ECONOMIC INTEGRATION IN NORTHEAST ASIA: CHALLENGES AND STRATEGIES FOR SOUTH KOREA

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CONTENTS

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I. Introduction

In Northeast Asia, the economies of Japan, South Korea, and China have made themselves heavily dependent on each other, but there is evidence that such mutual dependence has been beneficial to them all. With the growth of their economies and after the Asian financial crisis in 1997, they are achieving closer and closer economic relations.

Geographically, these three economies are neighbors, with South Korea situated in the middle. Seoul, capital of South Korea, is located approximately at the midpoint of a line joining the capitals of the other two countries, Beijing and Tokyo. South Korea is separated from China by North Korea and is connected to Japan by the Sea of Japan. Economically, these three economies are on different development paths and at different development stages. Japan has the most developed economy, but the economy of South Korea, which took off in the 1960s after some drastic economic reforms, is quickly growing and catching up. China opened up its economy at the end of the 1970s, and since then its growth has been more than spectacular. It has maintained an annual growth rate of approximately 9 percent nearly every year. It is now one of the economic powers of the world in terms of many economic indicators, including gross domestic product (GDP), trade volume, and foreign capital inflows.

These three economies share a common feature: they are all outward looking and depend for growth on their economic relations with other economies. All are export oriented, with large shares of their domestic outputs destined to other economies. Japan is also a major capital exporter, and South Korea is taking a similar path. China is mainly on the receiving end of foreign capital, being the largest recipient of foreign direct investment among all developing countries.

It is thus no coincidence that these three economies have close ties: they trade heavily among themselves; and Japan and South Korea are sending capital to China, with many of their firms setting up subsidiaries or joint ventures in China.

Recently, with the rising interest in regional economic integration among many Asian economies, China, South Korea, and Japan have seriously explored the possibilities of closer economic relations and cooperation. Among the options they have studied, both individually and jointly, are the establishment of free trade areas (FTAs), including some with countries in other regions, such as FTAs with the members of the Association of Southeast Asian Nations (ASEAN). They have also examined the impacts and possibilities of forming FTAs among themselves, including FTAs comprising two countries (Korea-Japan, Korea-China, Japan-China) and an FTA for all three countries (Korea-China-Japan).

Although the details of each of these FTAs have to be worked out and approved, it is clear that FTAs would allow freer movements of most goods (and possibly capital as well) among member countries. Because of the sizes of these three economies and their trade volumes, any FTA formed among them would create a large economy and also make a large impact on their economies and the economies of nonmember countries.

The purpose of this paper is to examine some of the features of these three economies—how they are dependent on each other and the nature and possible impacts of various FTAs among the three. In particular, this paper will analyze these impacts from the viewpoint of South Korea. It will also investigate some of the options and strategies of South Korea in establishing economic integration in Northeast Asia. This paper will try to rank various FTAs in terms of the welfare impacts on the economy of South Korea.

The analysis provided in this paper tries to capture and is based on some of the features of trade among South Korea, China, and Japan. It is also built on some of the motives of their governments in forming FTAs with other countries. One of these features is that these governments put much emphasis on the export performances of their firms. Another feature is that South Korea and Japan export to China many similar products—computers, computer chips, cellular phones, monitors, cameras, and cars—and are competing for market shares in China.

To provide the suggested analysis, this paper proposes a relatively new approach to investigating FTAs and the motives of governments in establishing FTAs and choosing partners. This approach, it is argued, is more appropriate than others for analyzing the FTA policies of many Asian countries. This approach is based on the reasonable premise that governments have an incentive to help national firms perform better in their exports and help them capture bigger shares of foreign markets. It is argued that appropriate FTAs are ways of achieving this objective.

Both South Korea and Japan have firms that export similar products to China, and they are unavoidably competing fiercely for the China market. That fact makes forming an FTA with China more meaningful. However, it is argued that when either South Korea or Japan forms an FTA with China, the other country will also have reasons to form an FTA with China as well. In this paper, one type of FTA is called an "aggressive FTA" and is formed with the purpose of promoting the exports of its national firms in a third market; another kind of FTA is called a "defensive FTA," and it is formed with the purpose of removing the economic disadvantage caused by not being a member country of the FTA.

The second section will present some crucial features of the three economies and will show how they depend on each other. The third section will present the traditional view on FTAs and will explain some of the limitations of the traditional view. In particular, it argues that the traditional view is not suitable for analyzing the recent FTAs established in Asia. The fourth section will present a new view of FTAs, with an emphasis on the rivalry between some Korean firms and some Japanese firms and on their competition in the Chinese market. The fifth section is the conclusion.

II. Mutual Dependence among South Korea, China, and Japan

In this section, we will examine some of the features of the economies of China, South Korea, and Japan and investigate how they depend on each other.

