Implication of KOR-US FTA on East Asian Economic Integration: Will Regional Integration with Regionalism Start in East Asia?

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Abstracts

Compared to the advanced level of regional integration in Europe or NAFTA area, East Asia has been showing quite a low level of regional integration even though much progress has been achieved in East Asian economic integration through bilateral FTAs especially since 2000. This paper is to conceptually understand the pattern of East Asian economic integration in the past and try to describe the prospective feature of economic integration and regionalism in East Asia. In describing the prospects for East Asian economic integration and regionalism, the paper puts special weights on KOR-US FTA. The paper argues that KOR-US FTA has some important implications on East Asian regionalism. For instance, KOR-US FTA can be regarded as the second shock that will strengthen the domino effect in the region. Korea-Japan FTA is more likely to be reactivated and concluded more easily than it was when first proposed. In order to conceptually understand what happened and will happen in the process of economic integration, we need a conceptual framework in which we can analyze the theoretical aspects of trade negotiations. The analytic framework used in this paper heavily depends on the political economy framework such as domino theory and juggernaut model.

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I. Introduction

Rapid growth in East Asia over the last four decades are usually attributed to several factors such as large increase in capital inputs, concentration of scarce resources into several industries wisely selected by the government, relatively advanced level of education leading to higher stock of human capital, effective intervention in the market by the government, and so on. Above of all these factors contributing to fast growth in East Asia, export-oriented growth strategy adopted by East Asian governments is widely accepted by academics and policy makers as one of the essential forces that resulted in rapid growth. East Asian countries have been able to promote growth by exporting to the consumer markets of developed countries. In other words, rapid growth in East Asia was possible because the developed market was open to East Asian countries implying that tariff rate faced by East Asian economies were generally very low.

Tariff reductions in developed economies have been implemented through many rounds of bilateral and multilateral trade negotiations since the WWII. Regionalism and multilateralism in developed countries have been naturally growing out of these continuous processes of trade negotiations in the past. Series of bilateral and multilateral trade negotiations in developed economies for the last 50 years eventually formed two big trade blocs, NAFTA and EU. Compared to the advanced level of regional integration in Europe or NAFTA area, East Asia has been showing quite a low level of regional integration even though the economic growth in the region was mainly caused by participating in international trade. Regionalization through deeper economic relations among several East Asian countries has been developed for the last 40 years, but it is not formal and institutionalized

enough to claim that regionalism has been steadily growing in East Asia. Even with recent surge in bilateral FTAs among East Asian countries, it is still premature to conclude that East Asians are successfully establishing regional integration with real regionalism. It is more appropriate to say that East Asian regionalism is still fragile.

It is true, however, that much progress has been achieved in East Asian economic integration through bilateral FTAs especially since 2000. According to the ADB database, as of the end of 2006, the cumulative number of FTAs in East Asia reached 96, and most of these FTAs have bilateral features. One of the bilateral FTAs recently concluded in East Asia is KOREA-US FTA. Judging only from the number of bilateral FTAs, one might say that regionalism in East Asia has already been considerably matured. But by other measures such as security relations or conflicts over historical matters, East Asian regionalism still has many obstacles to overcome in the future.

Fragility of East Asian regionalism comes from the asymmetric features of regional integration process. First, it does not have political motivation strong enough to establish regionalism in the region. East Asian countries do not share historical experiences such as those shared by European countries. This lack of shared historical memories leads to the lack of regional integration in security and political arena. Economic benefits expected to arise by promoting trade and investments have been the only main engine driving the integration process in East Asia. The lack of political incentive to form a real regionalism leads to the lack of leadership. The lack of leadership further weakens the integrity of regionalism. Unless we somehow resolve this asymmetry, the prospect for East Asian regionalism is not bright. Second type of asymmetry in East Asian regionalism comes from the lack of

regional integration in the Northeast Asian countries, namely, Korea, China and Japan. The three biggest economies in East Asia do not have any formal system of economic integration, not to mention, security or political integration. East Asian regional integration has been pursued mainly by ASEAN. ASEAN has been developing an institution of regional integration since 1967. Although ASEAN is currently playing an important role in establishing regionalism in East Asia, regional integration would be incomplete unless the three big economies in East Asia are deeply integrated. The regionalism in Northeast Asia would greatly enhance the regionalism in East Asia as a whole. Thus, regional asymmetry in East Asian regionalism should be somehow addressed.

The purpose of this paper is to conceptually understand the pattern of East Asian economic integration in the past and try to describe the prospective feature of economic integration and regionalism in East Asia. In describing the prospects for East Asian economic integration and regionalism, the paper puts special weights on KOR-US FTA. KOR-US FTA is the first bilateral FTA concluded between an industrialized East Asian economy and the world superpower the U.S. KOR-US FTA to Korea is like a NAFTA to Mexico. The paper argues that KOR-US FTA has some special implications on East Asian regionalism. By the way, to conceptually understand what happened and will happen in the process of economic integration, we need a conceptual framework in which we can analyze the theoretical aspects of trade negotiations. The analytic framework used in this paper heavily depends on the political economy framework such as domino theory and juggernaut model where regionalism is a building bloc to multilateralism. I take this building bloc logic of regionalism to multilateralism because this framework is able to capture the

dynamic feature of economic integration, and the dynamic feature of economic integration is the focus of the paper.

Many trade policy scholars - such as Krugman (1991) and Bhagwati (1991) - argued that regionalism was a stumbling bloc to global free trade. The logic of a stumbling bloc basically depends on the idea that the social welfare level of a nation will rise if regional trade bloc stops forming a bloc and moves to global free trade. We can easily understand this idea because the economy as a whole can consume and produce more under less distortion such as lower tariff in most cases. Therefore, regionalism will work as a stumbling bloc to global free trade as long as some group of nations raise their collective welfare above the free trade level by forming a trade bloc and by exploiting non-member nations. Bloc members have no incentive to break down regional trade bloc and move to global free trade. Bloc members would veto any changes in policies that undermine their exploitation of non-member nations. This is the basic logic of regionalism as a stumbling bloc to multilateralism.

This line of literature is missing the dynamic link between regionalism and multilateralism. It is possible for regional trade agreements to generate political economic forces for each member nation to liberalize more after they started RTA (regional trade agreement) and move closer to global free trade even though RTA may temporarily cause lower social welfare in non-member nations. This is the dynamic feature of regionalism as a building bloc to multilateralism. There are many literatures on this issue - such as, to name a few, Baldwin (1993), Baldwin and Robert-Nicoud (2005, 2006, 2007), and Freund (2000a, 2000b). The paper is heavily indebted to the domino theory and the juggernaut model developed in these literatures for deriving the conclusion.

