

21

## Prospects for Economic Cooperation in the Yellow Sea Rim Bloc and Its Future Direction

In—Joung Hwang

### BACKGROUND

Lately economic cooperation in Northeast Asia, which includes the Korean Peninsula, China, Commonwealth of Independent States (CIS), and Japan, has been recently paid special attention and has become an important mutual interest. Specifically, the Chinese idea for the formation of a Northeast Asia Economic Bloc, the Japanese concept of the establishment of a Japan Sea Rim Economic Bloc, and the CIS's plan for a Greater Vladivostok Free Economic Zone are all currently under examination. The common characteristic in these plans is the promotion of economic cooperation in the region, although there are slight differences in the area included in each project. The factors which have necessitated intra-regional cooperation in Northeast Asia are also worth mentioning.

The world has been progressing toward amicable reconciliation and globalization as the end of the Cold War draws near, and the international order is entering a reorganization stage in which national interests are becoming the main consideration. At the same time, the world has shown signs of moving toward regionalism: the Americas, the European Community, and the Asia—Pacific region centered on Japan. These trends have activated discussion on how to establish new regional bodies that can cope with the new regionalization.

Considering the improvement of political relationships within the region, a new political order, which could replace the past antagonism between East and West, is required. Also, the opening of each other's markets and the activation of specialization between countries are essential to further economic development in the region.

With regard to economic cooperation in Northeast Asia, two different concepts have been proposed so far—one is an economic cooperation centered on the East Sea Rim and the other on the Yellow Sea Rim.

Economic cooperation centered on the East Sea Rim has gained worldwide attention since the recent development of two major project proposals—the "Development Program for the Golden Delta of Northeast Asia"<sup>1</sup> and the "Tumen River Basin Development"—presented by the United Nations Development Program

(UNDP) as a major cooperative projects in Northeast Asia. The UNDP decided to give priority to the Tumen River Basin Development Project. In addition, North Korea presented its "Development Program for the Sonbong Economy and Trade Zone"<sup>2</sup> in a conference held in Ulan—Bator, Mongolia in July 1991. This series of development proposals has prompted significant progress in the discussion of economic cooperation in the region. In my understanding, these countries involved, including South and North Korea, China, CIS, Japan, and Mongolia, have formed a Program Management Committee under the auspices of the UNDP and are seeking concrete measures to deepen economic cooperation in the East Sea Rim.

In contrast to cooperation in the East Sea Rim, cooperation in the Yellow Sea Rim Cooperation, which is narrower in scope and size, is being developed carefully in the form of a transitional long-term concept. Geographically, the Yellow Sea Rim covers the west coast of the Korean Peninsula, four provinces in (Liaoning, Hebei, Shandong, Jiangsu) and three cities (Beijing, Tianjing, Shanghai) in China, as well as Kyushu in Japan. The proposal for cooperation in the Yellow Sea Rim, can be understood as a faction of the Northeast Asia Economic Bloc rather than as an independent economic bloc.<sup>3</sup> Whereas cooperation in the East Sea Rim is being considered at the governmental level, cooperation in the Yellow Sea Rim is being discussed only among scholars.

Economic cooperation in the East Sea Rim has reached a stalemate regarding the funds to be raised for the project, the selection of the area being developed, and detailed cooperation methods. On the contrary, cooperation in the Yellow Sea Rim has enjoyed good bilateral economic progress among the involved countries, and the possibility of forming an economic bloc is high.

This paper reviews the feasibility of cooperation in the Yellow Sea Rim, discusses the ways to remove the difficulties, and suggests the most desirable direction for this proposal.

## THE FOUNDATION OF ECONOMIC COOPERATION IN THE YELLOW

The main consideration for economic cooperation in a certain region is the economic complementarity, which depends upon the economic development stages, the mutually beneficial marketability, and the complementary creation of demand.