Table 1 shows the significance of these three economies and the possible impacts of the FTAs that are under consideration. The table presents the top 15 countries in the world in 2004 in terms of real GDP (at constant 2000 prices) and export volume. In terms of real GDP, Japan, China, and South Korea were the 2nd, 5th, and 12th largest

Table 1: **Top 15 Countries in Terms of GDP and Exports, 2004**

Rank	Real GDP[a]		Real GDP, PPP[b]		Exports[c]	
	Country	Share[d]	Country	Share[d]	Country	Share[d]
1	United States	30.93	United States	20.79	United States	10.29
2	Japan	14.35	China	12.73	Germany	9.44
3	Germany	5.49	Japan	6.75	China	5.73
4	U.K.	4.51	India	6.01	Japan	5.71
5	China	4.31	Germany	4.16	France	4.77
6	France	3.98	U.K.	3.28	U.K.	4.71
7	Italy	3.19	France	3.12	Canada	3.40
8	Canada	2.26	Italy	2.90	Hong Kong	2.80
9	Brazil	1.88	Brazil	2.65	ROK	2.68
10	Spain	1.78	Russia	2.52	Spain	2.42
11	Mexico	1.77	Spain	1.87	Russia	1.83
12	ROK	1.76	Mexico	1.81	Mexico	1.82
13	India	1.67	Canada	1.78	Switzerland	1.59
14	Australia	1.27	ROK	1.75	Austria	1.44
15	Netherlands	1.08	Indonesia	1.39	Ireland	1.31

Source: World Bank (2004).

a GDP in constant 2000 U.S. dollars.
b GDP purchasing power parity, in constant 2000 international dollars.
c Exports of goods and services, balance of payments, in current U.S. dollars.
d Share = percentage share of this variable in the world.

economies, respectively. When measured in terms of PPP, China, Japan, and South Korea held the positions of 2nd, 3rd, and 14th in the world. Among these three economies, South Korea has the smallest economy, but its trade volume is much larger than what its GDP would suggest: in terms of trade volume, China, Japan, and South Korea were the 3rd, 4th, and 9th.

Table 2 presents the potential economic power of various, selected FTAs that might exist in the future. If South Korea, China, and Japan form an FTA, they will create an economic unit with a combined real GDP of $7,127 billion (2004 data), or slightly more **than 20 percent of the world's GDP.**[1] This economic unit would have an export volume of $1,574 billion (2004 data), the biggest in the world. Even if only two of the countries create an FTA, it would still be significant. For example, if China and Japan formed an FTA, the new economic unit would have a real GDP of $6,514 billion, or 19 percent of the world's total GDP. In terms of export volume, it would have $1,276 billion, or 11 percent of the world's total—still the biggest in the world.

Table 3 shows the growth of trade volume of the three countries. From 1998 to 2004, the total exports of South Korea grew at an annual rate of 11.5 percent, while its total imports grew at an annual rate of 15.8 percent. The growth rates of China were much more impressive: 21.6 percent for total exports and 26.0 percent for total imports. The trade volumes of Japan, probably because it is a more developed economy, showed a less spectacular growth of trade: 6.5 percent for total exports and 8.4 percent for total imports.

Table 2: **Significance of Various Possible FTAs, 2004**

Possible FTAs	**Real GDP[a]**		**Exports[b]**	
	Value billions of dollars	**Share[c]** %	**Value** billions of dollars	**Share[c]** %
Korea-China-Japan	7,127.1	20.42	1,574.6	14.13
Korea-China	2,119.3	6.07	938.0	8.42
Korea-Japan	5,621.2	16.10	935.8	8.40
China-Japan	6,513.6	18.66	1,275.5	11.44

Source: World Bank (2004).

a GDP in constant 2000 U.S. dollars, in billions.
b Exports of goods and services, in U.S. dollars, in billions.
c Percentage of the world's GDP.

1. It would be ranked as the second largest economic unit in the world, after the United States.

Table 3: **Growth of Trade Volume in South Korea, China, and Japan, 1998–2004, billions of U.S. dollars**

Year	Total exports			Total imports		
	S. Korea	China	Japan	S. Korea	China	Japan
1998	132.30	183.81	388.14	93.28	140.24	280.63
1999	143.69	194.93	417.61	119.75	165.70	309.99
2000	172.27	249.20	479.25	160.48	225.09	379.66
2001	150.43	266.10	403.36	141.10	243.55	349.30
2002	162.47	325.60	416.72	152.12	295.17	337.61
2003	193.82	438.23	472.00	178.83	412.76	383.45
2004	253.84	593.33	565.76	224.46	561.23	455.25
Growth rate, %	11.5	21.6	6.5	15.8	26.0	8.4

Source: UN (various years).

Table 4 lists the top five exporting markets and top five importing suppliers of South Korea, China, and Japan in 1998 and 2004. The table shows that these three countries are important trading partners of each other and that the degree of importance got bigger during these years. On both the export and the import sides, each country is on the top-five list of the other two countries, and its position rose during this period. For example, for South Korea, in 1998, Japan and China were the second and third most important markets, respectively, for Korean products and suppliers of imported products. Six years later, China became the biggest market for Korean products, with Japan a distant third, while Japan was Korea's most important supplier, with China the second.

