

#### I Introduction

The world is witnessing the advances in regional economic integration in various parts of the world. Indeed, Western Europe, North America and East Asia are often referred to as the areas comprising a three polar system as economic activities such as foreign trade and foreign direct investment (FDI) have become concentrated in these regions. Despite the similarities in increased regional economic activities, the drivers leading to such phenomena are different in three regions. For Western Europe, regional institution in the form of regional trade agreement, more specifically the customs union, played a crucial role, while for North America it was market mechanism rather than regional institution that contributed to regional integration in the first place but it was later supplemented by free trade agreement (FTA), a form of regional trade agreement.

Unlike Western Europe or North America, regional economic integration in East Asia was promoted by market forces without regional institution until recently. It was around the turn of the 21<sup>st</sup> century that East Asia started to establish FTAs. Another difference in regional economic integration in East Asia compared to the cases in Western Europe or North America is a lack of region-wide framework. Indeed, one could characterize the situation in East Asia as the proliferation of bilateral and plurilateral FTAs. Recognizing the benefits of region-wide FTAs, several ideas have been floated for establishing region-wide FTAs. However, differences in the opinions about region-wide FTAs among East Asian economies have so far precluded them from establishing a region-wide FTA.

In light of these developments in East Asia, this paper attempts to examine the prospects of establishing a region-wide FTA in East Asia. In order to examine the issue, section II analyzes the characteristics of regional economic integration in East Asia from

the 1980s/1990s to the recent period, to set the stage for an analysis of the main issue. The analysis reveals that market forces, which are activated by unilateral trade and FDI liberalization by East Asian economies, played a crucial role in deepening regional economic integration in East Asia until the late 1990s. Section III examines institution-driven regionalization in East Asia. It first reviews the developments and proliferation of FTAs in East Asia and then it identifies their special characteristics and the factors behind the proliferation of FTAs. The section then examines the economic impacts of region-wide FTAs by undertaking simulation analysis based on a general equilibrium model. Section VI discusses the future prospects of region wide FTAs and other types of region-wide cooperation.

## II. Market-Driven Regionalization in East Asia

East Asia has seen rapid advances in regional economic integration in recent decades with foreign trade and investment being main drivers. Multinational corporations (MNCs), which are major investors as well as major international traders, have played an important role in promoting regional economic integration in East Asia, as they actively set up regional production networks, in order to achieve efficient production. What is notable is that it is trade and FDI liberalization policies not the formation of preferential regional trading frameworks such as an FTA that promoted regional economic integration in East Asia, at least until the turn of the 21<sup>st</sup> century. As such, the type of regional economic integration emerged in East Asia can be characterized as market-driven regionalization rather than institution-driven regionalization. This section provides an overview of market-driven regionalization in East Asia and an analysis of the factors leading to such development.

#### II.1. Increasing Intraregional Dependence in Foreign Trade

Rapid expansion of intraregional trade in East Asia can be discerned from various aspects in Table 1<sup>1</sup>. Intraregional trade in East Asia increased 2.19 times in ten years from 1995 to 2005. During the same period East Asia's overall exports and imports increased 2.08 and 2.03 times, respectively. As a result of rapid expansion in intraregional trade, the share of East Asia's intraregional trade in world trade increased from 12.3 percent in 1995 to 13.2 percent in 2005. The magnitude of East Asia's intraregional trade is significantly larger than NAFTA's intraregional trade, but substantially smaller than the EU's intraregional trade. The shares of intraregional trade in world trade for the NAFTA and the EU are 7.7 and 25.4 percent in 2005, respectively.

East Asian economies have become increasingly important trading partners for each other, as intraregional trade increased its importance for East Asian economies. The share of East Asia in East Asia's overall exports and imports increased from 47.4 and 54.7 percent in 1995 to 49.9 and 59.1 percent in 2005, respectively. The importance of intraregional trade for the region's trade in East Asia is greater compared to the NAFTA (55.1 percent for exports and 38.3 percent for imports, both in 2005) but lower compared to the EU (66.3 percent for exports and 66.1 percent for imports).

Among the East Asian economies, China increased the importance the most for other East Asian economies as a trading partner from 1995 to 2005, as East Asia's exports to and imports from China expanded 3.96 and 3.74 times during the 1995-05 period, much faster compared with East Asia's trade with other East Asian economies. For Japan, NIES4, and ASEAN4, international trade with China expanded the fastest

<sup>&</sup>lt;sup>1</sup> East Asia in the table is defined to consist of the following 10 countries and economies, China, Japan, NIES4 (South Korea, Taiwan, Hong Kong, and Singapore), and ASEAN4 (Indonesia, Malaysia, the Philippines, and Thailand) because of data availability. Many studies have identified rapid expansion of intra-regional trade in East Asia See, for example, Ng and Yeats (2003), and Urata (2001, 2005a).

compared to their trade with other countries/regions. It should be added that it is not only the East Asian economies but also the NAFTA and the EU that saw their trade with China increase very fast. Increased importance of China as a trading partner for many East Asian economies as well as non-East Asian countries is largely due to China's rapid economic growth. In addition, China's substantial trade and FDI liberalization contributed significantly to this effect.

For China, international trade with ASEAN4 expanded at remarkable speed, as China's exports to and imports from ASEAN4 expanded 5.72 and 8.26 times, respectively, from 1995 to 2005, much faster compared to its trade with other East Asian economies. Rapid expansion in China-ASEAN4 trade appears largely due to China's rapid economic growth, but the establishment of the ASEAN-China FTA in 2005 is likely to have some positive impacts. Despite the rapid increase in the China-ASEAN4 trade, the share of China-ASEAN4 trade in both China's and ASEAN4's overall trade is still small. For China, ASEAN4 account for 4.1 and 7.0 percent of its exports and imports, respectively in 2005, while the shares of China in ASEAN4's exports and imports are 10.8 and 9.6 percent, respectively, in the same year.