As the main economic indicators in Table 21.1 show, there exist significant differences in the sizes of economy and the degree of dependence on external sectors among the countries. Japan's per capita GNP is more than US \$20,000, compared with less than US \$400 in China. The difference in industrial structures can be seen in Table 21.2. The portion of tertiary industry in Japan is around 61 percent, while North Korea and China exhibit a relatively heavy dependence on primary industry. South Korea is in the transition period, moving toward a more advanced industrial structure.

The complementarity in each country's factor endowment is shown in Figure 21.1. China and North Korea have the comparative advantage in natural resources and labor, whereas South Korea and Japan have it in technology and capital.

Economic cooperation in the Yellow Sea Rim has proven quite active, as we can

Table 21.1 Main economic indicators of Yellow Sea Rim countries (1990)

Classification	S. Korea	N. Korea	Japan	China
Population (millions)	43.52	21.72	123.54	1,143.33
GNP (billions of dollars)	233.4	23.1	2,936.4	364.8
Per capita GNP (dollars)	5,470	1,064	23,780	324
Exports (billions of dollars)	65.0	2.0	286.9	62.1
Imports (billions of dollars)	69.8	2.6	234.8	53.4
Trade value/GNP (%)	57.8	19.9	17.8	31.7

Sources: "Main Statistical Indicators," National Statistical Office, Republic of Korea, 1991. "Evaluation of North Korean Economy," Reunification Bureau, Republic of Korea, 1991.8. *Economic Statistics Annual*, The Bank of Japan, 1991. *Statistical Yearbook of China*, The State Statistical Bureau, China, 1991.

Table 21.2 Industrial structure of Yellow Sea Rim countries (1990)

	Unit: %			
	S. Korea	N. Korea	Japan	China
Primary	9.5	26.8	2.4	23.4
Secondary industry	44.2	56.0	36.9	52.9
Tertiary industry	46.3	17.2	60.7	23.6

Sources: "Main Statistical Indicators," National Statistical Office, Republic of Korea, 1991. "Evaluation of North Korean Economy," Reunification Bureau, Republic of Korea, 1991.8. *Annual Report on National Accounts*, Economic Planning Agency, Japan, 1992. *Statistical Yearbook of China*, The State Statistical Bureau, China, 1991.

Figure 21.1 Factor endowment of the Yellow Sea Rim countries

	Natural	Labor force	Technology	Capital	Management know-how
China	⊙⊙	⊙⊙	x	x	x
N. Korea	⊙	⊙⊙	x	x	x
S. Korea	x	x	⊙	⊙	⊙
Japan	x	x	⊙⊙	⊙⊙	⊙⊙

Note: ⊙⊙ denotes "Abundant," ⊙ denotes "Moderate," and x denotes "Scarce."

see from intra-trade in the past decade. The annual average growth rate of intra-region trade among South and North Korea, Japan, and China from 1985 to 1990 was 8.5 percent.

In particular, Korea's annual average growth rate of intra-trade during the same period was particularly high at 21.6 percent, which is significantly high (Table 21.3).

Table 21.3 Intra-regional trade among Yellow Sea Rim countries

Units: millions of US Dollars, %

Classification		1985	1990	Average annual rate of increase
N. Korea	Exports	0	1	—
	Imports	0	12	—
Japan	Exports	4,543	12,638	22.7
	Imports	7,560	18,574	19.7
China	Exports	683	1,553	17.9
	Imports	478	2,268	36.5
S. Korea	World Exports	30,283	65,016	16.5
	World Imports	31,136	69,844	17.5
Total intra-regional trade	Exports	5,226	14,192	22.1
	Imports	8,038	20,854	21.0
	Share	21.6	26.0	—
S. Korea	Exports	0	12	—
	Imports	0	1	—
Japan	Exports	179	300	10.9
	Imports	247	176	-6.6
China	Exports	257	125	-13.4
	Imports	231	358	9.2
World	Exports	1,772	2,020	2.7
	Imports	1,770	2,620	8.2
Total intra-regional trade	Exports	436	437	0.0
	Imports	478	535	2.3
	Share	25.8	20.9	—
S. Korea	Exports	7,097	17,457	19.7
	Imports	4,092	11,707	23.4
N. Korea	Exports	247	176	-6.6
	Imports	179	300	10.9
China	Exports	12,477	6,130	-13.2

The average proportion of each country's intra-region trade to world trade showed a tendency to decrease, from 22.5 percent in 1985 to 18.6 percent in 1990. In the case of South Korea, the proportion of intra-region trade to world trade has increased from 21.6 percent in 1985 to 26.0 percent in 1990. However, in view of Japan's decreased portion of intra-region trade to world trade, a more positive role for Japan is needed to activate economic cooperation in the Yellow Sea Rim.