To better demonstrate the mutual dependence among the three countries, ***Table 5*** shows the changes in trade volumes among these countries from 1998 to 2004. On the whole, the table reveals close trade relations among the countries and that these countries are becoming even more dependent on each other over time. This is more significant for the dependence of South Korea and Japan on China on both the export and the import sides. For South Korea, the percentage of its exports to China rose from 8.3 percent in 1998 to 19.6 percent in 2004, while the share of imports from China, as a percentage of South Korea's total imports, increased from 6.7 percent in 1998 to 13.2 percent. The picture for Japan was about the same: 5.2 percent in 1998, rising to 13.1 percent in 2004 on the export side; and 13.2 percent in 1998 to 20.7 percent in 2004 on the import side.

Two more interesting features of Table 5 can be pointed out. First, trade between South Korea and Japan remained fairly stable during the 1998–2004 period, at least in a percentage sense. For example, for South Korea, the share of imports from Japan stayed approximately at or slightly below 20 percent, whereas for Japan, the share of

Table 4: **Top Five Trading Partners of South Korea, China, and Japan, 1998 and 2004**

Year	South Korea				China				Japan			
	Exports	Share[a] %	Imports	Share[a] %	Exports	Share[a] %	Imports	Share[a] %	Exports	Share[a] %	Imports	Share[a] %
1998	United States	17.2	United States	21.7	Hong Kong	21.1	Japan	20.2	United States	30.9	United States	24.0
	Japan	8.4	Japan	17.7	United States	20.7	United States	12.0	Hong Kong	5.8	China	13.2
	China	8.3	China	6.7	Japan	16.1	South Korea	10.7	China	5.2	Australia	4.6
	Hong Kong	6.5	Australia	4.9	Germany	4.0	Germany	5.0	Germany	4.9	South Korea	4.3
	Switzer-land	3.7	Saudi Arabia	4.2	South Korea	3.4	Hong Kong	4.7	South Korea	4.0	Indonesia	3.9
2004	China	19.6	Japan	20.6	United States	21.1	Japan	16.8	United States	22.7	China	20.7
	United States	16.9	China	13.2	Hong Kong	17.0	South Korea	11.1	China	13.1	United States	14.0
	Japan	8.5	United States	12.9	Japan	12.4	United States	8.0	South Korea	7.8	South Korea	4.8
	Hong Kong	7.1	Saudi Arabia	5.3	South Korea	4.7	Germany	5.4	Hong Kong	6.3	Australia	4.3
	Germany	3.3	Germany	3.8	Germany	4.0	Malaysia	3.2	Thailand	3.6	Indonesia	4.1

Source: UN (various years).

a Exports and imports as percentage shares of the total exports and imports.

imports from South Korea remained at approximately 5 percent. Second, for China, the shares of trade with South Korea and Japan, in terms of exports and imports, stayed fairly constant, despite the fact that China's trade volumes increased substantially during this period. This means that while China trades more and more over time, its degree of dependence on South Korea and Japan remains fairly constant.

Table 5: **Mutual Dependence among China, South Korea, and Japan, 1998–2004, in billions of U.S. dollars and percentage**

Year	South Korea								China								Japan							
	Exports to:				Imports from:				Exports to:				Imports from:				Exports to:				Imports from:			
	China		Japan		China		Japan		S. Korea		Japan		S. Korea		Japan		China		S. Korea		China		S. Korea	
	$	%[a]	$	%[a]	$	%[a]	$	%[a]	$	%[a]	$	%[a]	$	%[a]	$	%[a]	$	%[a]	$	%[a]	$	%[a]	$	%[a]
1998	10.97	8.3	11.07	8.4	6.23	6.7	16.54	17.7	6.25	3.4	29.66	16.1	15.01	10.7	28.28	20.2	20.09	5.2	15.36	4.0	37.09	13.2	12.08	4.3
1999	13.68	9.5	15.86	11.0	8.87	7.4	24.14	20.2	7.81	4.0	32.41	16.6	17.23	10.4	33.76	20.4	23.34	5.6	22.89	5.5	42.85	13.8	16.03	5.2
2000	18.45	10.7	20.47	11.9	12.80	8.0	31.83	19.8	11.29	4.5	41.65	16.7	23.21	10.3	41.51	18.4	30.38	6.3	30.70	6.4	55.10	14.5	20.45	5.4
2001	18.19	12.1	16.50	11.0	13.30	9.4	26.63	18.9	12.52	4.7	44.94	16.9	23.38	9.6	42.79	17.6	31.00	7.7	25.30	6.3	57.87	16.6	17.20	4.9
2002	23.75	14.6	15.14	9.3	17.40	11.4	29.86	19.6	15.53	4.8	48.43	14.9	28.57	9.7	53.47	18.1	39.82	9.6	28.57	6.9	61.78	18.3	15.48	4.6
2003	35.11	18.1	17.28	8.9	21.91	12.3	36.31	20.3	20.09	4.6	59.41	13.6	43.13	10.4	74.15	18.0	57.42	12.2	34.81	7.4	75.47	19.7	17.90	4.7
2004	49.76	19.6	21.70	8.5	29.58	13.2	46.14	20.6	27.81	4.7	73.51	12.4	62.23	11.1	94.33	16.8	73.94	13.1	44.26	7.8	94.34	20.7	22.05	4.8

Source: UN (various years).