Section II examines the progress of market-driven regional

economic integration of East Asian economies in 1980s and 90s. Section III examines the East Asian regionalism since 2000. The prospective impact of KOR-US FTA on the East Asian regionalism is also discussed. Section IV is the concluding remarks.

II. Market-Driven Economic Integration in East Asia

Rapid economic growth over the last two decades in East Asia was in large part caused by the market-driven expansion of international trade and FDI. East Asia's exports rose from 14 percent of world total exports in 1980 to 27 percent in 2006, while its imports expanded from 15 percent to 24 percent during 1986-2006. FDI inflows into East Asia more than tripled from 5 percent of world total FDI inflows in 1980 to 16 percent in 2005, while East Asian FDI outflows increased from 5 percent to 11 percent of world total outflows over the same period. East Asia's global expansion in trade and FDI has been accompanied by inter-regional expansion in trade and FDI as well as rising intra-regional concentration of trade and FDI. Table 1 shows that intra-regional trade has continued to rise for the last two decades. More than fifty percent of East Asia's trade now arises within the region.

Table 2 shows that firms from the major industrialized countries as well as those from within East Asia are the main investors in emerging East Asian countries. Increases in trade and FDI within the region have certainly contributed to regional economic integration. However, the growing linkages of regional economic integration in East Asia is more like a regionalization rather than a regionalism because the integration is largely bottom-up, corporate or market-driven, informal, and predominantly

independent of official governmental involvement.

[Table 1] Intra-Regional Trade Share, 1986-2006 (%)

Region	1980	1985	1990	1995	2000	2001	2002	2003	2004	2005	2006
NIEs (4)[a]	8.6	9.2	11.9	15.5	15.5	15.3	15.8	15.2	14.6	13.9	13.6
ASEAN (10)[b]	17.9	20.3	18.8	24.0	24.7	24.1	24.4	26.6	26.7	27.2	27.2
ASEAN+PRC+Korea +HK+Taiwan (14)	22.7	27.2	33.0	39.1	40.6	41.1	43.4	44.7	45.2	45.5	45.8
ASEAN+3 (13)[c]	30.2	30.2	29.4	37.6	37.3	37.1	37.9	39.0	39.2	38.9	38.3
ASEAN+3+HK +Taiwan (15)	36.8	39.0	43.1	51.9	52.1	51.9	53.8	55.4	55.9	55.4	54.5
ASEAN+6 (16)[d]	34.6	34.8	33.7	40.8	40.5	40.6	41.3	42.4	43.0	43.1	42.6
ASEAN+HK +Taiwan (18)	40.5	42.7	46.3	54.5	54.6	54.5	56.3	57.7	58.5	58.4	57.6
NAFTA (3)	33.8	38.7	37.9	43.1	48.8	49.1	48.4	47.4	46.4	46.1	44.3
EU (27)	61.5	60.0	66.8	66.9	66.3	66.7	67.4	68.1	67.6	66.2	65.8

*Reprinted from Kawai and Wignaraja (2007)
Notes: a. NIEs = Hong Kong; China; Republic of Korea; Singapore; and Taiwan
b. ASEAN = Brunei, Cambodia, Indonesia, Lao DPR, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Viet Nam.
c. ASEAN+3 = 10 ASEAN countries, Korea, China and Japan.
d. ASEAN+6 = 13 ASEAN+3 countries, Australia, New Zealand, and India.

[Table 2] Emerging East Asia's FDI Inflows, 1995-2005 (%)

FDI Inflows to:	Source Regions/Countries of FDI Inflows to Emerging East Asia					
	U.S.	EU	Japan	Asian NIEs	ASEAN9	Total (US$Mill)
Asian NIEs	16.8	15.8	8.1	5.2	3.9	437,999
HK	5.1	7.4	5.7	5.3	1.8	215,999
Korea	22.4	40.1	13.3	4.1	7.4	55,975
Singapore	31.7	19.3	8.5	4.0	5.8	142,748
Taiwan	19.9	13.1	15.5	14.2	2.5	23,277
ASEAN9	18.4	29.1	19.1	29.2	4.2	116,413
Indonesia	5.7	50.9	3.3	15.0	9.3	11,839
Malaysia	27.4	23.4	13.6	22.0	2.1	44,651
Philippines	23.4	10.3	23.1	16.9	1.1	13,709
Thailand	10.5	10.5	25.1	27.6	0.9	37,428
Viet Nam	4.8	19.1	14.4	39.2	6.6	18,225
PRC	8.1	8.1	8.6	54.0	1.6	537,163
Total	13.9	14.7	10.5	34.9	3.1	992,516

*Reprinted from Kawai and Wignaraja (2007)

Economic integration in East Asia(especially in 1980s and 90s) could be characterized as the process of creating so-called "Factory Asia."[1] "Factory Asia" has been producing millions of different products with world-beating price-quality ratios. "Factory Asia" does this by sourcing billions of different parts and components from plants and companies located in various countries. Some of the parts and components come from the industrialized countries outside the region, but most of them come from countries within the region such as Japan or South Korea. What made it possible for many developing countries in East Asia to promote growth through "Factory Asia" were the so-called 'dual track' development strategies that blocked the imports of manufactured goods for final consumption while fostering manufactured exports.[2] Encouraged by the success of Japan and four tigers (Korea, Taiwan, Singapore, Hong Kong), the governments of many developing East Asian countries (ASEANs and China) pursued dual-track growth strategy. This strategy fits in well with the global trend towards the 'unbundling' of manufacturing processes, what has been sometimes called fragmentation, or slicing up the value-added chain. Rising wages in developed countries and the rapid fall in trade and communication costs meant that firms that previously bundled together most or all stages of manufacturing in one country found it profitable to unbundled and offshore some stages (especially labor-intensive stages) to countries whose low productivity is more than offset by their low wages. As a result, production network, in other words, supply-chain network was created throughout the East Asian countries. "Factory Asia" is basically a production

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1) In other words, "Factory Asia" means the global production networks in East Asia. More explanations on the global production networks in East Asia could be found in Ernst (2004). On "Factory Asia" also see Ando (2004), Ando and Kimura (2005), Ng and Yeats (2003) and Fukao et al. (2003).
2) Greenaway et al. (2002)

network. And this network needed low prices of parts and components in order to produce final products competitively. Therefore, the governments imposed very low level of tariffs on parts and components imported from developed countries such as Japan, Korea, and other rich nations. The tariff-cutting was unilateral and non-discriminatory, but the effect was mostly regional given the nature of the network of Korean, Japanese and Taiwanese multinationals. "Factory Asia" got established via unilateral liberalization of tariffs on the parts and components trade that makes up the bulk of intra-East Asian trade. Table 3 shows the unilateral feature of tariff reductions in East Asia.

