Chapter 9

Escaping from FTA Trap and Spaghetti Bowl Problem in East Asia

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1. INTRODUCTION

FTA has proliferated in East Asia. There are many FTAs enforced and going to be enforced between 2005 and 2010. Concerns over the so-called spaghetti bowl stemming from the proliferation of FTAs are growing in East Asia. The first warn of a possible spaghetti-bowl problem was to be on alert by Baldwin (2006a and 2006b). Naming as the noodle bowl syndrome instead of the spaghetti bowl, Baldwin claimed that nations in East Asia are extending FTAs without any trade arrangement in the light of regional perspective. In short, managing the noodle bowl should be a priority for all East Asian governments. In fact, FTAs in East Asia have been variety in phase-out tariff schedules, exclusion lists of trade liberalization, rules of origin (ROOs) including the application forms. This is because each participant of the FTAs is free to determine them.[1] Therefore, the proliferation of FTAs may have caused the overlapping FTA problem, the so-called spaghetti bowl problem, which exporter have faced different tariffs and ROOs for a product differ by destination.

Onset of the proliferation of FTA in East Asia, it is urgent task to study whether the spaghetti bowl problem is really occurring in East Asia or not. In particular, since in East Asia where productions are fragmented into sequent processes and located across countries in the region, the ROO issue and the overlapping FTAs may increase service link costs and hurt the development of regional production network. This paper aims to identify what problems are occurring and will occur by the enforcement and the proliferation of FTAs, and to examine what measures are necessary to minimize the spaghetti bowl problems.

With such perception, this paper tries to discuss the spaghetti bowl problem caused

[1] Cited from the Technical Information on Rules of Origin, http://www.wto.org/english /tratop_e/ roi_e/roi_info_e.htm.

by the overlapping FTAs. The following section discusses the development of production fragmentation and distribution networks. Section 3 pays attention to the investment incentives policies to provide tax incentives but it is suspicious of being opposed to the WTO trade and investment rules. Section 4 discusses the solution of the problem by launching FTAs. Without the management of FTAs, the overlapping FTAs, however, is in a danger of spaghetti bowl problem because of different exclusion lists, phase-out tariff schedule, and rules of origin. Section 5 investigates rules of origin issue The last section summarizes and concludes. The paper addresses two things. First, FTAs in East Asia varies in exclusion lists and rules of origin. Second, more importantly, local content rule of origin adopted in AFTA, the ASEAN-China FTA, and the ASEAN-Korea FTA is and claims that the rules in East Asia are cumbersome because of several reasons, making very low utilization of FTAs oe the FTA trap. Simplification of rules of origin and harmonization of them among the countries in the region would be the first step to escape from the FTA trap and spaghetti bowl problem.

2. PRODUCTION FRAGMENTATION AND NETOWRK IN EAST ASIA

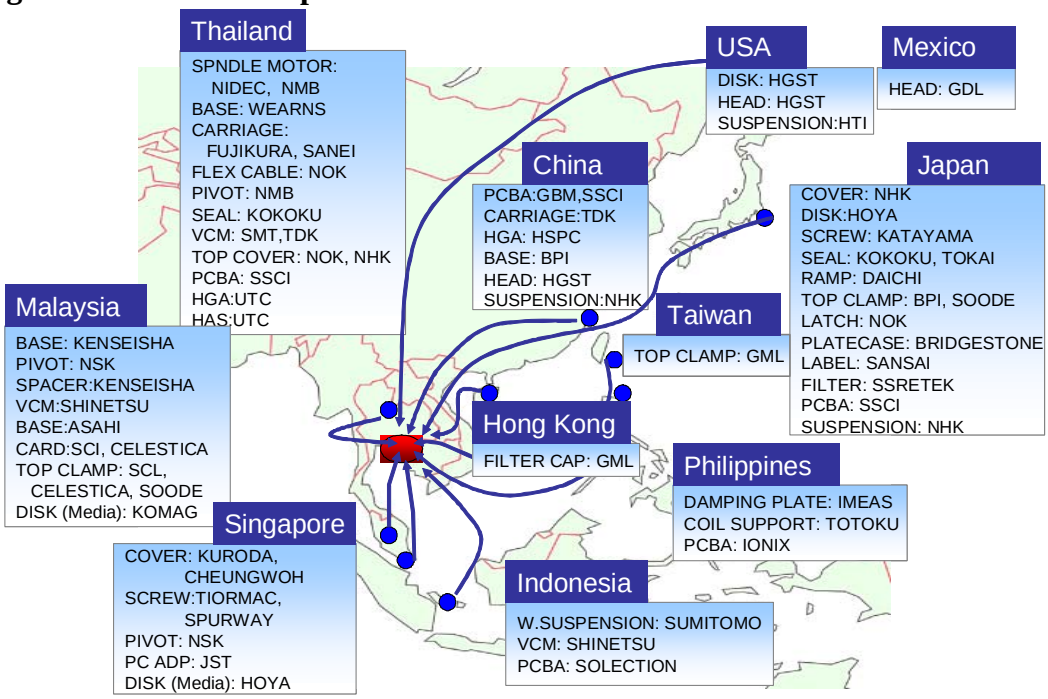
2.1 Characteristics of production fragmentation in East Asia