The increasing importance of China-ASEAN4 trade was emphasized above, but one cannot dismiss the importance of the NIES4 for China and ASEAN4 in their trade. Indeed, the NIES4 were by far the largest trading partner for China and ASEAN4 in 2005. The importance of the NIES4 can be partly explained by the roles of Hong Kong and Singapore as an entrepot. It should also be noted that intra-ASEAN4 trade increased noticeably by 3.51 times. This increase is certainly helped by the ASEAN Free Trade Area (AFTA), under which trade barriers on intra-ASEAN trade have been increasingly removed.

Contrary to the increased importance of China as a trading partner for other East Asian economies, Japan's importance declined substantially from 1995 to 2005, largely because of Japan's long recession. For the East Asian economies other than Japan, the share of Japan in their exports and imports declined from 8.5 and 16.1 percent in 1995 to 7.4 and 11.9 percent in 2005, respectively. Indeed, Japan was surpassed by China in terms of the importance as a trading partner for East Asian economies during the 1995-2005 period. An examination of the changing geographical patterns of trade for the NIES4 and ASEAN4 reveals that for ASEAN4, unlike the case for the NIES4, Japan has a larger share than China, although the gap is rapidly narrowing.

These differences in the changing importance of East Asian countries as trading partners for other East Asian countries have important implications on foreign economic policies such as trade and FDI policies and economic assistance policies for East Asian countries. Specifically, "rivalry" between rising China and declining Japan for gaining a leadership role in regional economic integration in East Asia is attracting a lot of attention from policy makers, researchers, business people and others. I will come back to this issue in a later section.

# II.2. Creation of Regional Production Networks by MNCs

One notable characteristic of intra-regional trade in East Asia is increasing and high importance of trade in machinery parts. This observation is supported by the figures in Table 2. For office and telecommunications, electrical appliances and road vehicles, the share of parts in intra-East Asian trade increased from 1990-94 to 2000-04, although the magnitude of the shares differ among the products. Although the share of parts in textile/apparel trade is also high as that for road vehicles, it declined over time.

Among the machinery sectors, the share of parts is highest for electrical appliances, which is followed by office and telecommunications equipment and then by road vehicles. The importance of parts in intra-East Asian trade can be observed from a comparison with trade with the US and the EU. One finds that East Asia's exports have lower (higher) share of parts (finished products) in its trade with the US and the EU compared to that with East Asia.

The pattern of intra-East Asian trade in parts differs by the products and by the economies. For electrical appliances approximately 80 percent of East Asia's exports take the form of parts and the remaining 20 percent of finished products regardless of their export destinations. High share of parts in electrical appliances may be attributable to high shipping cost, as white goods, a large portion of traded electrical appliances, are bulky and heavy. However, one exception is China in that the share of finished products in the exports of electrical appliance is high, especially for its exports to developed countries, possibly reflecting very competitive (low) prices of Chinese products.

A similar trading pattern of China's electrical appliances trade can be found for East Asia's trade in office and telecommunications and textiles/apparel. East Asian economies import parts from other East Asian economies and export finished products to developed countries.

Our findings on the pattern of trade in parts and finished products in office and telecommunications, electric appliances, and textile/apparel suggest the presence of triangular trade. Under the triangular trade, parts produced by Japan and the NIES are exported to China and ASEAN countries to be assembled as finished products, which in turn are exported to North America and Europe.

East Asia's trade pattern in road vehicles is different from the patterns observed for electronics or textiles. Similarly to the case for office and telecommunications

equipment, and electrical appliances, the share of parts in intra-East Asian trade is increasing, but unlike these products finished products account for a large share for road vehicle exports from Japan and the NIES. Unlike the case for office and telecommunication equipment or textiles/apparel, almost all of Japan's imports in road vehicles from East Asia are parts and not finished products. This finding indicates a lack of competitiveness in assembling automobiles in East Asian developing economies vis-à-vis Japan. However, with an improvement in technical capability, East Asian developing economies may improve competitiveness and successfully export finished products to Japan, just like the cases of other machinery products.

The findings in this section reveal developing East Asia's role as a world factory for electronics and electric machinery and textiles, as they produce finished products by assembling parts supplied by developed and developing economies and sell finished products in the world market. Indeed, we observe the emergence of regional production network in electronic and electric machinery in East Asia, which have promoted regional economic integration in East Asia. Such regional production networks have been created mainly by MNCs from Japan, the US, the EU, as they break up the production process into various sub-processes and locate each process in a country or a region where the sub-process is conducted most efficiently through active foreign direct investment. This kind of fragmentation strategy has been adopted by MNCs, as they take advantage of substantial diversity in the level of economic development and wages among the East Asian countries.<sup>2</sup>

#### II.3. Trade and FDI Liberalization in East Asia

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<sup>&</sup>lt;sup>2</sup> See Ando (2006) and Kimura (2006) for regional production networks in East Asia..

Various factors such as buoyant world economy contributed to rapid expansion of foreign trade and FDI in East Asia. One of the most important factors that contributed to rapid expansion in trade and particularly intra-regional trade is trade and FDI liberalization pursued by East Asian countries. This section reviews the recent development in the changes in foreign trade and FDI policies in East Asia.

In the 1980s and 90s, East Asian countries embarked on unilateral liberalization of trade and FDI policies and deregulation in domestic economic activities as part of comprehensive structural reform policies. Such policy changes were induced partly by their commitments to the World Bank and the IMF for obtaining economic assistance and largely by the realization on the part of East Asian countries that liberalization and deregulation would promote economic growth. Liberalization of trade and FDI regimes led to the expansion of exports and inward FDI because it shifted the incentives from import-substituting production to export production and increased attractiveness of these countries to foreign MNCs.