[Table 3] Unilateral Tariff Cutting in East Asia, 1991-2003

(Average applied tariffs, %)

	1989	1992	1995	1999	2000	2001	2002	2003
India		59		34		31		28
Vietnam			14	15		15	15	16
Thailand	40	40	20		16	15		14
China		42	35	16	16	15		11
Malaysia	14	14				9	9	9
Korea	14	11	8	8			8	8
Indonesia	23		16	11	9	7	7	7
Taiwan	10	6		6	6	6	6	5
Philippines	28	19	19	9	7	7	5	4
Singapore	0		0			0	0	0

*Reprinted from Baldwin (2006)

This is why the process of creating "Factory Asia" is mainly the process of economic integration without real regionalism. It is an East Asian regionalization of the way to produce final products to meet the world demand. In particular, ASEAN FTA (AFTA) did little to foster liberalization although it was set up in 1992. Intra-AFTA trade is dominated by trade in parts and components. HS Chapters 84 and 85 account for 50 percent of the intra-AFTA

trade. On these items, the ASEANs have cut their applied rates to zero or very low level, so there is almost no margin of preference that would justify the cost of complying with rules of origin. Table 4 shows this lack of regional preference.

[Table 4] Intra-East Asian Preference Margins vis-à-vis EU and North America

Sector	Exporter to East Asia		
	East Asia	North America	EU
Mining products (HS25-27)	1.7	2.6	1.7
General machinery (HS84)	1.5	1.9	2.5
Electrical machinery (HS85)	1.4	1.5	2.2
Others	1.4	1.7	2.6
Wood and paper	1.4	1.3	1.5
Precision apparatus	1.2	1.3	2.0
Agriculture	41.0	29.7	30.9
Light Industry	26.8	8.3	12.8
Food and beverages	21.8	26.4	25.8
Textiles and clothing	7.3	7.6	7.8
Transportation machinery	4.6	2.8	8.6
Pottery products	2.9	3.6	4.4
Chemicals	2.4	3.0	2.7
Basic metals	1.8	2.6	2.3
All products	7.4	5.5	7.2

*Reprinted from Baldwin (2006)
Note: Tariff data for 2002.

Regionalism played almost no role in fostering East Asian trade in 1980s and 90s. This implies that the only liberalizing force that worked in the region was race-to-the-bottom unilateralism.[3] However, East Asia experienced two shocks in late 1990s and

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3) Race-to-the-bottom unilateralism means that unilateral tariff reduction becomes politically optimal to a low-wage country since the tariff cuts were viewed as critical to creating new industry jobs, especially when other competing low-wage countries started cutting down tariff unilaterally hoping to raise trades and FDI inflow from developed countries. Developing countries in a region would cut down tariff competitively and unilaterally in this situation.

2000, and those shocks significantly changed the characteristics of economic integration in East Asia. That is, regionalism started to roll over in East Asia although it is fragile yet. Two shocks are Asian Financial Crisis in 1997 and China's WTO membership in 2000.

III. East Asian Regionalism

1. East Asian Domino Effect - Phase 1

Asian Financial Crisis in 1997 reignited the efforts of East Asian countries to strengthen mutual cooperation within the region. Specially, financial and monetary cooperation among ASEAN+3 (ASEAN, Korea, Japan, China) has been progressing steadily although the speed of progress is quite slow. So far ASEAN+3 has produced two main outputs regarding financial cooperation within the region. They are CMI(Chiang Mai Initiative) and ABMI(Asian Bond Market Initiative). Thanks to the slow but on-going developments in CMI and ABMI, East Asian regionalism is also making progress. Further developments in CMI imply that East Asia would have a formal surveillance and monitoring institutions such as IMF within ASEAN+3. If financial cooperation in East Asia becomes deeper and deeper in the future, the surveillance and monitoring institution is likely to evolve into Asian Monetary Fund and a common exchange rate arrangement would be institutionalized in the region. This is a big progress in East Asian regionalism, but it will not happen in the near future.

Although the Asian Financial Crisis has contributed a little to the progress of East Asian regionalism, more influential event that has generated a burst of FTAs in the region was China's WTO

membership. This shock caused a massive domino effect with dozens of new FTAs being announced, negotiated and signed.[4] China's WTO membership would provide an external lock-in of Chinese unilateral economic reforms, and many believed that this would magnify China's attractiveness even further as a location for Factory Asia jobs and investment. ASEANs were very much worried about the job losses that would be caused by this Chinese impact. Thus, China offered an FTA to ASEAN to assuage ASEAN fears of new Chinese competition. ASEAN-China FTA (ACFTA) was concluded in 2003, and it is scheduled to eliminate tariffs on almost all bilateral trade between China and ASEANs by the year 2010. This triggered a domino effect among the ASEANs themselves. Preferential trade liberalization between China and ASEAN (ACFTA) is the first signal indicating that real regionalism finally begins to emerge in East Asia.[5]

The domino effect quickly spread to other East Asian countries, namely, Korea and Japan. Korea and Japan realized that

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4) The domino theory of regionalism is a political economy approach to why and how a regional trade bloc would evolve into a more liberalized and larger trade bloc, eventually moving closer to multilateralism. The logic proceeds in two steps. In first stage, an initial political equilibrium is assumed to be given where the nation in question has chosen to stay outside the RTA (regional trade agreement). Suppose that any nation(s) in the region starts RTA with other nation(s) in the region. This is a shock to other nation(s) outside the RTA. This shock generates new political economy forces in the non-member nation(s). Specifically, non-member exporters now have a greater stake in membership because they face more discrimination if their nation stays out and greater market access if it joins. The shock raises the pro-membership forces more than the anti-membership forces. The second stage starts if one non-member actually decides to join. The PTA (preferential trade arrangements) enlargement implies that discrimination facing the remaining non-member nations expands and this again strengthens the pro-membership political economy forces in outsiders, potentially producing new membership in the RTA. This cycle repeats until a new political economy equilibrium obtains. See Baldwin (1993) for more rigorous descriptions of the domino theory.