Note: Because of statistical discrepancies, country A's exports to country B as reported by the government of country A may not be the same as country B's imports from country A as reported by the government of country B.

a Exports and imports as percentage shares of the aggregate exports and imports of the referenced country.

III. Traditional Views of Economic Integration

When a group of countries forms an FTA, how may the trade volumes and welfare of the member countries and nonmember countries be affected? This is a question economists have long tried to answer. Although the answers may vary depending on the economic conditions of the countries concerned, it has been recognized that the welfare effects on these countries are in general ambiguous, that is, in some cases a member or a nonmember country may gain and in other cases a member or a nonmember country may lose.

In other words, when a group of countries forms an FTA, the world as a whole may or may not be better off. It is possible that some of the member countries of the FTA may even become worse off.[2] This pessimistic view has led to the argument that multilateral trade liberalization is superior to regional trade liberalization, at least from the point of view of the economic welfare of the world as a whole.

Yet it has become a fashion among many countries that forming FTAs with other countries is one of the most important trade policies a government can undertake. The current wave of FTAs in Asia is an example. The immediate question is, why are so many countries working so hard to negotiate with other countries to form FTAs?

Traditional economic theory has a straightforward way of explaining the welfare effects of economic integration. More than five decades ago, Viner (1950) suggested the use of the concept of trade creation and trade diversion to measure the welfare effects of economic integration. It is argued that, for an individual market, if trade is created (in the sense that there is an increase in the trade volume) between two member countries as a result of a drop in trade restrictions, economic integration tends to be beneficial to the countries. This follows the usual argument of gains from trade. This is trade creation. However, it is noted that economic integration usually leads to preferential trade treatment in favor of member countries but against nonmember countries. Thus, after the formation of a customs union or an FTA, a member country will be able to see a switch in the source of imports of a commodity from a nonmember country to a member country. This is called trade diversion, and it tends to be detrimental for both the importing country and the world as a whole because the source of the imports is switched from a country of low cost (the nonmember country) to a country of high cost (the member country).

Because South Korea, China, and Japan are mutually dependent on each other, economic integration among them will bring substantial changes to their economies

2. Saygili and Wong (2005), using simple numerical simulation, show that China may experience a drop in welfare if it forms an FTA with the countries of ASEAN.

and to many others in the world. How well can the traditional views be applied to describe the impacts of various forms of economic integration among these countries, and how well can traditional views be used to describe the decisions of the governments involved?

To examine how the concept of trade creation and trade diversion can be applied to these countries, we can look at the case of South Korea. Consider industry 730210 (HS 2002, rails of iron/steel).[3] In 2004, South Korea imported $4,549,696 worth of iron/steel rails from other countries, at an average price of $1.10 per kilogram, but imported none from China (UN 2004). China, however, is a significant producer and exporter of iron/steel rails. In 2004, it exported $34,537,467 worth of iron/steel rails to the rest of the world, at an average price of $0.40 per kilogram. With no preferential tariff treatment, the fact that South Korea imports iron/steel rails from the rest of the world but not from China implies that South Korea prefers the quality-price mix of rails from the rest of the world and not from China.

Suppose now that South Korea and China form an FTA, with the tariffs on the goods imported from each other removed while external tariffs of both countries remain unchanged. Such a preferential tariff treatment by South Korea in favor of China will encourage South Korea to import Chinese products. In other words, the FTA gives an extra edge to products from China. Suppose, for the purpose of illustration, that trade liberalization as a result of the FTA exists to such an extent that South Korea now chooses to import iron/steel rails from China.

The switch in the source of iron/steel rails imported by South Korea, which is called trade diversion, is regarded as detrimental to the welfare of South Korea, and even to the welfare of the world as a whole.[4] The reason is that South Korea is importing the product from a place that produces an inferior price-quality mix of the item instead of from the original supplier country with a better price-quality mix of the product.

Trade creation is more likely for other products that South Korea imports from China prior to the formation of the FTA. For example, in 2004, South Korea imported a total of $102,096 worth of iron/steel switch blades, crossing frogs, and point rods (730230, HS 2002) from all countries of the world, at an average price of $6.29 per kilogram. Out of this total, $37,559 worth of the product, or 36.8 percent, came from China, at

3. HS 2002 means the Harmonized Commodity Description and Coding System of commodity classification, or simply the Harmonized System (HS), adopted in 2002.

4. China could very well gain from the FTA, however, at least as far as the South Korea market is concerned.

a price of $2.42 per kilogram.[5] An FTA with China will encourage more trade with China. Such creation of trade tends to benefit not only South Korea but also China, as the usual analysis for gains from trade can be applied here to explain the beneficial impact of trade creation.