East Asian countries unilaterally liberalized their import regimes by lowering tariff rates and non-tariff barriers from the early 1980s through the early 2000s (Table 3). The notable exceptions were Hong Kong and Singapore, which had adopted virtually free trade regime for a long time. Many East Asian countries had high tariff rates in the late 1980s and early 1990s. Among nine East Asian countries shown in the table Japan and Singapore are the only two countries, whose average tariff rates were lower than 10 percent in the late 1980s. China, Thailand and the Philippines imposed particularly high tariff rates. Since then all the countries pursued liberalization policies. China and the Philippines reduced their tariff rates dramatically so that their respective average tariff rates came down to less than 10 percent by the early 2000s. Other countries carried out trade liberalization as well, but their magnitude of tariff cuts was less dramatic. In spite

of substantial reduction in tariff rates, some countries still maintain relatively high tariff rates. The average tariff rates for Korea and Thailand are around 15 percent in the early 2000s. It should be noted that the primary sector is relatively more protected than the manufacturing sector, as the average tariff rates for primary products are higher than those for manufactured products in all the economies in the table except Malaysia and Singapore.

Policies toward FDI inflows started to be liberalized in the mid-1980s and liberalization of FDI policies has continued since then, because East Asian economies began to realize that FDI inflows would promote economic growth. Although it is difficult to quantify the restrictiveness of an FDI regime, it is clear that many East Asian economies have liberalized their policies toward FDI inflows since the mid-1980s<sup>3</sup>. Restrictions on FDI take various forms, including restrictions on market access or right of establishment, most-favored-nation treatment, and national treatment. Many East Asian economies ruduced restrictions on market access by lowering the number of sectors and industries on the negative list and by relaxing the limits on foreign equity ownership. Among them, Indonesia, Korea, Malaysia, the Philippines, and Thailand adopted substantial FDI liberalization measures in an effort to attract foreign investors. Furthermore, recognizing the important contribution that FDI may make toward economic growth, a number of economies introduced incentives such as tax breaks to attract FDI. Indeed, there has been keen competition among the countries in the region to attract FDI by reducing barriers and providing incentives.

Having discussed that East Asian economies have undertaken trade and FDI policies, which contributed to rapid expansion of trade and FDI as well as the formation

<sup>&</sup>lt;sup>3</sup> Japan PECC (2002) examined the impediments to FDI in APEC economies, and found that many East Asian economies reduced the number and the level of impediments by liberalizing FDI policies.

of regional production networks by MNCs, there still remain various obstacles in foreign trade and FDI. For example, many East Asian economies still apply high tariff and restrictive FDI measures on the automobile sector with an objective of developing that sector. Similar protection is also found in material producing sectors such as iron and steel. It should also be reiterated that agriculture is subject to substantial protection both in developed as well as developing economies. As will be discussed in the next section, one of the factors that have led to the recent surge of free trade agreements (FTAs) in East Asia is the desire for East Asian economies to overcome high protection barriers to expand business opportunities.

### III. Institution-Driven Regionalization

East Asia's regional economic integration was mainly market-driven as trade and FDI liberalization by East Asian economies promoted foreign trade and FDI of these economies, which in turn resulted in rapid economic growth of the East Asian region. Rapid economic growth led to further liberalization in trade and FDI policies, resulting in a virtuous cycle of economic growth and trade and FDI liberalization. Rapid economic growth coupled with trade and FDI liberalization contributed to regional economic integration in East Asia, as rapidly growing economies became the sources as well as destinations of foreign trade and FDI. This market-driven regionalization was gradually complemented by an element of institution-driven regionalization, as free trade agreements (FTAs) have become popular among East Asian economies. This section analyzes emergence of institution-driven regionalization in East Asia in recent years.

#### III.1. Expansion of Bilateral and Plurilateral FTAs

East Asia was not active in the formation of regional trade agreements (RTAs), which include FTA and customs union, until recently (Table 4)<sup>4</sup>. Indeed, ASEAN Free Trade Area (AFTA), which was established in 1992, was the only major FTA until Japan and Singapore enacted Japan–Singapore FTA (formally named a New Age Japan-Singapore Economic Partnership Agreement, JSEPA) in 2002<sup>5</sup>. However, the situation changed dramatically in recent years. Many countries in East Asia began to form FTAs with the countries not only in the region but also outside the region.

The members of the ASEAN started the ASEAN Free Trade Area (AFTA) process in 1992 to make ASEAN a competitive region for exports and for attracting FDI. The 1992 agreement provided for the liberalization of tariff and non-tariff measures under the Common Effective Preferential Tariffs. The target year for achieving tariff and non-tariff liberalization was originally set for 2008, but was later moved forward to 2002. The AFTA has been in effect among the original five ASEAN members—Indonesia, Malaysia, Singapore, Thailand and the Philippines—since January 2002 when the tariff rates were reduced to 0-5 percent, though the exclusion list is long and individual country circumstances vary. Furthermore, Vietnam is to comply with the same tariff standards by 2003, Laos and Myanmar by 2005, and Cambodia by 2007. By 2010 ASEAN is expected to become a complete free trade area free from tariffs with the exception of CLMV members, which are given later deadlines. FDI

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<sup>&</sup>lt;sup>4</sup> In the GATT/WTO, regional trade agreements (RTAs), which violate one of its basic principles of non-discrimination, are permitted under GATT Article XXIV with several conditions, which include liberalization of substantially all the trade of the members, not increasing trade barriers on non-members, and completing the RTA process within ten years. For developing members, more lenient conditions are applied under the enabling clause. An FTA is considered to be a shallow form of regional integration, because it only removes tariff and non-tariff barriers among the members, while a customs union is a deeper integration, as it adopts common external tariffs on non-members, in addition to the removal of tariff and non-tariff barriers on trade among the members.