Table 21.3 (continued)

Classification		1985	1990	Average annual rate of increase
Japan				
	Imports	6,483	12,054	13.2
World	Exports	175,638	286,948	10.3
	Imports	129,539	234,799	12.6
Total intra-regional trade	Exports	19,821	23,763	3.7
	Imports	10,754	24,061	17.5
	Share	10.0	9.2	—
S. Korea	Exports	478	2,268	36.5
	Imports	683	1,553	17.9
N. Korea	Exports	231	358	9.2
	Imports	257	125	-13.4
Japan	Exports	6,109	9,011	8.1
	Imports	15,035	7,588	-12.8
China				
World	Exports	27,364	62,090	17.8
	Imports	42,252	53,350	4.8
Total intra-regional trade	Exports	6,818	11,637	11.3
	Imports	15,975	9,266	-10.3
	Share	32.7	18.1	—

Sources: "Main Indicators of Korean Economy," Korea Foreign Trade Association, Republic of Korea, 1991. "North Korea Brief," Reunification Bureau, Republic of Korea, 1991. "White Paper," Japan, MITI, 1986 and 1991. Statistical Yearbook of China. The State Statistical Bureau, China, 1991.

The commodity trade structure of each country illustrates the relatively strong complementarity among the countries as Tables 21.4, 21.5, and 21.6 reveal. Specifically, Japan has the comparative advantage in high-tech, heavy, and chemical industries, which are capital-intensive; South Korea's advantage is in manufacturing industry, and China's is in primary and labor-intensive industries. Also, North Korea is believed to have a comparative advantage in labor-intensive industries, similar to China.

The current state of foreign direct investment (FDI) in the region could be another good barometer for measuring the degree of each country's specialization. Korea's FDI to China was slow until 1989. However, after a rapid increase starting in 1990, FDI tripled in 1991 when compared with the previous year (Table 21.7). The investment protection agreement reached between South Korea and China in May 1992 is expected to pave the way for more active FDI between them. After the conclusion of an investment protection agreement in 1988, Japan's FDI to China increased steadily—a 75.7 percent increase in numbers and a 77.7 percent increase in amount in 1991 over the previous year's.

Table 21.4 Export and import shares of Yellow Sea Rim countries by commodities  
Unit: %

SITC classification	S. Korea		N. Korea		Japan		China	
	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports
0	3.5	5.0	8.89	11.1	0.5	13.5	11.7	7.1
1	0.2	0.3	0.1	0.6	0.1	1.4	0.6	0.3
2	1.4	14.2	8.5	8.0	0.7	15.3	8.0	8.2
3	1.1	12.4	7.9	32.1	0.0	21.1	8.1	2.8
4	0.0	0.3	0.0	1.4	0.0	0.2	0.2	1.5
5	3.3	11.7	2.7	6.4	5.3	7.3	6.1	12.8
6	22.1	15.7	37.5	16.0	12.9	14.2	20.8	20.9
7	37.8	34.4	7.7	19.7	70.4	13.6	7.4	30.8
8	30.4	5.8	26.3	3.7	8.3	12.4	20.5	3.5
9	0.2	0.2	0.4	1.0	1.4	1.1	16.6	12.2
Total	100	100	100	100	100	100	100	100

Note: SITC 0; food and live animals chiefly for food

- 1; beverages and tobacco
- 2; crude materials inedible, except fuels
- 3; mineral fuels, lubricants and related materials
- 4; animal and vegetable oils, fats and waxes
- 5; chemicals and related products, n.e.s.
- 6; manufactured goods classified chiefly by material
- 7; machinery and transport equipment
- 8; miscellaneous manufactured articles
- 9; commodities and transactions not classified elsewhere in the SITC

Sources: Same as Table 21.3. North Korea's data was calculated from the NEA—KIEP Trade Matrix.

