

10. See Bergsten (1994)

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