Viner's concept of trade creation and trade diversion has been used widely by economists and policymakers to evaluate the welfare impacts of FTAs or customs unions. However, this concept has limitations. First, it is based on a partial equilibrium framework, which applies to a market in which the firms and consumers in each country have no monopoly power. When we want to consider the impacts of an FTA on the entire economy of a member country, such a single-market analysis is no longer applicable, and, in fact, in some cases it could lead to a misleading or even a wrong conclusion.

Second, although we can hardly find out exactly what a government is thinking about and why an FTA is approved, we can still observe what governments are doing. In Asia, the fever of forming FTAs is still raging. How well can the traditional view explain what is going on in Asia?

The traditional view focuses on the import side of an economy and tries to determine whether a government is importing goods from the right sources, i.e., whether it is efficient, from the point of view of both the member country and the world as a whole, for the member country to import more goods from other member countries. However, for the governments of many of these Asian countries, which view the export performance of their country's firms as an important factor of growth, it will be the export side, not the import side, of foreign trade that in general will receive more attention in setting major trade policies such as FTAs.[6] For example, there is no evidence that the government of South Korea is worrying much about the possible switch in the source of the supplying country from other countries of the world to China if a Korea-China FTA is formed.

Two additional examples can show why the import side of foreign trade is in general the focus of attention for many governments. First, note that Singapore, a small and fast-growing economy, is already adopting a free-trade regime. Yet Singapore is very keen on forming FTAs with other countries. As of March 2006, Singapore had

5. The price of the product from China is consistently lower than the price of the product of the same category from the world as a whole. A possible and reasonable explanation is that the product from China is of a lower quality.

6. There are of course exceptions. For example, governments may worry about internal political resistance if an FTA could result in a substantial jump in the import of some of the products. We ignore this effect in this paper. For a discussion of this effect, please read Wong et al. (2004).

concluded FTAs with 11 countries or groups of countries and is considering the costs and benefits of forming FTAs with 15 other countries or groups of countries.[7] In terms of the number of FTAs concluded and under negotiation, Singapore's eagerness in this policy is unmatched by any other country in Asia. Furthermore, negotiations have been initiated and concluded very quickly. For example, the negotiation process between Singapore and South Korea, for the Korea-Singapore Free Trade Agreement, was launched in January 2004, shortly after the signing of the Declaration of Intent on 23 October 2003. After seven rounds of negotiations, the FTA was concluded in November 2004 and officially signed on 4 August 2005.

Why would a small, open economy like Singapore, which already has a free-trade policy, be interested in forming FTAs with other countries? After all, forming an FTA will hardly affect the external price structure its import side is facing. Therefore the usual argument in terms of trade creation and trade diversion can hardly be applicable in the case of Singapore.

Japan is another example. Japan signed an FTA with Mexico on 17 September 2004, and it entered into force on 1 April 2005. This is the second FTA Japan has signed with another country in the recent past.[8] This is a case difficult to explain with the traditional view because Mexico is not an important trading partner of Japan, especially on the import side. In 1998, Mexico ranked 36th on the list of Japan's sources of imported goods, providing a mere 0.44 percent of what Japan imported. In 2004, the year in which the agreement was signed, the importance of Mexico to Japan as a source of imported goods improved slightly, being ranked 32nd and providing 0.48 percent of Japan's total imports. As a matter of fact, Mexico is more important to Japan as a foreign market for Japanese products: in both 1998 and 2004, Mexico was ranked 21st among the markets for Japanese exports. Mexico bought 1.09 percent (in 1998) and 0.94 percent (in 2004) of the aggregate exports of Japan.

IV. Economic Integration and International Rivalry

In the previous section, we explained the limitations of the traditional views when they are applied to an analysis of the rush of Asian countries toward FTAs. In the Singapore

7. The countries that have concluded an FTA with Singapore are ASEAN Free Trade Area, Australia, European Free Trade Association, India, Japan, Jordan, New Zealand, Panama, South Korea, Trans-Pacific SEP (Brunei, New Zealand, Chile, Singapore), and the United States. Singapore is negotiating with the following countries and groups for possible new FTAs: ASEAN-People's Republic of China, ASEAN-Australia-New Zealand, ASEAN-India, ASEAN-Japan, ASEAN-South Korea, Bahrain, Canada, Egypt, Kuwait, Mexico, Pakistan, Peru, Qatar, Sri Lanka, and the United Arab Emirates. See http://app.fta.gov.sg/asp/fta/ourfta.asp.

8. The first one was with Singapore, signed on 11 December 2003. See http://www.mofa.go.jp/region/asia-paci/singapore/jsepa0312.pdf.

and Japan examples described above, the countries' import sides do not seem to be crucial in the governments' decisions about FTAs.