One of the prominent features of East Asia economy is the production fragmentation in which production process is sliced into sequential production stages and located within a country and across countries. Ando and Kimura (2003) claims that the international production and distribution networks in East Asia is a distinctive characters in their significance in the regional economy, involving a large number of countries in the region and different firm nationalities. What features production fragmentation or networks has in East Asia? What we can observe in East Asia is an explosive increase in trade in intermediate goods, particularly in machinery industries, based on production-process-wise international division of labor among countries at different income levels and development stages. Trade patterns, in today's global competition where economies of scale are important, are quite different from the traditional ones

based on static comparative advantage. The whole production processes involve sequential production blocks that locate across countries and across firm's nationalities (see Hiratsuka 2006). Products traded between firms in different countries are components instead of final products.

Figure 1 give an example of production-process-wise division of labor in hard disc drive manufacturing in East Asia. A hard disc drive assembling factory operating in Thailand procures parts and components from within the country and from the foreign countries, in particular from Asia. The same parts and components are procured from more than two suppliers located in different countries for hard disc drive assembly. Those parts and components require high technology and light weights. Those suppliers are located in different countries transport parts and components to several assemblers such as Seagate, Western digital, Maxtor, Hitachi, Fujitsu, Toshiba, and Samsun, located in different countries. Those parts and components are produced in the locations procuring materials from overseas. For example, medias which are produced by suppliers located in several countries procures from its major materials of substrates from Japan and Malaysia. Substrates procure major materials of blank from two

Figure 1: International procurement of a hard disc drive assembler in Thailand



Source: Hiratsuka (2006).

suppliers located in Japan. Therefore, hard disc drive production has sequent production processes located in various countries in the region.

The well-developed production fragmentation across countries or production network, like a hard disc drive, has developed intensively partially in electronics industry. Simple production fragmentation that a semi-finished product is transported to other country and after processing it is moved back has developed between Singapore, and Malaysia and Thailand. In recent years, such simple production fragmentation is developing seen between Thailand and Vietnam. Surprisingly, in recent years, simple production networks can be seen between Thailand and Laos. Semi-processed condenser parts are transported from the suburb of Bangkok to Vientiane, Laos, for lowest grade condenser, and after very labor intensive hand work processing, the finished condenser are exported back to Thailand.

2.2 Twenty-four hours production operation

Most of factories operating in East Asia by multinational enterprises (MNEs) employ two shift twenty-four hour production operation system in which workers work twelve hours a day (eight hours plus four hour overtime). This system not only meets the “just in time” production system but also recovers equipment costs under short product cycles. Two-shift twenty- four hours production operation system contribute to lower production cost and network set-up costs (fixed cost per unit production).