According to an investigation of South Korea's FDI to China based on industrial sectors, the labor-intensive manufacturing industry is the most dominant sector; on the other hand, Japan's FDI to China is most active in fabricated metal products and machinery followed by the service industry.

In general, one of the main factors deciding FDI allocation is the benefit of transferring less competitive or declining industries abroad in order to compensate for the lost competitiveness usually due to increasing labor costs, unless FDI is not directly related to the development investment.

The high proportion of labor-intensive industry in Korea's FDI to China reflects the fact that Korea is undergoing an industrial restructuring period, shifting from labor-intensive products to capital—and technology-intensive products. Considering each country's comparative advantage of factor endowments, an inflow of labor-intensive products from China could help accelerate the reallocation process of productive factors from labor-intensive industries to high-tech industries. Also, China could improve the production ability and cut down production costs by employing the production facilities supplied by Korea or Japan. In addition, Japan's

Table 21.5 Korea's export and import shares of Yellow Sea Rim countries by commodities

SITC classification	Unit: %			
	Japan		China	
	Exports	Imports	Exports	Imports
0	10.8	0.3	0.7	14.6
1	0.1	0.1	0.1	0.1
2	3.2	2.2	15.4	13.9
3	4.0	2.5	0.5	16.9
4	0.0	0.1	0.0	0.1
5	3.9	13.5	17.4	9.4
6	21.7	17.1	42.1	40.8
7	23.1	55.7	21.3	1.9
8	32.5	8.4	2.6	2.3
9	0.7	0.2	0.0	0.1
Total	100	100	100	100

Source: Korea Institute for Industrial Economics and Trade (KIET) data base.

provision of capital goods and high-tech components to Korea and China could contribute to the formation of diversified specialization in the region.

The foundation of economic cooperation in the Yellow Sea Rim based upon this analysis of the economic structure and the current state of economic cooperation among the involved countries, is very encouraging. Considering that China is seeking for ways to speed up economic development through international specialization, and that North Korea is greatly interested in the open door policy, the formation of the Yellow Sea Rim Economic Cooperation is timely. The expected effects of intra-regional cooperation could be optimized through more active participation in mutually beneficial specialization.

## THE POSSIBILITY OF COOPERATION AND IMPEDIMENTS

### Possibility of Cooperation

As pointed out in the previous chapter, the Yellow Sea Rim Bloc has the foundation and many advantageous conditions which could facilitate the development of economic cooperation. First of all, inter-industrial cooperation can be pursued easily.<sup>4</sup> Each country in the region has a different ability in the production of specific goods and different tastes of demand because of the differences in their industrial structures, economic development stage and factor endowments. The state of industrial development in each country is shown in Figure 21.2.

Industries on the vertical axis of Figure 21.2 are classified by the degree of factor intensity, the degree of technological difficulty, and the degree of product demand. Moving upward on the vertical axis means that the industries are more intensive on

Table 21.6 Japanese export and import shares of Yellow Sea Rim countries by commodities

Unit: %

Exports			
	S. Korea	N. Korea	China
Foodstuff	0.3	1.9	0.4
Crude materials and fuels	4.5	1.6	1.8
Light-industry products	10.9	32.3	18.3
Textiles	4.1	15.9	9.9
Non-metallic mineral manufactures	2.1	2.3	2.3
Other light products	4.8	14.2	6.1
Heavy industry products	82.5	59.5	78.0
Chemicals	14.0	10.0	12.3
Metals	11.0	9.3	19.5
Machinery and equipments	57.6	40.1	46.2
Re-exports and special treatment product	1.7	4.7	1.5
Imports			
	S. Korea	N. Korea	China
Foodstuff	12.6	32.0	16.1
Crude materials	2.1	9.0	9.0
Mineral fuel	4.0	8.4	24.2
Processed products	79.1	50.1	50.2
Re-exports and special treatment product	1.5	0.5	0.5

Source: MITI, "White Paper," 1991.

technology, capital, and information, which have the high entry barrier. On the contrary, moving downward on the vertical axis means that the industries are more labor-intensive and have a low entry barrier.