5) See Baldwin (2002, 2006a) for more detailed accounts of the East Asian domino effect caused by China's WTO membership.

preferential trade liberalization between two of their major markets - China and ASEAN - would create discrimination against their goods. In response to ACFTA, Korea and Japan had to figure out a strategy to counteract the discriminatory effects of ACFTA on their products. The strategy adopted was to form a new network of bilateral trade relations with countries within the region, mainly ASEANs because Korea and Japan could not join ACFTA. The result was the Korea-Japan FTA talks, the Korea-ASEAN FTA, the Japan-ASEAN FTA, the Japan-ASEAN bilateral FTAs and even FTAs with countries outside East Asia such as Australia, New Zealand, India(ASEAN+6), and the U.S. (the KOR-US FTA). Figure 1 illustrates the domino effect caused by China's WTO membership.

[Figure 1] East Asian Domino Effect - Phase 1
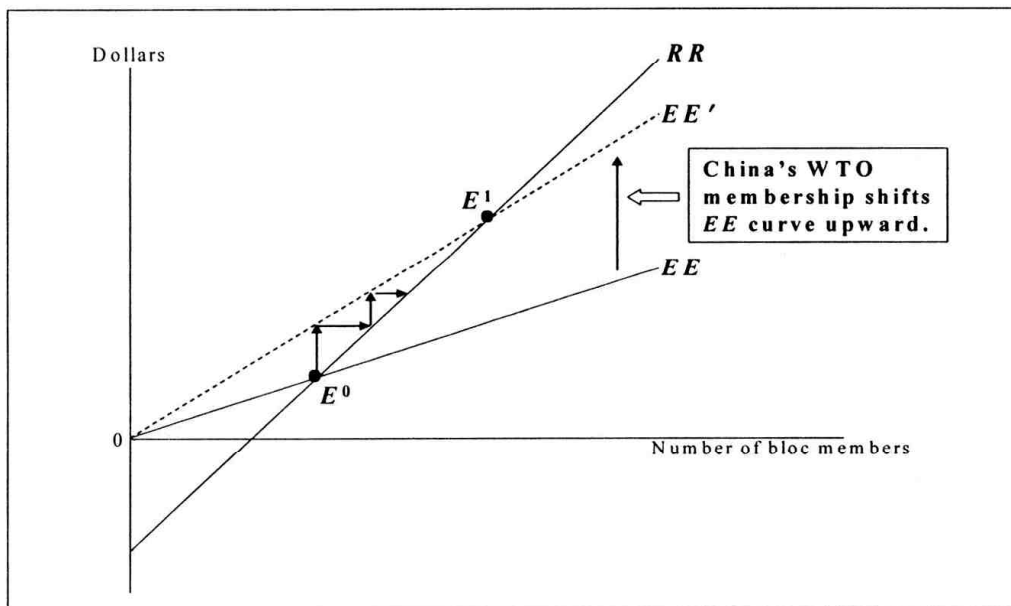
The *EE* curve shows how the pressures to join trade bloc rise as membership in the bloc expands.[6] The *RR* curve shows the intrinsic resistance of countries to joining the bloc. Under some

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6) Appendix 1 briefly explains how *EE* and *RR* curves are derived and the domino effects arise.

regularity conditions, EE and RR curves intersect at E^0 and this determines the equilibrium bloc membership. A shock that deepens the integration in the bloc will rotate EE upward and this results in a new political economy equilibrium at E^1. As a result, the number of countries in the bloc rises. China's WTO membership is the shock that deepens the economic integration in the East Asian region, thereby shifting EE upward.

There is one fundamental weakness in East Asian regionalism formed by the domino effect. This domino effect caused the bursts of bilateral FTAs within East Asia and resulted in so-called 'noodle bowl' syndrome[7] which is highly likely to undermine the benefits of East Asian regionalism in the future. Other major weakness also exists in East Asian regionalism. It is the lack of regionalism in Northeast Asian countries, namely, Korea, China, and Japan. The lack of regionalism in Northeast Asia poses the potential fragility of East Asian regionalism because these three countries are the biggest economies in East Asia, and East Asian regionalism would be incomplete without deeply integrated Northeast Asian countries.

2. East Asian Domino Effect - Phase 2

If it is the China's WTO membership that caused the first wave of domino effect in East Asia, KOR-US FTA can be regarded as the second shock that will strengthen the domino effect in the region. The impact of KOR-US FTA on domino effect is illustrated in Figure 2. The number of countries in East Asian trade bloc will

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7) Noodle bowl syndrome refers to the messy situation of East Asian regionalism. It should be thought of as the East Asian version of Bhagwati's famous spaghetti bowl problem where he says: "spaghetti bowl of tangled, inconsistent trade standards (such as rule of origins) that just can't be good for efficiency. See Baldwin (2006a) for more on noodle bowl syndrome.

rise more because the shock deepening the integration in the region shift the *EE* curve even higher.

[Figure 2] East Asian Domino Effect - Phase 2
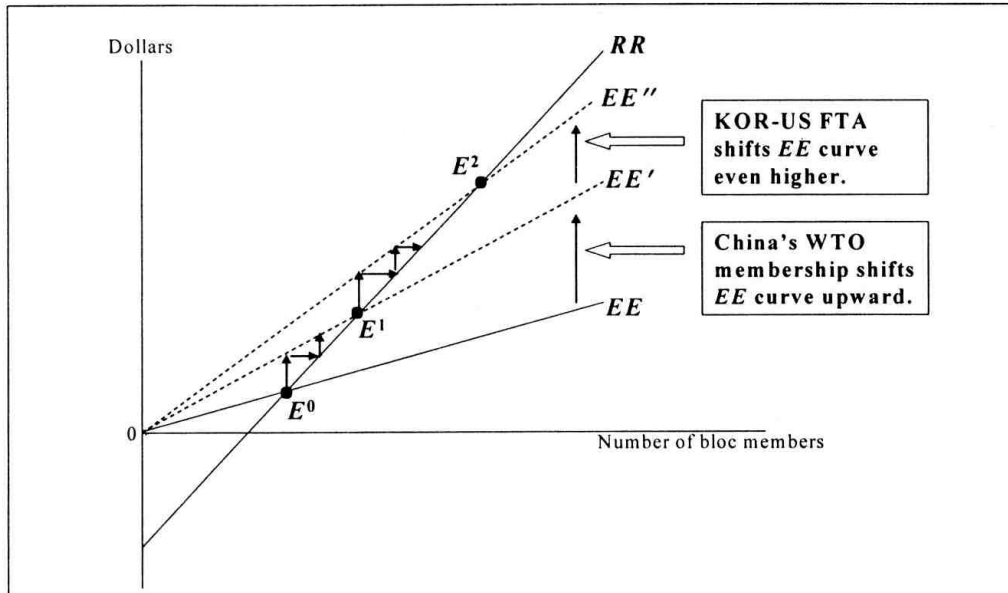
What makes KOR-US FTA have significant impact on East Asian regionalism? It is the fact that KOR-US FTA to South Korea is much like NAFTA to Mexico. NAFTA meant that Mexico had zero tariffs on most of its imports. Because the U.S. maintained low MFN tariffs, bilateral free trade with the U.S. produced domestic prices in Mexico that resembled those that would be observed under free trade with the world. In short, NAFTA launched a *de facto* multilateral liberalizing effect[8] that crushed in ten years the sort of protectionist forces that took the GATT four decades to crush in the U.S. and Canada. This realigned political economy forces in Mexico, eliminating firms that might have objected to liberalization outside of NAFTA and creating firms that would gain. Under this condition, the strategy that Mexico adopted was to sell its market access bilaterally. Mexico signed FTAs with the