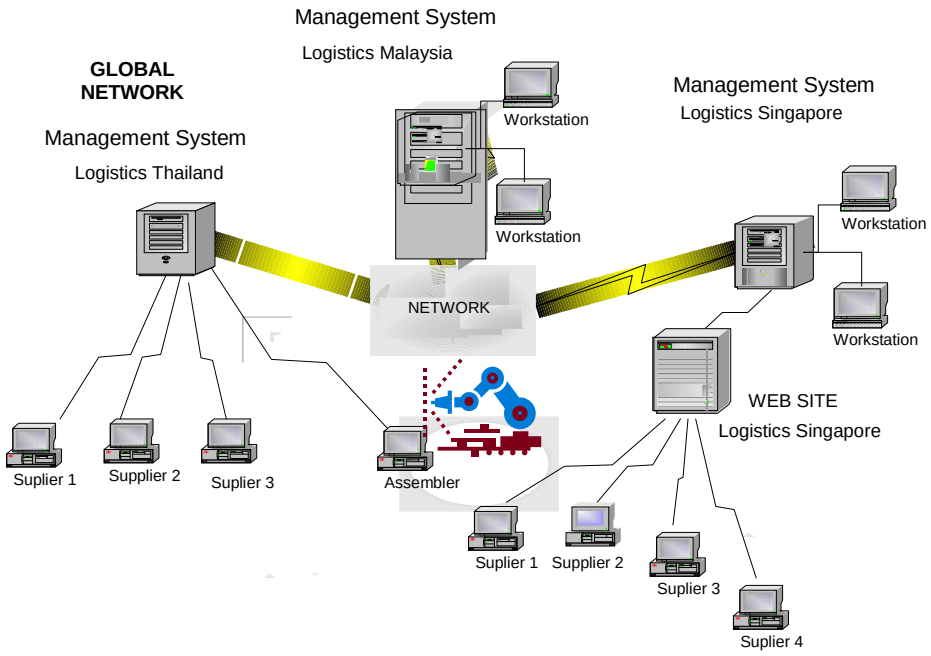
In the “just in time” production system, service link costs which connect separated production bases is low. Parts and components are to be shipped to clients on time. To do so, assembler factories ask logistic company to develop sophisticate online procurement system that connects fragmented suppliers with the assembler. Roughly there are two deliver systems.

2.3 Sophisticate logistic operation under low labor cost

One logistic system is the “hub” warehouse system in which the outsourced logistic company constructs a huge “hub warehouse” close to an assembler, and manages the “hub warehouse” (see Figure 2). Each supplier is asked to transport parts to the “hub” warehouse by its cost. In this system, domestic suppliers are asked to ship one time a day while oversea suppliers can ship parts and components two or three times a week.

And the outsourced logistic company carries those transported parts every two or three hours to the contract assembler on time. Also assemblers do not need to have own warehouses in the factories. The key lies in the inventory management online system which connects a large number of suppliers, a “hub” warehouse and an assembler. The online software system is developed by logistic company. Assemblers do not need to develop the online procurement management system. In stead, assemblers pay the costs of software license, operating “hub warehouse” and transportation from the “hub” to the assembler are borne by assembler. The total cots be born by each assembler is huge but smaller than own development of software development, and the construction and management of well-designed warehouse. The “hub” warehouse system is employed by world class electronics related assemblers such as hard disc drive assemblers and PC assemblers. The logistic companies are global companies who have clients in the world.

Figure 2: Hub warehouse logistic operation



Source: by author

Another is the “milk-run” delivery system that a truck arranged by logistic company drops at each supplier to pick up parts at two or three hour interval and transports them to an assembler. In the milk-run system, most of suppliers are located within distances of two or three hours by truck. But, several major parts and components are imported by the assembler. The transportation costs of goods are borne by the assembler. The “milk-run” system including inventory data are managed by logistic company. The “milk-run” logistic system is employed by automobile, motor cycle industry.

3. INVESTOR FREIENDY INVESTOMENT POLICY BEHIND PRODUCTION FRAGMENTATION

3.1 Tax exemption system favored by East Asia

In addition to the viable logistic activities by private sector, what business environments have been improved through the accumulation of ad-hoc policy responses has contributed to the development of production fragmentation through inflows of foreign direct investment (FDI). In East Asia investor friendly investment policies have encouraged investment and developed production fragmentation and networks. Most of the East Asian countries, in particular, ASEAN and China, have provided investment incentive policies which have provided tax holidays on corporate income as well as import duty exemption on intermediate materials, for export purpose, and on machinery. For example, as summarized in Table1, Thailand has improved its business environments gradually responding to voices and claims by private sectors. Under the BOI scheme, the BOI status company can set up business without paying import tax on machinery and operate production without any tax for export purpose.