The main factors to decide comparative advantage in industries are capital, level of technology, labor productivity, and abundant natural resources. For our analysis "Zone of Comparative Advantage" is used to denote the industries group which has the comparative advantage. This "Zone of Comparative Advantage" has a tendency to move upward on the vertical axis when a country develops and accumulates capital and technology. The rectangular surrounding small squares in Figure 21.2 denote a "Zone of Comparative Advantage." Japan's "Zone of Comparative Advantage" is moving from the B Industries Group to the A Industries Group, and Korea's "Zone of Comparative Advantage" is moving from the C Industries Group to the B Industries Group. Because of their short experience in international specialization and their lack of capital and technology, China and North Korea specialize in the labor—and resource-intensive D Industries Group. However, China is heading for the C



Table 21.7 Trend of FDI to China

Unit: US Millions of dollars

Year	Foreign direct investment to China		Korea's FDI to China		Japan's FDI to China	
	No. of cases	Amount	No. of cases	Amount	No. of cases	Amount
1985	3,073	5,931	1	0.1	127	471
1986	1,498	2,834	2	1.8	94	210
1987	2,233	3,709	—	—	113	301
1988	5,945	5,297	6	12.3	237	276
1989	5,779	5,600	14	11.4	294	439
1990	7,273	6,596	42	59.0	341	457
1991	12,978	11,977	116	79.1	599	812

Note: Korea's figures are based upon EPB's data on stock value basis, 1985 figures of China and Japan include other investments.

Source: China, *Almanac of China's Foreign Economic Relations and Trade*.

Industries Group with the help of rapid economic growth. The portion in Figure 21.2 that is not overlapped, or the "Representative Zone of Specialization," points out the industries that enjoy an exclusive comparative advantage. Japan has a "Representative Zone of Specialization" in the A Industries Group, and South Korea has it in the B Industries Group, whereas China and North Korea occupy this zone in the natural resource-intensive and labor-intensive industries.

The rapid economic growth of South Korea and China helps move their "Zone of Comparative Advantage" upward. Accordingly, South Korea's "Zone of Comparative Advantage" and Japan's "Zone" are overlapped in the B Industries Group, and South Korea's and China's "Zones of Comparative Advantage" are overlapped in the C Industries Group. These overlapped regions are called "Zones of Trade Conflict," which indicates a high degree of trade competition and some obstacles to close economic cooperation. However, we must realize that there is plenty of room for economic cooperation even in these "Zones of Trade Conflict." Although industries belonging to the "Zones of Trade Conflict" use similar levels of technology and capital intensity, intra-industrial cooperation could be pursued through product differentiation and production procedure specialization based upon different labor productivity, resources endowment, and other non-economic factors. Considering that the industrialized countries are looking for FDI to overcome the deteriorating domestic production environments and that developing countries are trying to induce FDI, the argument for promotion of international competitiveness and intra-industrial cooperation through FDI and transfer of technology sounds very convincing.

The development of specialization within industries could exert positive effects on intra-regional economic cooperation. First of all, whereas inter-industrial specialization could aggravate income imbalance in the region, intra-industrial specialization could contribute to balanced intra-regional development through equal distribution of value-added. Also the intra-industrial specialization in the "Zones of Trade