<sup>&</sup>lt;sup>5</sup> For discussions on FTAs in East Asia, see for example, Aggarwal and Urata (2006), Urata (2005), and Pangestu and Gooptu (2004), Soesastro (2006) and Sally (2006)...

liberalization in the ASEAN has been underway after the creation of the ASEAN Investment Area (AIA) in 1998, which provides coordinated investment cooperation and facilitation programs, market access, and national treatment of all industries. But some ASEAN members continue to maintain sizeable sensitive and exclusion lists from FDI liberalization. In order to accelerate the creation of free FDI region, ASEAN Comprehensive Investment Agreement (ACIA) was established in December 2008.

In 2003 the ASEAN Leaders agreed to set the target year of 2020 for the establishment of an ASEAN Community, which is composed of the ASEAN Security Community, the ASEAN Economic Community and the ASEAN Socio-Cultural Community. Under the ASEAN Economic Community free flow of goods, services, investment and capital is to be established. The target date for the establishment of an ASEAN Community was later moved forward to 2015.

Besides AFTA, ASEAN as a group as well as its members individually have become active in FTA formation and negotiations with other countries in recent years. One of the FTAs involving ASEAN that has received most attention recently is that with China. ASEAN and China enacted an FTA in goods trade in July 2005 and service trade in January 2007, while they signed an investment agreement in August 2009. ASEAN excluding Thailand enacted an FTA with Korea in July 2006 and it enacted an FTA with Japan in December 2008. ASEAN signed FTA agreements with CER (Australia-New Zealand) in March 2009 and India in August 2009. Currently, ASEAN is negotiating an FTA with the EU. These developments indicate that ASEAN has become a hub of FTAs in East Asia.

Many ASEAN members have become active in establishing bilateral FTAs. Singapore enacted many FTAs with countries such as New Zealand, Japan, Australia, the USA, the EFTA, and India and it is negotiating with many countries. Thailand has

also become active in establishing FTAs, as it has implemented FTAs with Australia, New Zealand, and Japan and it is currently under negotiations with the US and others. Malaysia enacted an FTA with Japan and it began negotiations with several economies including the US. Brunei, Indonesia, and the Philippines enacted FTAs with Japan separately, while Vietnam signed an FTA with Japan.

Compared to ASEAN countries in Southeast Asia, the economies in Northeast Asia including China, Japan, Korea, and Taiwan had not been active in FTAs until the end of the 1990s. However, China, Japan and Korea have become very active in FTAs. China implemented FTA with ASEAN, Hong Kong, Macau, and it is negotiating FTAs with over 20 countries. Japan enacted FTAs with eight countries (Singapore, Mexico, Malaysia, Chile, Thailand, Indonesia, Brunei and the Philippines) and ASEAN. It has signed an agreement with the Philippines, Brunei and ASEAN, and it is currently in negotiations with Australia, the Gulf Cooperation Council (GCC), Korea and others. Korea implemented FTAs with Chile, Singapore, the EFTA, and ASEAN and it has signed an agreement with the US. Korea is actively pursing FTA policies as it is currently negotiations with the countries including the EU, Canada, India, and Mexico.

Taiwan is very keen on having FTAs with many countries but political problems with China have precluded them from achieving the objective. Taiwan enacted FTAs with small countries in Central America such as Nicaragua and El Salvador.

Ideas of a region-wide FTA covering East Asian countries have emerged but no formal attempt has been made to date. At the Leaders' summit meeting of ASEAN+3 (China, Japan, and Korea) in 1998 the leaders decided to set up the East Asia Vision Group to study long term vision for economic cooperation. The group has presented the leaders with recommendations including the establishment of East Asia FTA (EAFTA). The Expert Group, which was set up at the recommendation of ASEAN+3 Economic

Ministers, conducted feasibility study of EAFTA in two phases and presented recommendations to the Economic Ministers in 2006 and in 2009 to start the process of the establishment of an East Asia FTA.

Japan proposed the CEPEA (Comprehensive Economic Partnership in East Asia), which is an Economic Partnership Agreement (EPA) including an FTA covering ASEAN+3+3 (India, Australia, and New Zealand) or ASEAN+6, at ASEAN+6 Economic Ministers' meeting in 2006. ASEAN+6 are also the members of the East Asian Summit, which was held for the first time in 2005 It has been argued that behind the CEPEA idea lies Japan's strategy of taking a leadership role in setting up regional institution in East Asia, as it was China that has taken an initiative in the EAFTA discussions. A study group was set up to examine the feasibility of the CEPEA and it presented recommendations to the Economic Ministers in 2009 to begin the process of the establishment of an EPA.

Accepting the recommendations by the EAFTA and CEPEA study groups, the Economic Ministers agreed to take forward East Asia integration in August 2009. The next step is to present the recommendations of EAFTA and CEPEA to the Leaders at the Summit meetings, while the Economic Ministers agreed that the Senior Officials should undertake a step-by-step approach by commencing discussion on Rules of Origin, tariff nomenclature, customs related issues and economic cooperation as building-blocks in the process of realizing East Asia integration<sup>6</sup>

While two region-wide initiatives began to be discussed in East Asia, the US proposed an FTAAP, or Free Trade Area of the Asia-Pacific covering 21 APEC member economies, at APEC Leaders' Meeting in 2006. At the Leaders' Meeting in 2007, the leaders agreed to examine the prospects of FTAAP. Behind the US proposal of an

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<sup>&</sup>lt;sup>6</sup> For EAFTA, see <a href="http://www.aseansec.org/JMS-12th-AEM-Plus-Three.pdf">http://www.aseansec.org/JMS-AEM+6-Working-Lunch.pdf</a>, for CEPEA, see <a href="http://www.aseansec.org/JMS-AEM+6-Working-Lunch.pdf">http://www.aseansec.org/JMS-AEM+6-Working-Lunch.pdf</a>

FTAAP is a concern that the US would be excluded from East Asia to result in the decline in its economic activities in East Asia. It should be noted that the differences in the members between ASEAN+6 and APEC give rise to important implications of the groupings. Taiwan and Russia, important economic players, are included in an FTAAP, while India, a member of ASEAN+6, is excluded from it. In the Asia-Pacific region, a high level FTA involving Brunei, Chile, New Zealand and Singapore (Trans-Pacific Strategic Economic Partnership, or TPP) was set up in 2006. Later other countries including Australia, Peru, the US, and Vietnam have shown an interest in joining the group. FTAAP is considered as top-down initiative, while TPP is bottom-up.