3.2 TRIMs problem

East Asian countries employed the investor friendly policies on that investment are designed to protect and foster domestic industries. These measures include local content requirements, export performance requirements, local equity restrictions, and so on. These measures can also be used in connection with fiscal incentives as opposed to

Table 1: Investment Promotion Incentives by Thailand

	import duty exemption on intermedaite goods	import duty exemption on machinery	tax exemption of corporate income
Since 1987	for export more than 80%	None for Zone 1, 50% for Zone2, and 100% for Zone 3	None for Zone 1 , 0-3 years for Zone2, and 4-8 years for Zone 3
Since 1989		None for Zone 1, 50% for Zone2, and 100% for Zone 3	None for Zone 1 , 3 years for Zone2, and 5-8 years for Zone 3
Since 1990			None for Zone 1 , 3 years for Zone2, and 6-8 years for Zone 3
Since 1993		Zone 2: import duty exemption for 1 year for more than 30% export Zone 3: import duty exemption for 5 years formore than 30% export	Zone 1 None (3 years for export more than 80% plus located in industrial estate) Zone 2: 3 years tax exemption in principle but max 7 years for located in industrial estate Zone 3: 8 years tax exemption plus 50% reduction for 5 years, and tax deduction for 25% of investment expenditure

Notes: In 1987, the definition of zones was Zone 1 (Bangkok and one province), Zone 2 (4 provinces), and Zone 3 (67 provinces). The definition was changed in 1989, Zone 1 is Bangkok and five Bangkok surrounding provinces. Zone 2 is 10 provinces and Zone 3 is 57 provinces.
Source: Compiled by author based on materials of the Board of Investment, Thailand.

requirement. Some of these investment measures distort trade in violation of GATT Article III (National Treatment on Internal Taxation and Regulation), and are therefore prohibited by the WTO Agreement on Trade Related Investment Measures (TRIMs). The BOI investor friendly policy which has provided special privilege to exempt import duty on intermediate goods and machinery only for export purpose may violate the TRIMs.

3.3 Solving the problem by FTAs

In East Asia, as mentioned already, the tax exemption systems are employed by the government. Such tax exemption systems, however, are prohibited by the TRIMs. The WTO have prepared exceptions that provides special concession tariffs between the countries by establishing the custom union or the free trade area based on the agreements. To put it differently, FTAs can solve the problems stemming from the TRIMs. In fact, Thailand has shown great interest in FTAs because the current BOI tariff exemption system has opposed to the TRIMs.

4. EAST ASIAN SPAGHETTI BOWL PROBLEM

Baldwin's argument is based on the experiences in Europe. European regionalism has both top-level management (the European Union, or EU) and WTO discipline (Europeans have bound their tariffs at very low levels). Europe discussed its trade arrangements for more than a decade before the EEC was formed. And, finally, the Europe chose to employ the custom union in which goods can circulate within the member countries, once goods enter into a member country. Furthermore, in the late 1990s, Europe was in danger of a spaghetti bowl problem caused by the overlapping FTAs. But, the EU solved the problem by harmonizing the tariff structures of all the bilateral trade arrangements, imposing a common set of rules of origin and insisting on cumulation throughout the region.

4.1 High bound tariffs and low MFN ones

East Asia has not learned much from the EU experiences. First, In East Asia, regional production network have progressed. The "Factory Asia" is operating in under the low most favored nation (MFN) tariff rates, leaving high "bound" tariffs. The MFN tariff cuts were not "bound" in the World Trade Organization (WTO) and so are not subject to WTO discipline. What this so-called "bindings overhang" that the MFN tariffs are much lower than the bound tariffs means is that East Asian tariffs could raise the MFN tariffs without violating any WTO rules. In other word, there is a possible that if a country raises the MFN tariff, trade war will occur. This is quite different from Europe in which

the “bound” tariffs were low.