Table 21.8 Korea's and Japan's FDI to China by industries

Industry	Unit: Number of cases, %			
	S. Korea		Japan	
	Cases	Proportion	Cases	Proportion
Agriculture, forestry, and fishery	7	3.9	29	4.5
Mining	4	2.2	4	0.6
Manufacturing industries	160	88.4	419	65.6
Food and beverages	14	7.7	50	7.8
Textiles, clothes, footwear, and leather goods	59	32.6	100	15.6
Furniture and wood products	8	4.4	190	3.0
Paper, paper products, and printing	2	1.1	12	1.9
Chemicals and petroleum	8	4.4	54	8.5
Non-metal mineral products	5	2.8	18	2.8
Basic metal industries	1	0.6	28	4.4
Fabricated metal products, machinery, and equipment	35	19.3	138	21.6
Other manufacturing industries	28	15.5	—	—
Construction	—	—	13	2.0
Trade, hotels, and wholesale and retail trade	2	1.1	22	3.4
Transport, storage, and communication	1	0.5	11	1.7
Financing, insurance, and real estate	—	—	20	3.1
Other service and N.e.c.	7	3.9	121	18.9
Total	181	100	639	100

Note: Korea's figures are based upon the aggregate value as of the end of 1991, but Japan's figures are for the end of 1990.

n.e.c. = not elsewhere classified.

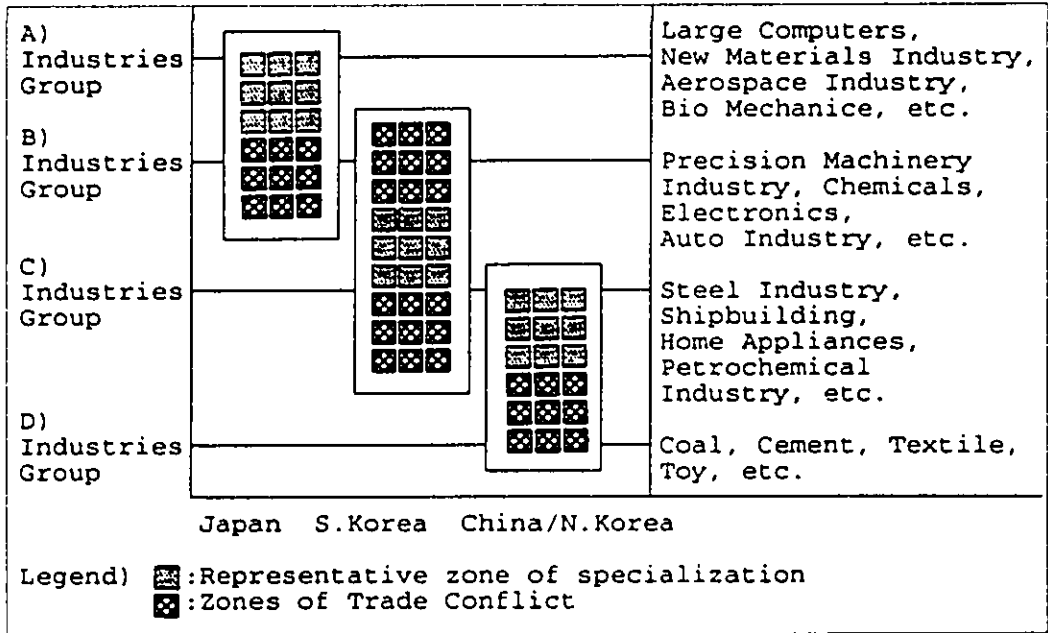
Source: Economic Planning Board data, Republic of Korea. "China Equity Joint Venture Summary," Mitsubishi Research Institute, Japan.

Conflict" helps to move the less developed countries' "Zones of Comparative Advantage" upward and improve the cooperation environments in the region by contracting the "Zones of Trade Conflict" of the developed and developing countries. This contributes to a better industrial structure in less-developed countries.

The Yellow Sea Rim Region is well-equipped with the fundamental conditions for effective economic cooperation through intra—and inter-industrial specialization. Geographically, the countries in the bloc are closely located, saving time and transportation costs. With cultural exchanges that have lasted thousands of years, these countries share many things in common, such as philosophy, religion, ways of thinking, and even symbols (for example, Chinese characters).