To learn the motives of these governments in signing FTAs, let us examine the positions of Singapore and Japan. The Ministry of Trade and Industry of Singapore, in an undated document entitled "Benefits of FTAs," states clearly why it is establishing FTAs and choosing partners:

> With FTAs, Singapore-based companies will enjoy cost-savings from the elimination of customs duties and improved market access. Cost savings are derived not only from tariff savings, but also from mutual recognition agreements, customs cooperation measures and removal of onerous regulations. Both our producers and service suppliers will enjoy "national treatment," i.e. they will be treated like locals upon entering our FTA partners' markets. This and many other provisions in our FTAs are intended to help blaze the path of internationalisation for Singapore-based companies.[9]

This statement focuses entirely on the export side of the economy. It emphasizes the need of the country to improve market access for various commercial and professional services and to get easier entry into other countries for national businesses.

Japan (MOFA 2004) adopts a similar attitude for signing FTAs. It states the criteria on identifying countries and regions with which to negotiate for FTAs and economic partnership agreements (EPAs):

> 2-1 Whether or not it will substantially expand and facilitate exports of industrial, agricultural, forestry and fishery products, trade in services, and investment, through the liberalization of trade in goods and services and of investment; whether or not it will improve the business environment for Japanese companies operating in the partner countries/regions, through harmonization of various economic systems such as protection of intellectual property rights, as well as through facilitation of movement of natural persons.
>
> 2-2 Whether or not it is indispensable to eliminate economic disadvantages caused by absence of EPA/FTA.

Paragraph 2-1 is similar to the position of Singapore, but Japan takes goes one step further. In addition to trying to help national firms gain access into foreign markets,

9. See http://app.fta.gov.sg/asp/faqs/general_benefits.asp.

the Japanese government also cares about whether the absence of an FTA will mean economic disadvantages for national firms. Thus, the establishment of an FTA could be a way to reduce or eliminate some of the disadvantages faced by national firms in foreign markets.

The latter point is especially important and can be used to explain the motive behind Japan's signing an FTA with Mexico. Even though the United States is the most important trading partner of Japan, many Japanese firms are competing intensely with corresponding firms in the United States for markets in third countries such as Mexico; for example, Toshiba and Sony are competing with Hewlett Packard and Apple in computers, and Toyota and Honda are competing with GM and Ford. Because the United States and Mexico (also with Canada) have an FTA (the North American Free Trade Agreement; NAFTA), these U.S. firms thus have the advantage of selling their products to Mexico's market free of government taxes while products from Japanese firms are subject to tariffs imposed by the Mexican government. Japan thus has an incentive to establish a similar FTA with Mexico that will remove the economic disadvantages caused by an absence of an FTA.

The two types of FTAs established under the two motives described above can be termed aggressive FTAs and defensive FTAs: Aggressive FTAs are those formed for the purpose of providing an advantage to national firms to get into a foreign market, and defensive FTAs are those formed for the purpose of eliminating or reducing the disadvantage in a foreign market that national firms are facing.

Now let us see how we can make use of the above concept in terms of these two types of FTAs to examine the options for South Korea in terms of economic integration in Northeast Asia.

South Korea has three options for a Northeast Asia FTA:

- FTA with China,
- FTA with Japan, or
- FTA with China and Japan.

If it signs an FTA with one country, say, China, the impacts will depend on whether Japan will sign a separate FTA with China. Having two separate FTAs is not the same as an FTA consisting of all three countries.[10] We want to analyze these options in terms of the motives of a government described above.

10. For example, if there is an FTA between South Korea and China and a separate one between China and Japan, then South Korea and Japan could maintain tariffs on the goods imported from each other. If there is an FTA for three countries, trade will be free between any two countries.

South Korea adopted a development path that is similar in many ways to that of Japan. During the past decades, South Korea has to a great extent closed the technology gap between its firms and the corresponding firms in Japan. As a result, many Korean firms are producing close substitutes for Japanese products. Furthermore, these products are competing in many common markets. For example, Hyundai is competing with Honda and Toyota in the sale of cars, while Samsung is competing with Sony and Toshiba in the sale of computers, computer accessories and peripherals, and cellular phones in the rapidly expanding China market.[11] Knowing that many South Korean products are competing with corresponding Japanese products, we can analyze the FTA options for South Korea.

South Korea FTA with China

Suppose that South Korea chooses to form an FTA with China. As a result, products produced in South Korea can enter markets in China free of any tariffs, while goods entering China that are produced somewhere else are still subject to the tariffs imposed by the Chinese government.[12]

The FTA thus represents a preferential treatment to those Korean firms that compete directly with Japanese firms in markets in China. The elimination of the tariffs previously imposed by the Chinese government effectively lowers the costs of selling Korean products in China. Because the corresponding Japanese firms do not receive such treatment, the policy thus benefits the Korean firms at the expense of the Japanese firms. For the Korean market, which has its welfare dependent on the profits of the Korean firms selling their products in China, the FTA policy is welfare enhancing.

Receiving preferential treatment is an important motive for forming FTAs, and this explains why the number of FTAs has been rising so rapidly recently.[13] We label such FTAs as aggressive FTAs.[14]

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11. The production of these products in China is insignificant, so that whatever China consumes is imported from abroad. Japan and South Korea are two of the most important sources of imported goods for China.