4.2 Complex of a large number of bilateral trade arrangements

Second, East Asia has not coordinated trade arrangements to solve the problem. FTAs in East Asia have different in exclusion lists, phasing-out tariff schedule, and rules of origin. Baldwin claimed that the ASEAN Free Trade Area (AFTA) featured the complex of bilateral FTA inside ASEAN. An AFTA exporter of any ASEAN member country of any particular product faces different tariffs according to the ASEAN destination market concerned. Thus AFTA acts as if it were 45 (=10×9÷2) bilateral trade relationships. The ASEAN-China FTA (ACFTA) is counted as 10 separate bilateral trade arrangements between each ASEAN member and China since China and each ASEAN chooses its own ‘sensitive list’ and bilateral market access depends upon the interaction of the two lists. A large number of important manufactured items are included in the sensitive lists in the ASEAN-China FTA. For instance, China excluded 178 tariff lines such as automobile, automobile parts, synthetic fiber, papers and so on. Thailand excluded 251 tariff lines of footwear, glass, coil, bars and rods, wire steel, refrigerator compressors, electric fans, electric irons, microwave ovens, and so on. In addition, the China-ASEAN FTA employs the reciprocal principle, which means that products placed on both sides of sensitive lists are excluded from liberalization. As for the China-Thailand bilateral trade relation, each side can exclude 429 (251 plus 178) products from the trade liberalization. Therefore, the 13 members of ASEAN+3 will end up signing a very large number of bilaterals in the coming years, having the potential of 78 （=13×12÷2） bilateral FTAs.

Third, rules or origin varies according to the FTAs. In addition, ROOs are different by FTA or by destination. For manufactured goods, there are three types of ROOs: (1)a content (VC) rule which means a product must satisfy a minimum local (or regional) value ratio, (2) a change in tariff classification (CTC) rule defined at Harmonized System (HS) level, and (3) a specific process (SP) rules which requires a specific production process. Minimum local ratio is defined in the VC rule, and HS digit number is defined in the CTC rule. Kawai and Wignaraja (2007) summarizes the ROOs adopted in several FTAs for automobile and auto parts which provide a material to understand

Table 2. Rules of origin adopted in several FTAs for automobile and auto parts

		JAPAN			KOREA	ASEAN			SINGAPORE		THAILAND
		Japan - Malaysia EPA (2006)	Japan - Singapore EPA (2002)	Japan - Thailand EPA (2007)	Korea - Singapore FTA (2006)	ASEAN Free Trade Area (1993)	ASEAN - PRC FTA (2005)	ASEAN - Korea FTA (2006)	Singapore - Australia FTA (2003)	United States - Singapore FTA (2004)	Thailand - Australia FTA (2005)
87.01	Tractors (other than works, warehouse equipment)	CTC (6 digit) or VC of 40%	CTC, last substancial manufacture*	CTC or VC of 40%	CTC plus VC of 55%	VC 0f not less than 40%	VC 0f not less than 40%	VC 0f not less than 40% or a CTC (4 digits)*	VC of not less than 50%	CTC plus VC of at least 30% (build up)	CTC plus VC of 40%
87.03	Motor Vehicles for transport of persons (except buses)	CTC or VC of 60%	CTC, last substancial manufacture*	CTC or VC of 40%	CTC plus VC of 55%	VC 0f not less than 40%	VC 0f not less than 40%	VC of 45%	Last process of manufacture within territory of the party	CTC plus VC of at least 30% (build up)	CTC plus VC of 40%
87.04	Motor Vehicles for the transport of goods	CTC or VC of 50%	CTC, last substancial manufacture*	CTC or VC of 40%	CTC plus VC of 55%	VC 0f not less than 40%	VC 0f not less than 40%	VC of 45%	VC of not less than 50%	CTC plus VC of at least 30% (build up)	CTC plus VC of 40%
87.08	Parts and accessories for motor vehicles		CTC, last substancial manufacture*	CTC or VC of 40%	CTC plus VC of 50%/ 55%	VC 0f not less than 40%	VC 0f not less than 40%	VC of 45%	Last process of manufacture within territory of the party	CTC (6 digits) or CTC plus VC of at least 30% (build up)	CTC (6 digits) plus VC of 40%
87.11	Motorcycles, bicycles, etc. with auxiliary motor	CTC or VC of 60%	CTC, last substancial manufacture*	CTC or VC of 40%	CTC plus VC of 55%	VC 0f not less than 40%	VC 0f not less than 40%	VC 0f not less than 40% or a CTC (4 digits)*	VC of not less than 50%	CTC (4 digits) or CTC plus VC of at least 30% (build up)	CTC (6 digits) plus VC of 40%
87.14	Parts and accessories of bicycles, motorcycles, etc.	CTC or VC of 40%	CTC, last substancial manufacture*	CTC or VC of 40%	CTC (4 digits)	VC 0f not less than 40%	VC 0f not less than 40%	VC 0f not less than 40% or a CTC (4 digits)*	VC of not less than 50%	CTC (6 digits) or CTC plus VC of at least 30% (build up)	CTC (6 digits)