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8) This is what we call 'juggernaut effect' in Baldwin(1994), and Grossman and Helpman (1994).

EU and Japan in addition to FTAs with another 40 countries.[9) Trades with most of these countries grew rapidly, which validates Mexico's decision to go bilaterally instead of unilaterally or multilaterally. Mexico's decision also affected other countries' political economy forces. For instance, Chile's political economy forces were similarly re-arrayed by its FTAs and this pushed the Chilean government to adopt Mexico's aggressive bilateralism.

KOR-US FTA will create almost the same effect on South Korea as NAFTA did on Mexico. After KOR-US FTA is ratified by both countries and finally comes into effect in real life, bilateral free trades with the U.S. will significantly reduce down the prices of imports and South Korean economy will face domestic prices that resemble those that would be observed under free trade with the world. It is like South Korea launching a *de facto* multilateral liberalizing effect (in other words, juggernaut effect) with the world. South Korea will aggressively pursue bilateral trade agreements with many different countries in the world just like Mexico did after NAFTA, and particularly, FTAs with East Asian countries are expected to rise much faster than those with countries outside the region. South Korea's decision to sell its market access bilaterally will affect the political economy forces of other nations within East Asia just like Mexico's decision affected Chile's political economy forces.

One important implication that this second wave of domino effect produces is that Korea-Japan FTA is more likely to be reactivated and concluded more easily than it was when first proposed. Many of FTAs concluded in East Asia are covering only limited range of industries. For instance, liberalizations in agricultural sector, service sector, investment rule and intellectual

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9) The main FTAs that Mexico concluded are with Chile, Bolivia, Costa Rica, Columbia, Venezuela, Nicaragua, Israel, EFTA (European Free Trade Association), Guatemala, Honduras and El Salvador, etc.

property rights are not usually welcomed in East Asian regionalism. In contrast, FTAs with the U.S. include a complete range of requests from a wide scope of industries. A host of issues such as trade facilitation, investor protection, government procurement, competition policy, intellectual property, environment issues and labor rights are to be included in FTAs with the U.S. Regional economic integration over the last two decades in East Asia has relied almost exclusively on informal networks of collaboration. "Factory Asia" is the typical example. No formal institutions are established within the network of "Factory Asia." ASEAN has a minimalist secretariat, few formal rules but an on-going commitment to dialogue and the search for consensual solutions to a sequence of problems. Informality is likely to continue in the near future. There is little probability to create formal and rule-based institutions for East Asian regionalism. In contrast, FTAs with the U.S. are rule-oriented. Legal and institutional building is emphasized, and legal commitments with dispute settlement mechanism are to be incorporated in FTAs with the U.S. This implies that KOR-US FTA will cause a profound structural change in South Korean economy in the near future. The more matured and upgraded South Korean economy becomes in the future, the more likely that Korea and Japan successfully conclude bilateral FTAs.[10] South Korea becoming more aggressive in pursuing FTAs and structurally upgraded thanks to KOR-US FTA would be seen as a better FTA partner for rich and advanced Japan than she is now.

3. Will East Asian Dominos Trigger Juggernaut Effects?

Due to the domino effects caused by several shocks such as

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10) Kawai and Wignaraja (2007) reveal that Japan has been pursuing more formal, rule-oriented and deeper RTA with East Asian countries.

China's WTO membership or KOR-US FTA that deepens regional economic integration, East Asia will have a huge network of bilateral trade liberalization across nations. When that happens, it is quite reasonable to expect that average level of tariffs within the region will be much lower than now. It implies that the governments might consider starting multilateral trade negotiations once the average tariff level across countries falls enough. East Asian governments will also need to overcome the noodle bowl syndrome because this syndrome will undermine the benefits of East Asian regionalism at some point of time in the future. This also provides East Asian countries with good incentives to finally begin multilateral trade negotiations. Figure 3 illustrates how the domino effects will initiate the juggernaut effects and how it ends up in East Asia.[11]

In Figure 3 *GFOC* curve[12] shows what the government finds it politically optimal relation between the tariff level and the number of firms in the import-competing sector. *FE* curve relates the equilibrium number of firms to the tariff. When an East Asian country forms a FTA with other nation, *FE* curve will shift to the left. A preferential tariff cut that boosts the nation's imports from the preferred partner will imply that domestic firms face a higher degree of competition for any given level of the tariff. This is why *FE* curve shifts to FE^1. Notice that, in this case, the FTA would reduce the politically optimal tariff from E^0 down to E^1. The stronger the domino effect, the more *FE* curve shifts to the left and the lower tariff level. When the tariff falls enough and noodle bowl syndrome worsens enough, the time will finally come when East Asian governments consider starting multilateral trade talks

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11) Appendix 2 briefly explains how *GFOC* and *FE* curves are derived and the juggernaut model comes into effect.