Also the Yellow Sea Rim region has geo-economic advantages. The northern part of this region is close to the East Sea Rim region which is under active study. If development of the East Sea Rim region is materializes, sizable amounts of funds and

Figure 21.2 Degree of "zone of comparative advantage"



materials would be needed for the construction of industrial complexes, airports, and harbor facilities. The Yellow Sea Rim region could complement this potential demand and accelerate the development of the East Sea Rim Bloc. The southern part of the Yellow Sea Rim Region is connected to ASEAN and the South Sea Rim Bloc, which consists of Hong Kong, Taiwan, and the southern part of China. This region has achieved rapid economic growth lately, and the future potential to this market could be enlarged by intra—and inter-industrial specialization as well.

### Impediments to Cooperation

There are, however, some impediments to be faced in pursuing economic cooperation in the Yellow Sea Rim. (Figure 21.3 indicates the extent of trade conflict). First, there is political distrust which has lain dormant for a long time. This region has suffered from several wars and has maintained antagonistic relationships for some time, even since World War II. Even though there currently is an amicable mood due to the collapse of ideological barriers and even though China has pursued an open door-policy, more efforts are needed to ensure the improvement of political relationships. Since the diplomatic relationship is a basic requisite for improvement, the lack of any official diplomatic ties between South Korea and China or between North Korea and Japan limits the exchange of materials and labor forces.

Second, the different economic systems among the involved countries can be considered another obstacle. China's open door policy has had tangible effects in only a very limited area, and North Korea is not open enough. Since the price mechanism has not functioned properly, the economic relationship between planned and market economies faces limitation. The inconvertibility of Chinese and North Korean

Figure 21.3 Trade relationship among the Yellow Sea Rim countries

	S. Korea	N. Korea	Japan	China
S. Korea	—	x	o	Δ
N. Korea	x	—	x	o
Japan	o	x	—	o
China	Δ	o	o	—

Note: x denotes some degree of trade conflicts between two countries.

o denotes no trade conflicts.

Δ denotes that trade conflicts are being resolved.

currency, the access barrier to domestic markets, and the volatility of ministries stemming from legal systems are major factors that prevent Japanese and Korean firms from executing FDI in the region.

Third, infrastructures, such as information networks, communication systems, transportation, and financial systems, are far below the desirable level. Investment into harbor facilities, airports, and telecommunication systems has not kept up with demands for the past ten years because of the lack of funds, causing a bottleneck of problems in transportation. Furthermore, airline services connecting the major cities of the involved countries are not sufficient. Although the trade volume between China and South Korea has reached over US \$5 billion, there is no regular airline service between the two countries.

### COOPERATIVE MEASURES

While the Yellow Sea Rim Bloc has several conditions favorable to economic cooperation, it should be noted as well that there are also some unfavorable factors caused by historical and political backgrounds. Economic cooperation in the Yellow Sea Rim should proceed in order to ensure permanent peace in Northeast Asia and to keep the balance of economic power in this region. As for the form of the economic cooperative bloc, it would be desirable to be an open, non-discriminatory and small bloc. The recent trend of regionalism has shown an exclusive tendency even within the region and has caused conflicts with outsiders. Therefore, it is important to put a priority on the principle of mutual equality in pursuing economic cooperation in the Yellow Sea Rim economic. Recently, the "Zones of Trade Conflict" have been overlapping very rapidly in the region, and the different stages of economic development and disparity of income levels among countries are hindering active economic exchanges. The cooperative economic bloc should itself be wide open to outsiders in order to ensure easier access to other neighboring markets, both in mature and in declining industries such as electronics and textiles.

For these measures to materialize, a positive role must be played by the concerned countries to remove the impediments mentioned above. First of all, the main consideration here is Japan's important role. Japan has played a formidable role as a supplier of capital and technology, and its role is expected to continue for a

considerable period. However, if Japan should aggravate the imbalance and cause undesirable conflicts in the region, economic cooperation would be adversely affected. Therefore, Japan's pursuit of peace and common prosperity, which does not strictly consider economic factors, is essential to the development of Northeast Asia. Specifically, Japan should open its domestic market wider, allowing more imports from abroad. Also, Japan should support neighboring countries' efforts to advance their industrial structure through technological transfer and financial aid. In order to facilitate the physical and human exchange in the region, Japan should also further expand international loans for the construction of infrastructures.