Source: Kawai and Wignaraja (2007)

how much the ROO problem is complicated. As shown in Table 2, as for motor vehicles for transport of persons (87.03), the adopted rules are different by FTA: (1) a VC rule (a 40% VC rule for AFTA and ASEAN-China FTA, and a 45% VC rule for ASEAN-Korea FTA); (2) a CTC rule (for Japan-Singapore EPA); (3). a choice of CTC or VC (a choice of CTC or a 60% VC for Japan-Malaysia EPA, a choice of CTC or a 40% VC rule for Japan-Thailand EPA; (4) a CTC rule plus a VC rule (a CTC rule plus a 55% VC rule for Korea-Singapore FTA, a CTC plus a 30% VC rule for United States-Singapore FTA, and a CTC plus a 40% VC rule for Thailand-Australia FTA); and (5) a SP rule (the last process of manufacture within territory of the party. Therefore, exporters face different rules of origin by destination. For example, a Thai exporter has to prepare a CTC rule or a 40% VC rule document for exports to Japan, a 40% of VC for exports to within ASEAN and China, a 45% VC rule document for exports to Korea, and a CTC plus a 40% VC rule document for Australia. In addition, the Thai exporter faces different format to apply certificate of origin by those destinations.

4.3 Lack of discipline in FTA

Fourth, FTAs in East Asia are lack of discipline. Trade liberalization level of one country is quite different by partner country. Inside ASEAN, each ASEAM member plans to realize very high level of FTAs. In 2007, the original ASEAN 6, Brunei, Indonesia, Malaysia, the Philippines, Singapore, and Thailand have reduced tariffs to less than 5 percent for 98 percent of tariff lines, and to 0 percent for 75.7 percent tariff lines. They plan to reduce all tariffs substantially to 0 percent by 2010. The new members, Cambodia, Laos, Myanmar, and Vietnam have reduced tariffs to less than 5 percent for 81.6 percent of tariff lines, and to 0 percent for 16.5 percent tariff lines in the year. They will accomplish 0 percent tariff for all products by 2015.

On the contrary, ASEAN-China FTA is a complex of low level of bilateral FTAs. Due to the sensitive lists and the reciprocal principal The China-Thailand bilateral trade liberalization exclude 429 (251 plus 178) products. Korea agreed to liberalize almost 100% of products in the Korea-US FTA. The ASEAN-Korea FTA has a large number of sensitive lists and employs the reciprocal principle.

4.4 Mitigation of spaghetti bowl syndrome

The East Asia's spaghetti bowl will be solved, to some extent, by the completion of AFTA. ASEAN will realize the complete free trade area, in which substantially all products are liberalized in the region by 2015. This means that, after the completion, the management of FTA in East Asia will depend on the ASEAN's external trade relations with the plus three countries of China, Japan, Korea, and another plus three of Australia, New Zealand and India. If ASEAN succeeds to harmonize those bilateral trade relations in exclusion lists and rules of origin, the East Asia's spaghetti bowl problem can be partly solved.

5. RULES OF ORIGIN ISSUE

Here a question rises. Does the overlapping of FTAs or the spaghetti bowl issue in East Asia really is a serious problem? In other words, does the overlapping of rules of origin really impose costs on firms, and as a result, firms feel difficult to utilize FTAs on business? This simple question arises from that the argument of spaghetti bowl problem assumes that any exporter of the FTA member countries have many oversea markets in East Asia. But, it is a possible that not so many exporters have many overseas markets in East Asia. What is the spaghetti bowl problem for East Asia? To make answer to this question, nearly 30 Japanese firms including affiliates operating in Thailand were interviewed. The following things are identified.