12) It is called *GFOC* because this curve is derived from the solution to the government's first-order condition.

simultaneously. According to the juggernaut model of how multilateral trade negotiations (MTN) affect tariffs, the array of political economy forces inside each and every nation participating in the talks is altered once MTN starts. It converts each nation's exporters from bystanders in the tariff debate to opponents of protection within their own nation. Exporters can win the prize of better access to foreign markets only if tariffs in their home nation are lowered, so lobbying against domestic tariffs becomes a way of lowering foreign tariffs. This lobbying activity against domestic tariffs shows that the domestic political economy forces are altered by the MTN. The MTN rearranges the political economy forces inside each participating nation in a way that raises the marginal cost to the government of maintaining any given level of tariff (taking as given the number of firms in the import-competing sector). In Figure 3, it shows up as a shift down of the $GFOC$ curve since the government finds it politically optimal to set a lower tariff for any given level of the number of firms in the import-competing sector.[13]

In the upper panel of Figure 3 shows the situation when the bilateral FTAs initiated by the domino effects shift FE curve to the left and then, the resulting MTN shifts $GFOC$ curve downward. The result is a big fall in tariff. However, the situation depicted in the upperpanel is the case when the reciprocal trade talks cover only some of the nation's trade partners, or only part of the goods exported. The tariff level falls down to E^2. E^2 is lower than E^1 which is reduced only by the domino effect, but still higher than zero tariffs. The lower panel shows the situation when all trade is covered. In this case, the downward shift of $GFOC$ is large enough to ensure that the long-run equilibrium involves zero tariffs as shown by E^{final}.[14]

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13) See Baldwin and Robert-Nicoud (2006) for more details.

[Figure 3] East Asian Dominos Triggering Juggernaut Effects
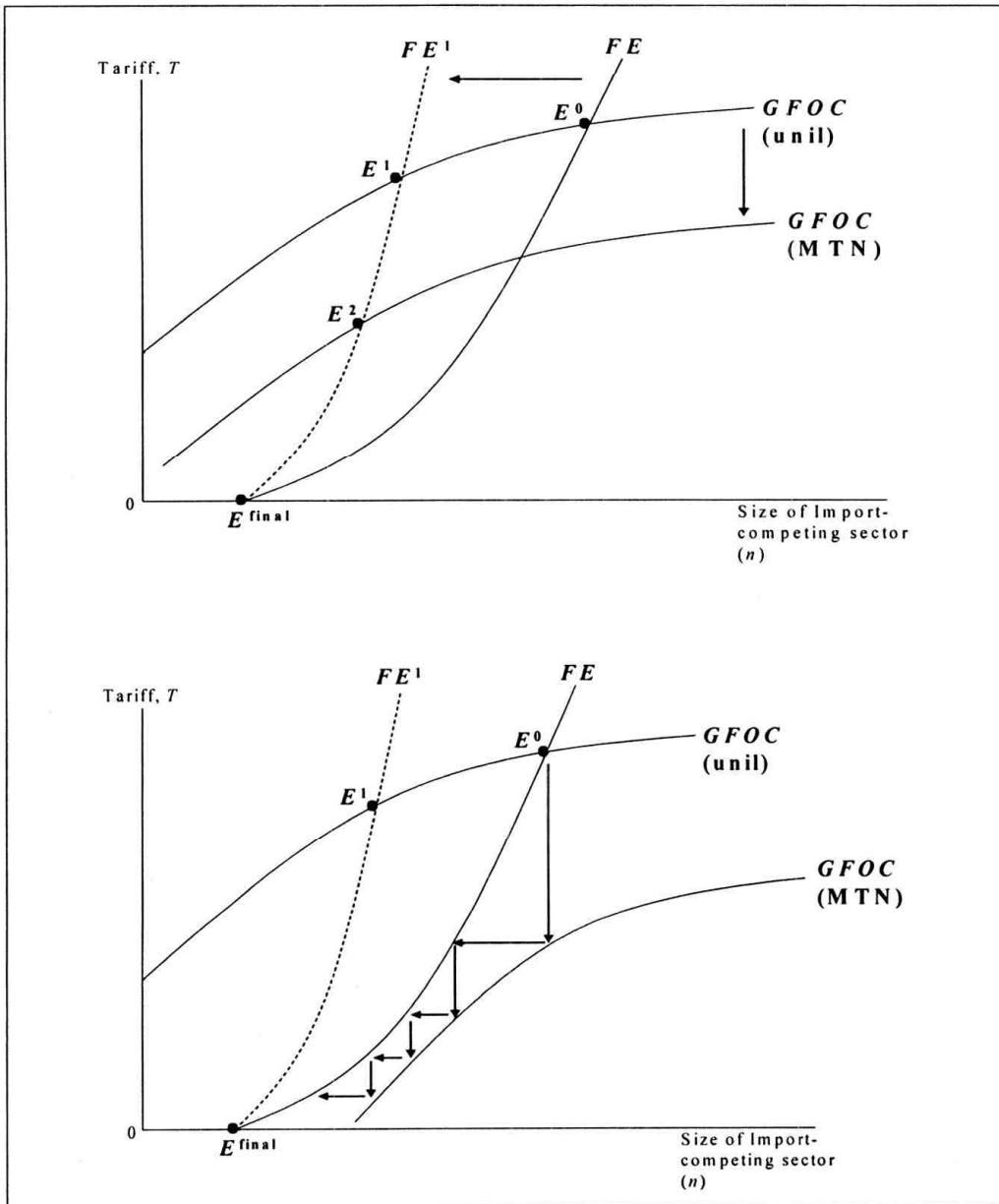
Which case will be the prospective feature of East Asian regionalism? If most East Asian countries choose to pursue trade liberalization which covers broad range of trade-related issues, the MTN reciprocity becomes sufficiently strong and the governments will cut tariff almost down to zero, thereby achieving strong regionalism with free trade. However, the typical pattern of RTAs

14) See Baldwin and Robert-Nicoud (2005) for a formal example that shows a full MTN leads to full liberalization.

in East Asia has presented a limited scope so far. For instance, ASEAN-China FTA has been implemented solely on tariff removal, and its extension to services does not seem to have a large impact. If China, the biggest economy in East Asia, continues to confine its liberalization to a limited range, then it is less likely for East Asia to achieve high-quality regionalism. In contrast to the FTAs with China, FTAs with the U.S. and FTAs between Japan and ASEAN countries are covering much wider range of trade-related issues. Under the influence of KOR-US FTA, South Korea will also try to conclude FTAs of high-quality covering broad range of trade-related issues. This implies that it is less likely for Northeast Asian economic integration to be established because Korea and Japan will pursue a regionalism of high-quality covering broad range of trade-related issues, while China will continue to pursue bilateral RTAs of low-quality mainly covering only tariff removal.