12. Usually when a country forms an FTA with another country, it will eliminate nearly all the tariffs on the goods imported from the second country, while it keeps the tariffs, if any, on goods imported from other countries unchanged.

13. This motive is similar to the one for export subsidies in the presence of international rivalry. Economic theory shows that export subsidies can have the effect of benefiting domestic firms at the expense of foreign firms that compete with the domestic firms in third markets. Using export subsidies is in general prohibited by the World Trade Organization (WTO), however; but forming FTAs is allowed, under certain conditions, by the WTO.

14. For some of the firms in the United States, NAFTA is another example of an aggressive FTA. For example, with the FTA, some U.S. companies can receive preferential treatment when selling their products in Mexico; this preferential treatment comes at the expense of competitors such as Japanese firms.

Such aggressive FTAs will undoubtedly affect negatively the firms that compete directly with Korean firms in the markets in China. That the Korean firms are receiving preferential treatment means that their counterparts in Japan are in a disadvantageous position and will mostly likely see a drop in their profits and in the welfare of the Japanese economy.

This will provide an incentive to Japan to form a similar FTA with China. Forming an FTA is an effective way of removing the preferential treatment to Korean firms. An FTA that is formed with the purpose of leveling the playing field is labeled a defensive FTA.

For Japan, forming a defensive FTA would have the effect of improving Japan's welfare compared with what it could get after Korea forms an FTA with China, but it would lower the welfare of Korea. The question is, after the aggressive FTA and then the defensive FTA, how will the welfare of Korea and Japan compare with their prior situations, in the absence of these two FTAs?

The removal of the tariffs initially imposed by China should, as a whole, benefit the Korean and Japanese firms that sell their products to China. Therefore, such trade liberalization on China's part could benefit some of its trading partners but hurt some others.[15] This means that, if Korea's economy and Japan's economy are similar, China's trade liberalization would benefit both South Korea and Japan. If the Korean and Japanese economies are substantially different from each other, the welfare effect of China's trade liberalization on an individual country could be ambiguous.

Thus, for South Korea, forming an aggressive FTA with China is better than no FTA at all, as long as Japan does not form a defensive FTA with China. If Japan does form a defensive FTA with China, South Korea's welfare would be lower than what it could get in the absence of the defensive FTA, but it would still be higher than what it could get without any FTAs as long as the Korean and Japanese economies are not too different from each other. For Japan, no FTA is better than having South Korea forming an aggressive FTA with China, but forming a defensive FTA with China could improve its welfare above what it would get with no FTAs as long as the Korean and Japanese economies are similar enough.

15. In general, we cannot rule out the possibility that some of the firms may be hurt. In a model of oligopoly, the final outcome will depend on how the firms compete. Thus, the final result depends on the initial tariff rates, the extent of trade liberalization, the technologies of the firms, and the demand conditions in China and possibly in other countries as well. We can, however, be sure that at least some firms will benefit.

South Korea FTA with Japan

Suppose now that South Korea forms an FTA with Japan instead of with China. How will this Korea-Japan FTA affect the welfare of various countries?

Such an FTA would mean that South Korea and Japan would eliminate their tariffs on the goods imported from each other, while they would keep tariffs on goods from other countries unchanged. Also assumed is that other countries would not change their tariff policies.

If we still focus on the markets in which the Japanese and Korean firms are major producers, such as cars, computers, cellular phones, and so on, then China can be ignored in the following analysis because China is not a major exporter of these products. We can thus focus on what will happen in the Korean and Japanese markets.[16]

When both South Korea and Japan remove their mutual tariffs, each economy is affected in three different ways:

- Local-market effect—an increase in competition from foreign competitors;
- Foreign-market effect—an increase in the competitiveness of local firms in the other market; and
- Price effect—a change (usually a drop) in the prices of the products produced by local and foreign firms and, thus, a change (usually a rise) in the consumer surplus.[17]

Let us examine these three effects in more detail, from the viewpoint of South Korea. A drop in tariffs imposed by South Korea as a result of a Korea-Japan FTA would encourage more imports and thus more competition from Japan. This would hurt sales by local Korean firms in the local market. Thus the local-market effect would tend to be negative in terms of Korea's welfare level.

At the same time, Korean firms would enjoy the removal of tariffs imposed by the Japanese government, so that they would be able to compete more in the Japanese market. This would be beneficial to Korean firms. So the foreign-market effect would tend to be positive.

16. This analysis is a simplified one because the Chinese market may still matter and because other countries, which may serve as exporters to or importers from South Korea and Japan, may also matter.

17. Other effects, caused by changes in the trade volumes with other countries, are possible, but they are secondary effects and thus are ignored here for simplicity.

As both Korean and Japanese firms have more competition in both markets, the total supply to both markets would increase. This would put a downward pressure on price levels and would be good for the consumers. So the price effect would tend to be positive.