#### III.2. Characteristics and Motives of FTAs in East Asia

One notable characteristic of FTAs in East Asia is their comprehensiveness in coverage. As such, some of the FTAs established in East Asia are termed as Economic Partnership Agreement (e.g. Japan-Singapore EPA, JSEPA), or Closer Economic Partnership Arrangement (e.g. China-Hong Kong CEPA), and others. These new types of FTAs typically include facilitation of foreign trade, liberalization and facilitation of foreign direct investment (FDI), and economic and technical cooperation, in addition to trade liberalization, which is included in traditional FTAs. It may be worth noting that the basic philosophy behind these new types of FTAs is similar to that of Asia Pacific Economic Cooperation (APEC) forum, whose three pillars are (1) liberalization and (2) facilitation of foreign trade and foreign investment, and (3) economic and technical cooperation.

Among the three pillars economic and technical cooperation is given a special attention because narrowing the gap between the high-income and low-income countries is considered very important for achieving economic prosperity and social and political

stability of the region, which consists of the countries with very different levels of economic development. Economic assistance has been used to gain support for FTAs from FTA partners by China and Japan, which are eager to play a leadership role in regional integration.

Having noted a common characteristic of comprehensiveness of FTAs in East Asia, specific contents do differ among the FTAs, reflecting different motives of the countries concerned. Japan emphasizes the importance of liberalization and facilitation of investment and service trade, as such measures would provide free, transparent and stable business environment for Japanese firms, which have invested heavily in East Asia. In particular, Japan is interested in having well functioning intellectual property right protection By contrast, developing countries such as ASEAN and China do not have equally strong interests in these measures. Indeed, ASEAN and China have adopted a gradual and sequential approach by dealing with trade in goods and services and investment separately with different timing, as liberalization in trade in goods is followed by liberalization in service trade and investment.

Let us turn to the discussions on the motives of East Asian countries behind their FTA strategies. Various common motives, despite the differences in their importance among the countries, can be identified.

First, rapid expansion of FTAs in other parts of the world has made East Asian economies realize the importance of establishing FTAs in order to maintain and expand their export opportunities. This market seeking FTAs pursed by East Asian countries is largely of defensive nature. A case in point is Japan's FTA with Mexico. Japanese firms were in disadvantageous position vis-à-vis US firms or EU firms in the Mexican market because the US and the EU had FTAs, under which their firms had duty-free access to Mexico. Japanese firms put pressure on Japanese government to negotiate an FTA with

Mexico to overcome their disadvantage. It should be noted here that a stalemate of the negotiations under the Doha Development Agenda under the WTO turned the attention of the WTO members with an interest in trade liberalization to FTAs. The market access motive played a role for FTAs among East Asian economies, as trade barriers are still substantial for many sectors in East Asian economies, as we saw above.

Second, countries interested in promoting structural domestic reform to achieve economic growth use FTAs as foreign pressure on the opposition to structural reform, in order to force domestic structural reform. The motive of promoting domestic reform was important for Korea in pursing an FTA with the US. Being sandwiched between China, a rapidly catching up economic giant, and Japan, highly competitive another economic giant, Korea needed to carry out structural reforms to maintain and improve competitiveness.

Third, rivalry among East Asian economies over gaining a leadership role in the region has activated their FTA strategies. Both China and Japan, which are competing to become a 'leader' in the region, are keen on using FTAs to strengthen the relationships with ASEAN, Korea and other countries. Indeed, in November 2002 Japan proposed an economic partnership framework to ASEAN one day after China agreed to start FTA negotiations with ASEAN. It should also be noted that ASEAN, Korea and other countries consider FTAs as a means to maintain and increase their influence in East Asia. ASEAN has been rigorously pursing FTAs with major countries in order for them to take a "driver's seat" in regional integration in East Asia, while Korea is moving ahead of other countries such as Japan and China to take a lead in the race.

Fourth, the financial crisis in East Asia in late 1990s increased the awareness among East Asian countries of the need for regional cooperation such as a region-wide FTA to avoid another crisis and to promote regional economic growth. The immediate

concern about financial problems resulted in regional cooperation in financial areas. Specifically, bilateral currency swap arrangements to deal with the shortage in foreign exchange under the name of Chiang-Mai Initiative were set up in 2000. Furthermore, ASEAN+3 countries are developing Asian Bond Market, in order to develop efficient and liquid bond markets in East Asia, enabling better utilization of East Asian savings for East Asian investments. It is also expected to contribute to the mitigation of currency and maturity mismatches in financing.

Fifth, countries with outward foreign direct investment use FTAs to improve business environment in FDI recipient countries, so that MNCs can perform efficiently. This motive is sought by including FDI liberalization and facilitation in FTAs. Indeed, this motive is one of the most important motives for Japan as many Japanese MNCs have invested in East Asia.

## III.3. Economic Impacts of Comprehensive Region-wide FTAs

In the previous sections we found that a number of bilateral and plurilateral FTAs have been established, negotiated and studied in East Asia. We also identified several initiatives toward the establishment of region-wide FTAs. This section attempts to examine the economic impacts of region-wide FTAs by conducting a simulation analysis based on the general equilibrium framework. Specifically, we use a Global Trade Analysis Project (GTAP) model, which has been used extensively for the analysis of FTAs.