5.1 Low utilization of FTAs in East Asia

Firms are not well aware of FTAs. Most firms have only general level information on FTA. In particular, SMEs do not know the system of FTAs. FTAs in East Asia have not intensively utilized by firms. Firms uses FTA selectively for certain products whose MFN tariffs are high and sales are large.

There are several reasons of that. First, the Information Technology Agreement (ITA) in which, among the agreed WTO member countries, most IT related products are traded without tariffs. Electronics components are exempted from import tariffs under the ITA. Second, the investment promotion schemes which exempt tariffs on

intermediate goods for export purpose, like the BOI scheme of Thailand, are available. The promoted firms are familiar with the tax exemption system. Third, FTAs in East Asia employ phase-out tariff schedule for many products. The phase-out tariff schedules, which tariffs are permitted to eliminate within 10 years makes FTAs unimpressive, lowering the motivation for enterprises to use FTAs. For example, in the Japan-Thailand EPA, Thailand offers the concession tariffs, e.g., of mould (HS 8480) to be 4.17% in the first year, 3.33% in the second year, 2.50% in the third year, 1.67% in the fourth year, 0.83% in the fifth year, and 0.00% in the six year against the MFN tariff, 5% (see Table 3). Because of the small spread between preferential tariff and the MFN one in the initial years, the motivation to use FTAs is quite low, resulting in failure to disseminate the Japan-Thailand EPA even after the enforcement. For these reasons, FTAs have not been utilized intensively in East Asia.

Table 3: Phase-out tariff schedule by Thailand in the Japan-Thailand EPA

Tariff item number	Description of goods	MFN Tariff	Rate of customs duty					
			1st year	2nd year	3rd year	4th year	5th year	As from 6th year
84.80	Moulding boxes							
8480.10	- Moulding boxes for metal foundry	5.00%	4.17%	3.33%	2.50%	1.67%	0.83%	0
8480.20	- Mould bases	5.00%	4.17%	3.33%	2.50%	1.67%	0.83%	0
8480.30	- Moulding patterns	5.00%	4.17%	3.33%	2.50%	1.67%	0.83%	0
	- Moulds for metal or metal carbides :	5.00%						
8480.41	- - Injection or compression types	5.00%	4.17%	3.33%	2.50%	1.67%	0.83%	0
8480.49	- - Other	5.00%	4.17%	3.33%	2.50%	1.67%	0.83%	0
8480.50	- Moulds for glass	5.00%	4.17%	3.33%	2.50%	1.67%	0.83%	0
8480.60	- Moulds for mineral materials	5.00%	4.17%	3.33%	2.50%	1.67%	0.83%	0
	- Moulds for rubber or plastics :	5.00%						
8480.71	- - Injection or compression types	5.00%	4.17%	3.33%	2.50%	1.67%	0.83%	0
8480.79	- - Other	5.00%	3.75%	2.50%	1.25%	0	0	0

Source: Compiled by author by using the Ministry of Foreign Affairs, Japan.

5.2 Cumbersome rules of origin

Author finds that the current rules of origin in East Asia are problematic in many ways. First, exporters have to burden the costs to prepare documents but benefits go to importers. The incentive to utilize FTAs, therefore, is low for exporters, in particular in Japan where labor costs are very high. The ROO issue seems to impede the utilization of EPAs. The application and certificate fee itself is small. But, the administrative costs

to prepare documents are costly for firms, in particular in Japan since labor costs are high. More importantly, it takes time of two days to get certificate of origin from the organizations. It does not match with “just in time” production.

Second, the value content (VC) rule, which has been adopted in AFTA, ASEAN-China FTA and ASEAN-Korea FTA, is quite costly and cumbersome for firms. It is quite difficult to calculate the value content (or local content) for a single part item since purchasing sources of parts as well as prices are frequently change according to market conditions. Such production processes tend to easily push up the costs of verifying the compliance of ROO. In addition, the document of the VC rule requires the information about costs and procurement sources. Sometimes they are confidential information because patented material and sources of suppliers are secret for some firms and the OEM suppliers. The change of tariff code (CTC) rule is better practice than the VC rule. The Bill of Materials (BOM) that describes the flow chard of production process for a final product can be used as the CTC rule certificate if the tariff code numbers are added on it. But, negotiation on digit level of the CTC is a difficult matter. More important, even the CTC rule, it takes time to get certificate of origin. The CTC rule and the less-demanding self-certificate rule should be launched.