Ⅳ. Concluding Remarks

East Asian regionalism is still in its early stage. Many obstacles are still to be overcome although strong driving force deepening the regional integration is currently under way. Lack of regional integration in security and political arena is one of the crucial gaps to be filled for the whole East Asia. The Northeast Asian integration is another crucial gap to be filled to strengthen East Asian regionalism. However, the prospective is not bright. What East Asia requires is in order to fill up these gaps to somehow build up mutual trusts and establish some form of leadership within the region. To strengthen East Asian regionalism in security aspect, it is absolutely necessary to establish strong leadership such

as the U.S. leadership in security since the WWII. This is in part why East Asian regionalism should be strongly related to the U.S. In order to fill the gap of Northeast Asian economic integration, Korea and Japan should persuade China into signing high-quality FTAs with other countries. But it will certainly take long.

Judging from the evidence given in the paper, East Asian regionalism has truly started since 2000. Idiosyncratic shocks such as China's WTO membership or Korea-US FTA have been magnifying the domino effect among East Asian countries and will continue to do the same in the future. It is even possible that multilateral trade talks would begin at some point of time in the future. However, judging from the limited FTA scopes signed by China, multilateral trade liberalization in East Asia is more likely to converge to some intermediate level of liberalization with tariffs greater than zero. Whether East Asia successfully establishes deep multilateral regionalism depends greatly on China's decision on whether she pursues deep high-quality integration with her Northeast Asian neighbors or not. It may be in a distant future for East Asian regionalism to reach the European level of regional integration.

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Appendix 1. Domino Theory of Regionalism
(Baldwin, 1993)

Consider a world of "g" countries, "h" of which are members of the regional trade bloc. The government of the typical country chooses whether to join the RTA or not. This choice is captured by the variable "u", which equals 1 if the government decide to join and 0 otherwise. Following Grossman and Helpman (1994), the choice is taken to maximize political support, which in turn depends positively upon the level of donations by industry, the level of social welfare net of donations, and "R" which reflects the support of groups that oppose RTA membership on non-economic grounds. The government's problem is to choose "u" in order to maximize the following objective function:

$$u[(1-a)D^{in} + aW^{in}] + (1-u)[(1-a)D^{out} + aW^{out} + R] \quad (1)$$

where $1 \geq a \geq 0$, the D's and W's are the level of donations and social welfare when the country is "in" or "out" of the RTA, respectively. "R" is the support from anti-RTA groups that the government receives if it decides not to join the RTA. Thus, "R" measures the country's general resistance to membership and varies across countries. If $a = 1$, the government acts as a social welfare maximiser. The further "a" is from unity, the greater is the political distortion. Greater political distortion leads to the interests of exporters receiving greater weight in the policy making process. We can think of two cases for social welfare function: one for the RTA member (W^{in}), and the other for non-member (W^{out}).[15]

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15) The first terms in (2) and (3) represent consumer surplus expressed in terms of price and related parameters of utility function. The level of consumer surplus would be different over member and non-member nation because the prices faced by consumers are different over member and

$$W^{in} = (1-\lambda)^{1-\lambda}\lambda^{\lambda}P_{RTA}^{\lambda\sigma/(1-\sigma)} + k\Pi^{in} \qquad (2)$$

$$W^{out} = (1-\lambda)^{1-\lambda}\lambda^{\lambda}P_{Non}^{\lambda\sigma/(1-\sigma)} + k\Pi^{out} \qquad (3)$$

All manufacturing firms in a country are organized into a lobbying group. The group's donations contract is as follows:[16]

$$D^{in} = k\Pi^{in} + \Psi, \quad D^{out} = k\Pi^{out} + \Psi$$

where Ψ is a scalar and k is the number of manufacturing firms per country.

Given the donation contracts, a typical government decides to join the RTA if and only if:

$$R \le (1-a)k[\Pi^{in} - \Pi^{out}] + a[W^{in} - W^{out}] \qquad (4)$$

(4) can be rewritten as:

$$R \le k[\Pi^{\in} - \Pi^{out}] + a(1-\lambda)^{1-\lambda}[P_{RTA}^{-\lambda\sigma/(\sigma-1)} - P_{Non}^{-\lambda\sigma/(\sigma-1)}] \qquad (5)$$

Arranging the countries in order of increasing resistance, we can plot the degree of resistance against the number of the RTA members. In figure 1 and 2, this is shown as the locus RR. In the figure, we have assumed that there is negative resistance to membership in some countries. Negative resistance implies that the government loses political support for non-economic reasons if it

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non-member nation. The second terms in (2) and (3) represent operating profits earned by typical firm when it is based in a member country versus when it is not. See Baldwin (1993) for more details of the derivation of (2) and (3).

16) Following Grossman and Helpman (1994), the donation contracts are restricted to be "truthful" in the Bernheim-Whinston jargon and actual donations are nonnegative.

does not choose membership.

The locus EE plots the right-hand side of (5). Since P_{RTA} is decreasing in h, and $\Pi^{in} - \Pi^{out}$ is increasing in h, it is obvious that the right-hand side of (5) is upward sloping as shown in the figure. The equilibrium number of RTA members is given by the intersection of the EE and RR schedules as long as there are countries in which there is sufficient resistance to the RTA membership to ensure that the locus RR will eventually rise above the EE schedule. For all countries to the right of E^0, for example, the non-economic resistance to the RTA membership exceeds the net economic benefit from joining the RTA. For all those to the left, the political support gained from being "in" versus "out" outweighs the political resistance to the RTA membership.

Appendix 2. Juggernaut Effects

The simplest RTA framework in the following example is useful to describe how $GFOC$ and FE curves are derived in Figure 3. In this example, the world consists of Home, Partner, and the rest of the world (RoW). Each nation exports two goods and imports the other good. These three nations are assumed to be symmetric in terms of size and the MFN tariff they initially impose.
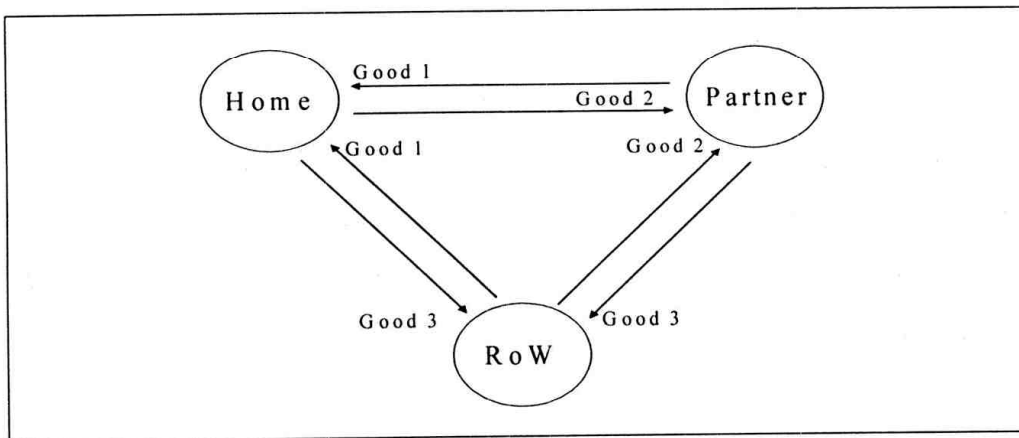
The national supply curves, taking good 1 as an example, are given as follows:[17]