We undertook three kinds of simulation for three different region-wide FTAs. Three kinds of simulation include; 1) trade liberalization, 2) trade liberalization and facilitation, 3) trade liberalization and facilitation, and economic cooperation. Three different region-wide FTAs are ASEAN+3 (EAFTA), (ASEAN+1)x5, and ASEAN+6

FTAs (CEPEA). (ASEAN+1)x5 indicates ASEAN's five bilateral FTAs with China, Korea, Japan, India, and Common Economic Relations (CER) involving Australia and New Zealand.

Trade facilitation program, which takes various forms such as the simplification of customs procedures and harmonization of technical standards, reduces the impediments to trade. Trade facilitation is assumed to have greater impacts on trade under the region-wide FTAs such as East Asia FTA and CEPEA compared to bilateral FTAs such as ASEAN+1 FTAs. This is because region-wide FTAs can avoid possible trade-reducing effects, which may be caused by the "spaghetti bowl effect" due to the proliferation of bilateral FTAs with different rules of origin, because region-wide FTAs should adopt common rules of origin. In the simulation analysis, we also consider the impacts of economic cooperation, which is one important component of the EAFTA and CEPEA (Simulation 3). Specifically, we assume that total factor productivity (TFP) of developing members will increase by one percentage point as a result of the formation of the EAFTA and CEPEA.

Table 5 shows the level of protection expressed in the form of the price differential between domestic and international prices, which reflect tariff and non-tariff barriers. According to the table, agriculture and food receive substantial protection for many countries including both developed and developing countries. Among the manufacturing sectors, transport equipment and textile and apparel are heavily protected in many countries.

The results of simulations are shown in Tables 6, 7 and 8. Several interesting findings are identified. First, the impacts of trade liberalization alone are limited, while trade facilitation is expected to have substantially larger impacts. For example, in the case of the EAFTA, trade liberalization increases GDP of ASEAN+3 countries by

0.14 percent, while trade facilitation pushes up GDP of ASEAN+3 countries by 1.18 percent. It should be added that the impacts on ASEAN are substantially larger. Second, among the three alternatives, EAFTA(ASEAN+3), (ASEAN+1)x5 and CEPEA(ASEAN+6), CEPEA members' gains are the largest in the case of CEPEA. Without considering economic cooperation (Simulation 2), CEPEA members' can expect their GDP to increase by 1.30 percent and their economic welfare by 128.8 billion dollars, or 43 dollars per capita, while their gains are smaller for the cases of EAFTA or (ASEAN+1)x5. Indeed, those CEPEA members, which are excluded from the membership of EAFTA, will lose in the case of EAFTA.

The impacts of economic cooperation are substantial for developing country members of EAFTA or CEPEA (Simulation 3). In the case of CEPEA, ASEAN's overall GDP will increase by 5.89 percent, while the increases for ASEAN+3 and ASEAN+6 members are significantly smaller. Among the CEPEA members, some ASEAN members including Vietnam, Malaysia, Thailand and the Philippines will benefit notably, while the gains for the developed members such as Japan, Australia and New Zealand are limited. The impacts of CEPEA on its member countries largely depend on the initial level of import barriers and the importance of foreign trade in their economic activities (trade/GDP ratios). Generally we find the following relationship among the CEPEA countries: the higher the level of import barriers, and/or the larger the trade/GDP ratios, the greater the gains from CEPEA.

The impacts on economic welfare indicate somewhat different patterns, although all CEPEA members gain from the formation of CEPEA (Table 7). A casual observation appears to show that large country in terms of economic size gain much compared to small countries. In an attempt to take account of the economic size, the change in economic welfare per capita is computed and shown in Table 8. The results of

the computation show that the gain to a Singaporean is by far the largest and then people in more developed countries including Australia, New Zealand, Malaysia, Korea and Japan are to gain, while the gains to people in developing countries such as India are much smaller. One reason that developed countries gain much in terms of economic welfare is an improvement in terms of trade in favour of these countries, which results from increased demand for their exports by the CEPEA members with higher income. The level of economic welfare per capita also depends largely on the size of population. Countries with large population such as China and India tend to show relatively small gain in economic welfare per person.

### VI. Future Prospects of Region-Wide FTAs and Beyond in East Asia

East Asia has seen a proliferation of FTAs recently. Many bilateral and plurilateral FTAs have been established, but no region-wide FTA has been established. Indeed, recognizing the economic benefits of FTAs with large number of members, three different groupings, ASEAN+3, ASEAN+6 and APEC, for FTAs have been proposed but none of them have yet been formally taken up for negotiation. In terms of achievements as an organization, not necessarily in terms of FTAs, so far, ASEAN+3 and APEC (FTAAP) have accomplished much more than ASEAN+6. However, ASEAN+6 is quickly gaining a momentum as Japan, India, Australia, and New Zealand have become active proponents.

Several obstacles do stand in the way to the formation of a region-wide FTA. The most serious obstacle is opposition to trade and FDI liberalization, which comes from non-competitive sectors. This problem is found in many economies except for Singapore and Hong Kong. Recognizing these obstacles, it is unrealistic to expect the formation of high-level, in terms of liberalization, FTAs covering all sectors and

including all East Asian economies. Instead, a low-level FTA is likely to be established with quite a few exclusions from trade and FDI liberalization. Although such an FTA is not ideal, one could expect gradual improvement over time, as it was the case for the AFTA. What is important is joint effort toward achieving a common regional goal, that is, a region-wide FTA in the area of trade, investment, and economic assistance.

Between ASEAN+3 and ASEAN+6 FTAs, economic benefits are greater for ASEAN+6. But the negotiations are likely to be more difficult not only because of the larger number of members but also because of very different attitudes toward trade liberalization by the members. What appears to play a key role in the formation of a region-wide FTA in East Asia is economic and technical assistance, since there are a large number of developing economies, which could benefit from economic assistance. In this regard, ASEAN+6 seems to have an edge, as a larger number of developed countries are the members. Having noted that ASEAN+6 may have a better chance to become an East Asian-wide FTA, activities involving ASEAN+3 should not be discouraged, as they have established foundation for regional cooperation. ASEAN+6 should be pursued with ASEAN+3 as a base.