If we add up these three effects, we cannot be sure whether the net effect is positive or negative. Because of such ambiguity, a Korea-Japan FTA may or may not benefit the particular market. If, however, the increase in imports to Korea from Japanese competitors is not significant and the local-market effect is small, then the foreign-market effect and the price effect will dominate, implying that a Korea-Japan FTA will benefit that particular Korean market.

How can a Korea-Japan FTA be compared with a Korea-China FTA, from the viewpoint of South Korea? If South Korea is able to choose between these two FTAs, which should it choose?

If it is determined that a Korea-Japan FTA would hurt South Korea, South Korea should definitely consider a Korea-China FTA, whether or not Japan would take defensive action to form a separate FTA with China, assuming again that the Korean and Japanese economies are not too much different.[18] If a Korea-Japan FTA is beneficial, it may not be ranked uniquely with a Korea-China FTA. The ranking would then depend on factors such as technologies of the Korean and Japanese firms; preferences of the consumers in the Korean, Japanese, and Chinese markets; and possibly the initial tariff rates as well. Which FTA South Korea should choose will then be an empirical question.

In a separate paper (Wong 2005), I develop a theoretical model to analyze and compare the effects of two FTAs, with either China or with Japan, for South Korea. I confirm the ambiguity in the ranking of these two FTAs but obtain the conditions under which South Korea would prefer a Korea-China FTA (with or without a defensive Japan-China FTA) to a Korea-Japan FTA. Using numerical simulation of various equilibriums, I am able to get cases in which forming an FTA with China will provide more welfare improvement than forming an FTA with Japan.[19]

18. Strictly speaking, what we need is for the Korean firms and Japanese firms in the industry under consideration to have similar technologies.

19. Note that the present framework is a partial equilibrium framework that examines what may happen in one single market. A government will have to consider how more than one market will be affected by a new FTA. How the effects on more than one market can be summed up to determine the right policy for the economy is another issue.

Korea-China-Japan FTA

An FTA with South Korea, China, and Japan as members is not the same as an aggressive Korea-China FTA plus a defensive Japan-China FTA because a three-way FTA allows free trade between any two of the three countries, and in the other cases free trade between South Korea and Japan is not guaranteed. However, a three-country FTA is equivalent to an aggressive Korea-China FTA plus a defensive Japan-China FTA plus a Korea-Japan FTA.

As a result, the three-country FTA can be analyzed conceptually in the following stages: stage one, South Korea forms an aggressive FTA with China; stage two, Japan forms a defensive FTA with China; stage three, South Korea and Japan form an FTA.

The three-country FTA, or these three stages, can be analyzed from the viewpoint of South Korea as follows. The Korea-China FTA is beneficial to Korea's economy. When Japan forms a defensive FTA with China, Korea's welfare will drop, but the welfare level is still higher than what it had initially. With aggressive and defensive FTAs, South Korea and Japan have free trade with China but not between themselves. Suppose now that South Korea and Japan form an FTA between themselves. We argued earlier that the Korea-Japan FTA could be either beneficial or detrimental to Korea's welfare. The ambiguity about the welfare impact of the Korea-Japan FTA will mean that the net welfare effect of the three stages, or the welfare effect of the three-country FTA, is in general ambiguous. It is thus in general difficult to compare the welfare impacts of the three-country FTA with a bilateral FTA.

If, however, the Korea-Japan FTA, in the presence of the aggressive and defensive FTAs, benefits South Korea, then one can say that the three-country FTA is beneficial to South Korea. If the Korea-Japan FTA could hurt the Korean economy, South Korea may or may not be hurt by the three-country FTA.

V. Concluding Remarks

In this paper, we examined trade relations among South Korea, China, and Japan as well as issues related to economic integration in Northeast Asia. Several forms of FTAs have been suggested, each of them making different impacts on the trade volumes and the welfare of these countries. We tried to compare and rank these FTAs from the viewpoint of South Korea.

We argued that, for the governments of South Korea and Japan, competition between their firms is an important factor in the determination of their policies, and the

governments want to improve the profits of their country's firms. It has been shown that economic integration could be a way to help promote the profits of their country's firms as they sell products to China and compete with the firms from the other country. Using this approach, we distinguish between aggressive FTAs and defensive FTAs, which South Korea and Japan can take into account when considering forming FTAs in Northeast Asia.

The approach suggested in this paper is different from the traditional approach in the economics literature: it emphasizes the export side of the economies instead of focusing on their import side. Thus the important factor for consideration for a government is not whether the economy imports goods from the right source but whether the economy is able to promote the profit of its own firms in third markets. We believe that, because many Korean firms are competing with similar Japanese firms in China, the current approach to analyzing FTAs enables us to examine the issue more deeply.

One limitation of the current approach is that it is based on a partial equilibrium framework, so it can examine only one market at a time and is more applicable when two countries have firms competing in a third market. A more complete analysis perhaps will need a general equilibrium framework in which we can examine more than two industries at the same time.

So far we have provided only part of the possible analytical investigation and discussion. We showed that some of the rankings are not unique, and whether one form of FTA is preferred to another form is an empirical question. This suggests that careful empirical studies of these industries and economies will be needed.

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