The processes of economic reform and liberalization also need to be accelerated. China should provide Japanese and Korean firms with an undistorted economic environment equipped with a matured free market and price mechanism by revising the dual economic system, in which market and planned economies coexist. North Korea also needs to share the burden as an economic partner. First of all, North Korea should redirect its policy toward reform and openness without further alienating international specialization. For example, it would be desirable to invite FDI, not only in the Tumen River Basin, which covers Sonbong and Rajin, but also in the Yellow Sea Shore area, where Nampo and Haeju are located and which is known as the best place in North Korea in terms of investment environment. China's and North Korea's governments need to focus on the reconstruction of their obsolete and stagnated infrastructure, ranging from harbor facilities to telecommunication networks. As well, their markets need to be opened in order to induce foreign capital and technology.

For the smooth progress of economic cooperation in the Yellow Sea Rim, political credibility in the Korean Peninsula must be regained as a prerequisite through the efforts of all countries involved as well as the two Koreas. The realization of economic cooperation between South and North Korea, based on peace in the Korean Peninsula, could contribute to cooperative relationships in the region. For example, the restoration of railroads and highways between South and North Korea would not only meet the rapidly expanding exchange of physical and human resources, but would also save time and transportation costs.

I would like to suggest the establishment of a permanent and practical discussion committee which would deal with issues such as removing impediments to cooperation, solving conflicts, and examining related subjects as pointed out earlier. It would be desirable for this committee to consist of academicians, government officials, and businessmen of involved countries. Various subcommittees under the main committee also need to be established to deal with specific issues, as follows:

First, to find a way to actualize the intra-industry division of labor and to share information on the international market so as not to compete with each other unnecessarily, we need subgroups by industrial sectors. These groups must also discuss how to effectively share the role with regard to the division of process, which is necessary for the technology transfer link from developed country to developing country.

In addition, permanent subgroups pertaining to dispute settlement, financial aid, and legal and investment consultation need to be established and operated in order to facilitate exchange within the region.

The planning of a long-term economic cooperation must be dealt with in other supporting systems. There has been a lack of mutual understanding and information exchange in the region. The lack of specialists who will engage in actual cooperation in the fields of economy and technology is another weak point. Therefore, universities, research institutes, and private companies need to contact each other more frequently in order to promote the exchange of technological information and to produce specialists.

It is now time for putting the initiative into practice, by diversifying and deepening cooperation, converting bilateral into multilateral and trade into investment, and the division of inter-industry into intra-industry. If these efforts could be combined with the participating countries' complementary policies, such as South Korea's West Sea Rim Development Plan and China's open policy for the Yellow Sea Shore area, the Yellow Sea Rim would become golden in the Northeast.

### NOTES

1. Ding Shicheng's concept was presented at the first International Conference on Economic Development in the Coastal Area of Northeast Asia, July 1990, Changchun, China.
2. The North Korean Government adopted the Administration Council's concept of establishing a "Free Economy and Trade Zone" in the area of Rajin and Sonbong in December 1991, and the development plan has already materialized at the governmental level.
3. Refers to "The Economic Development Strategies for the Coastal Areas of China and the Northeast Asia Economic Cooperation," presented by Shi Min at the Regional Forum on Northeast Asian Economic Cooperation, September 1991, in Seoul, Korea.
4. Inter-industrial cooperation occurs between different industries, for example, in regard to exporting agricultural goods, importing machineries is a form of inter-industrial trade.
5. In the determination of "Zone of Comparative Advantage," this paper refers to "The possibility of economic cooperation in East Asia and Korea's current position," by Tae Yong Shin, et al., KIET, 1989, which uses the index of revealed comparative advantage in analyzing international competitiveness.