Coming back to the discussions on the formation of an East Asia-wide FTA, such an FTA cannot be established unless big countries, particularly China and Japan, agree to open up their markets. For this, not only economic factors but also political factors have to be dealt with. Accordingly, maintaining good political relationships is very important for the formation of a region-wide FTA. It is needless to say that domestic reform and positive structural adjustment measures are required to establish FTAs.

So far our discussions have focused on FTAs, although we argued the importance of comprehensive FTAs including not only trade liberalization but also FDI

liberalization, trade and FDI facilitation and economic assistance, in order to achieve economic growth and narrowing development gaps in East Asia. Before we end this paper, we would like to discuss the need to promote cooperation in various areas in addition to economic and technical cooperation discussed within the context of FTAs. Two important areas of cooperation include energy and environment. Limited energy supply and serious environmental problem are obstacles in achieving economic growth. Regional cooperation can play an important role in alleviating these problems. For example, joint development of gas fields and oil reserves should be effective in maintaining energy supply while transfer of energy efficient technology from developed to developing countries should prove helpful not only in saving energy but also in mitigating environment problems. Since cooperation in these two areas yield benefits to all the countries, it should be formulated and implemented as soon as possible.

Cooperation in financial areas should also be emphasized. As noted various programs such as the Chaing-Mai Initiative and Asian Bond Initiative have already been developed. These regional programs should be further promoted. An idea of the introduction of a regional common currency should be regarded as a long-term goal in that cooperation and coordination mechanism of macroeconomic policies should be gradually developed and implemented. Stable macroeconomic environment plays a crucial role in achieving economic growth.

Cooperation in non-economic areas such as political and social areas should be encouraged. Issues of security and political systems are admittedly very difficult, especially so in East Asia because of the presence of the countries with very different political systems. Having noted this, it is important to be reminded that favourable political and social relationships would lead to promote economic activities, which in turn would lead to greater political and social stability.

We have discussed the need to establish a region-wide comprehensive economic partnership agreement and to promote cooperation in various areas, in order to achieve economic growth and social and political stability in East Asia. We also identified various obstacles for realizing these objectives. To overcome these obstacles, we need strong political leadership in all East Asian countries with a strong determination to achieve these goals. Particularly important are leaderships in China, Japan, Korea and ASEAN, which have decisive positions in determining the course of regional development. Having noted the crucial role of political leadership in formulating and implementing desirable policies for the region, one cannot overemphasize the important role that general public play for supporting political leaders. Realizing this point, we cannot overstate the importance of mass media and academic institutions in providing appropriate information and education.

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Table 1 Changing Patterns of East Asia's Trade from 1995 to 2005

rable i C	nanging Pa			sia's Trade from 199 99Share of world			fregion/c	ountry's	total tres
		to 2005	irom 199	trade	world	Exports	_		totai trac
			Immouto		2005	1995		Imports	2005
East Asia	East Asia	Exports	_	1995			49.9		
East Asia	China	2.19	2.19	12.3		47.4		54.7	59.1
		3.96	3.74	1.8 2.9	3.3	7.4	14.1 7.4	7.2	13.4
	Japan NIES4	1.81	1.49		2.3	8.5		16.1	11.9
		1.92	2.14	5.4	5.3	21.8	20.1	22.6	23.9
	ASEAN4 NAFTA	1.78	2.31	2.3	2.2	9.8	8.3	8.7	9.9
	EU25	1.78	1.22	5.0 3.5	3.8	24.0	20.5	16.8	10.1
	World	2.11 2.08	1.49 2.03	24.3	3.1 24.4	14.9 100.0	15.1 100.0	14.0 100.0	10.3 100.0
China	East Asia	3.74	3.96	1.8	3.3	55.7	40.6	66.8	59.6
	China								
	Japan	2.95	3.65	0.5	0.8	19.1	11.0	15.0	12.4
	NIES4	3.97	3.72	1.2	2.2	32.9	25.5	48.1	40.3
	ASEAN4	5.72	8.26	0.1	0.4	3.7	4.1	3.8	7.0
	NAFTA	6.82	3.53	0.4	1.1	17.8	23.7	9.6	7.7
	EU25	7.08	3.31	0.4	1.0	13.6	18.9	13.3	9.9
	World	5.12	4.44	2.9	6.8	100.0	100.0	100.0	100.0
Japan	East Asia	1.49	1.81	2.9	2.3	41.7	46.4	37.9	43.4
	China	3.65	2.95	0.5	0.8	5.0	13.4	9.6	18.0
	Japan								
	NIES4	1.30	1.29	1.6	1.0	24.7	24.0	16.9	13.8
	ASEAN4	1.00	1.61	0.9	0.5	12.1	9.0	11.4	11.6
	NAFTA	1.15	0.88	2.0	1.0	29.7	25.5	24.9	14.0
	EU25	1.22	1.26	1.1	0.7	16.1	14.6	14.6	11.6
	World	1.34	1.58	7.3	5.1	100.0	100.0	100.0	100.0
NIES4	East Asia	2.14	1.92	5.4	5.3	48.4	57.2	58.0	63.0
	China	3.72	3.97	1.2	2.2	13.1	26.9	9.9	22.2
	Japan	1.29	1.30	1.6	1.0	9.4	6.6	22.0	16.3
	NIES4	1.55	1.55	1.6	1.2	14.9	12.7	16.1	14.1
	ASEAN4	1.80	1.86	1.1	1.0	11.1	11.0	10.0	10.5
	NAFTA	1.32	1.13	2.0	1.2	22.2	16.2	16.0	10.3
	EU25	1.73	1.35	1.4	1.1	14.1	13.4	13.1	10.0
	World	1.81	1.77	10.1	8.9	100.0	100.0	100.0	100.0
ASEAN4	East Asia	2.31	1.78	2.3	2.2	51.4	54.7	62.3	69.9
	China	8.26	5.72	0.1	0.4	2.8	10.8	2.7	9.6
	Japan	1.61	1.00	0.9	0.5	17.4	13.0	25.9	16.4
	NIES4	1.86	1.80	1.1	1.0	25.6	21.9	28.5	32.4
	ASEAN4	3.51		0.2		5.6			11.5
	NAFTA	1.87	1.16	0.6		20.8	17.9		
	EU25	1.82	0.97	0.6		15.4	12.9	15.7	9.6
NAETA	World	2.17	1.59	3.9		100.0			100.0
NAFTA	East Asia China	1.22 3.53	1.78	5.0 0.4	3.8 1.1	22.6 1.7	16.0 3.4	32.5	26.8
	Japan	0.88	6.82	2.0		1		2.7 13.5	8.6 7.2
	NIES4		1.15	2.0	1.0	8.6 9.3	4.5 6.2	13.5 12.2	7.2 7.4
	ASEAN4	1.13 1.16	1.32 1.87	2.0 0.6	1.2 0.5	9.3 3.0	2.0	4.1	7.4 3.6
	NAFTA	2.04	2.04	7.8	7.7	46.2	55.1	40.5	38.3
	EU25	1.53	2.32	7.8 2.9	2.8	46.2 16.5	14.8	40.3 16.1	36.3 17.3
	World	1.71	2.32	18.0	17.2	100.0	100.0	100.0	100.0
EU25	East Asia	1.49	2.10	3.5	3.1	7.6	6.0	9.8	10.4
	China	3.31	7.08	0.4	1.0	0.9	1.6	1.0	3.6
	Japan	1.26	1.22	1.1	0.7	2.1	1.4	3.5	2.2
	NIES4	1.35	1.73	1.4	1.1	3.1	2.2	3.7	3.3
	ASEAN4	0.97	1.82	0.6	0.4	1.5	0.8	1.5	1.4
	NAFTA	2.32	1.53	2.9	2.8	7.5	9.1	7.0	5.4
	EU25	1.91	1.91	27.3	25.4	66.1	66.3	68.9	66.1
	World	1.90	1.99	40.5	38.4	100.0	100.0	100.0	100.0
C	omputed fro								