$$p = s^H(X_1^H, n_H, a), \ p = s^P(X_1^P, n_P, b), \ p = s^R(X_1^R, n_R, c)$$

where n_i's are the number of symmetric firms in nation $i (= H, P, R)$, and the prices refer to the prices actually faced by the various firms (with tariffs these prices will differ).

The national demand curves are given as follows:

$$p^j = D(C_1^j, d) \ \text{where} j = H(\text{Home}), \ P(\text{Partner}), \ R(\text{RoW})$$

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17) The supply curves for good 2 and 3 are isomorphic, except Partner has the comparative disadvantage in good 2 and the RoW in good 3.

Based on these national supply curves for Home, Partner and Row, firm level operating profit can be drawn as follows under MFN regime:

$$\pi^H = \pi^H(p,a), \ \pi^P = \pi^P(p,b,T), \ \pi^R = \pi^R(p,c,T),$$

where T=tariff.

Profit of firms based in Partner and the RoW depends on tariff under MFN regime. Home is importing good 1 from Partner and the Row, and Home imposes tariff on good 1 imported. Prices faced by partner and the RoW is $p-T$ under MFN regime.

Assuming entry costs are subject to congestion, and the fixed entry cost depending on δ and n_i for nation i, where $\delta(>0)$ is a parameter, the free entry conditions under the MFN regime can be derived. In other words, firms in each nation continue to enter the good 1 industry until

$$\pi^H(p,a) = \delta g^H(n_H), \ \pi^P(p,b,T) = \delta g^P(n_P),$$
$$\pi^R(p,c,T) = \delta g^R(n_R) \tag{6}$$

where $g^i(n_i)$ reflects the nonlinear relationship between the number of firms and the level of entry cost for each nation. Equations (6) are the free entry conditions.

The equilibrium prices under the MFN and RTA regimes are finally expressed in terms of parameters, tariff, and the number of firms as follows:

$$p_{MFN} = f^1(a,d,T,n_H,n_P,n_R) \ \text{and}$$
$$p_{RTA} = f^2(a,d,T,n_H,n_P,n_R) \tag{7}$$

Plugging (7) into the free entry conditions, we can solve for the *FE* curve, i.e., the n's as a function of T.[18]

$$n_H^{MFN} = \eta^1 \left(n_R^{MFN}, T, \delta, a \right), \quad n_R^{MFN} = \eta^2 (T), \quad n_R^{MFN} = n_P^{MFN},$$

$$\text{where } \frac{\partial \eta^1}{\partial T} > 0, \ \frac{\partial \eta^2}{\partial T} > 0, \text{ and}$$

$$n_H^{RTA} = \eta^3 \left(n_R^{RTA}, T, \delta, a \right), \quad n_R^{RTA} = \eta^4 (T), \quad n_P^{RTA} = \eta^5 \left(n_R^{RTA}, T, \delta \right),$$

$$\text{where } \frac{\partial \eta^3}{\partial T} > 0, \ \frac{\partial \eta^4}{\partial T} > 0, \ \frac{\partial \eta^5}{\partial T} > 0$$

Now the Home government's objective function G is given as follows:

$$G = \alpha \pi_M + CS + TR + \pi_X$$

where π_M is producer surplus in the import competing sector and π_X is producer surplus in the export sector, CS is consumer surplus, and TR is tariff revenue. The first three terms always depend on T while the fourth term depends on T only under reciprocity. Therefore,

$$G_{unil} = \alpha \pi_M [T, \overline{n}] + CS[T, \overline{n}] + TR[T, \overline{n}] + \pi_X [\overline{n}]$$

$$G_{MFN} = \alpha \pi_M [T, \overline{n}] + CS[T, \overline{n}] + TR[T, \overline{n}] + \pi_X [T, \overline{n}]$$

The first order conditions of these two objective functions are the $GFOC_{unil}$ and $GFOC_{MFN}$ in Figure 3. It can be easily shown how the politically optimal tariff depends on the vector of n's, $\overline{n}$.

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18) All results in Appendix 2 can be expressed with specific functional forms of supply and demand curves. See Baldwin (2008) for more practical exercises of the juggernaut effect.

동아시아 경제통합에 한·미 FTA가 미치는 영향분석: 지역주의에 기초한 지역통합이 동아시아에서 시작될 것인가?

전 종 규*

논문초록

　2000년 대 이후 양자간 자유무역협정의 체결이 늘어나면서 동아시아 지역의 경제통합수준도 상당히 향상되는 모습을 보여주고 있으나 EU 및 NAFTA로 대변되는 유럽 및 북미지역의 경제통합 수준에 비한다면 동아시아 지역의 경제통합 수준은 여전히 낮은 것이 현실이다. 본 논문은 과거 동아시아 지역의 경제통합과정에서 나타난 특징을 살펴보고 이를 바탕으로 미래의 통합과정에 대해 시사점을 얻고자 한다. 특히, 한·미 FTA가 앞으로 전개될 동아시아 지역의 경제통합과정에서 어떤 역할을 담당하게 될 것이며, 동아시아 지역주의의 발전과정과 어떤 관계를 가질 것인가에 대해 이론적인 분석을 시도한다. 분석에 사용된 이론모형은 지역주의의 도미노 이론(Domino theory of Regionalism)과 같은 정치경제적 모형이다. 분석 결과 얻은 주요 시사점은 다음과 같다. 한·미 FTA는 동아시아 지역의 경제통합과정에서 발생하는 도미노 효과를 더욱 강화할 것이며, 그 결과 한·일 FTA의 체결가능성이 협상이 시작되었던 최초 시점보다 높아지게 되었고, 이는 한·일 FTA 협상이 가까운 시일 내에 재개될 것을 시사한다.

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