Third, normally, FTAs in East Asia employs the “direct shipment requirement” which does not allow transporting goods through third country. In ASEAN, Singapore has intermediate trade function. Goods are transported to Singapore first and then delivered to other ASEAN country. The “direct shipment requirement,” which is an unexpected problem, does not meet the real distribution system developed in ASEAN. Plurilateral FTA may be better than bilateral FTA since the former enables to transport goods via Singapore to other ASEAN countries.

5.3 Cumbersome rules of origin

The AFTA rules of origin require 40% of cumulating local content in the region. The AFTA rule seemed to be a standard rule in East Asia because of its simple 40% local content requirement and low barrier. The 40% local content requirement is not high barriers because local content of manufacturing sector in average is 84% for Indonesia, 57% for Malaysia, 51% for Singapore, 65% for the Philippines, and 67% for Thailand (Kuroiwa 2008). The AFTA rules of origin, however, are cumbersome, and plan to

employ the change of tariff code rule for specific products. Eventually, it is likely that the AFTA rules will change from the pure 40% cumulating local content rule to a kind of product specific rule which the adopted rules varies according to products, and the rules of origin in East Asia will employ the product specific rule that allow to choose the local content rule and the change of tariff code rule. In fact, the ASEAN-Japan EPA will employ such product specific rule. The product specific rule that allow the choice of local content rule and change of tariff code rule is better than the pure local content rule. But, the rules of origin in East Asia ask to submit the documents to certificate of origin. It takes time one or two days, which does not suit to the “just in time” product operation. Less demanding self-certificate system is necessary to encourage the utilization of FTAs and mitigate the spaghetti bowl problem.

6. SUMMARRY AND CONCLUSION

In East Asia, de facto economic integration has developed in the form of production fragmentation or production networks. In recent years, however, FTAs have proliferated in the region. This paper aims to discuss de jure integration (formal integration) in East Asia. The paper reviews the characteristics of production fragmentation or de facto base economic integration, claiming that production fragmentation is operated under the twenty-four hours production operation and sophisticate logistic networks. Those systems make it possible to respond the “just in time” production system prevailing in East Asia, in particular, in ASEAN and China. Also, the development of production fragmentation has been supported by investor friendly tax incentive measures including tax exemption on intermediate goods and machinery as well as on corporate tax for several years. The exemption on import duty is suspicious of the opposition to the Trade Related Investment Measures (TRIMs). One of aims to pursue FTAs in East Asia is to solve the problem. However, the FTAs in East Asia have not been well managed to encourage regional integration. The WTO bound tariffs are rather high although the applied MFN tariff rates are very low. Such situation has a risk of trade war. More importantly, FTAs are different in exclusion lists and rules of origin, and as a result, spaghetti bowl problem is in danger of spaghetti bowl problem that exporters of a

product will face different FTA preferential tariff and rules of origin by destination. In East Asia, exporters and importers are not well aware of FTAs. There are various reasons of that. The Information Technology Agreement (ITA) enables trade across countries most of electronics goods without any import tariffs. Importers or producers are familiar with the exemption of import tariff on intermediate goods provided by the BOI. Phase-out tariff schedule which tariffs are eliminated within 10 years period makes FTAs unimpressive. Exporters have to prepare documents but benefits go to importers. Local content rule which ahs prevailed in East Asia is cumbersome in preparing documents. FTA imposes "direct shipment requirement" which FTA preferential tariff are not applied to the products which are shipped via a third country. For these reasons, East Asia has been in the FTA trap that FTAs have not well utilized by firms intensively. FTA East Asia has to manage FTAs by employing a simple self-certificate and change of tariff code rule. ASEAN will complete the free trade area by 2015, escaping from the spaghetti bowl problem inside ASEAN. Therefore, whether East Asia can mitigate the spaghetti bowl problem depends on the ASEAN's bilateral trade relations with the plus three countries of China, Japan, and Korea, and anther plus three of Australia, New Zealand and India. If ASEAN can harmonize those bilateral trade relations, East Asia will be able to escape from the spaghetti bowl problem. Simplifying rules of origin and harmonizing them among the countries in the region would be the first step to escape from the spaghetti bowl problem.

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