Source: Computed from JETRO's trade matrix.

Table 2 Parts Trade for East Asian Economies: Share of Total (%)

	Export Destinations																	
Exporting	East	Asia	ASI	EAN	NI	ES	Ch	ina	Jap	oan	Inc	dia	U	IS	Е	U	Wo	orld
Regions	90-94	00-04	90-94	00-04	90-94	00-04	90-94	00-04	90-94	00-04	90-94	00-04	90-94	00-04	90-94	00-04	90-94	00-04
Office and	Office and telecommunications equipment: (SITC 759 + 764 ) / (SITC 75+76)						(5+76)											
East Asia	58.2	66.7	65.3	76.4	47.6	61.5	70.8	80.7	49.4	45.8	57.0	68.6	41.0	43.8	38.2	43.7	44.5	54.2
ASEAN	56.9	62.3	68.7	76.2	39.0	54.9	73.7	64.7	42.6	43.5	43.3	53.2	33.7	39.1	24.8	38.4	38.3	49.2
NIES	69.4	75.0	65.0	81.1	69.3	73.3	79.5	81.7	56.5	51.6	77.1	85.1	41.3	56.6	36.2	52.3	46.9	64.9
China	39.0	56.6	44.1	72.1	36.5	58.5			51.1	42.3	29.0	74.3	40.2	34.8	32.7	36.5	37.1	46.2
Japan	53.3	71.7	60.6	74.0	50.0	61.1	42.9	88.5			61.0	66.6	46.0	42.1	47.9	43.8	48.1	51.6
Electrical &	& Appara	atus: (SIT	C 771+7	772+773-	+776)/S	SITC 77												
East Asia	81.2	85.4	84.3	88.1	79.0	84.6	68.5	83.8	86.7	83.1	74.7	73.1	73.1	69.7	64.7	70.0	74.2	79.3
ASEAN	87.1	91.8	85.6	89.8	87.5	95.1	69.2	90.3	89.8	90.3	80.6	86.0	90.7	93.1	87.8	93.7	86.6	91.6
NIES	82.3	87.2	87.3	91.8	83.8	88.9	68.4	84.6	85.1	83.4	76.3	73.5	67.9	69.1	56.5	68.0	71.5	80.9
China	56.3	72.2	63.2	76.2	52.4	72.4			77.4	68.2	53.9	52.9	33.9	37.0	27.6	35.8	47.2	55.9
Japan	79.4	80.2	81.7	84.9	78.5	77.5	69.0	77.9			71.0	57.8	68.7	60.2	59.3	59.6	71.3	73.1
Road vehic	les: SIT	C 784 / (S	SITC 722	2+781+7	82+783+	784)												]   
East Asia	48.7	53.9	45.0	48.8	63.2	58.4	20.6	46.4	94.9	92.7	87.9	90.9	21.5	19.5	13.2	18.8	23.3	23.6
ASEAN	67.7	78.1	58.3	68.5	56.7	89.0	64.9	86.0	91.4	87.3	81.6	94.4	97.7	98.3	19.0	40.2	55.8	58.5
NIES	30.0	44.2	32.2	32.4	44.0	60.9	21.2	39.0	93.3	92.2		96.0	33.5	14.9	15.7	10.8	26.4	21.5
China	97.7	88.3	79.2	79.1	98.4	63.6			99.1	99.2		52.7	95.6	95.7		92.3	92.8	83.5
Japan	42.4	50.7	43.6	47.2	45.6	55.1	18.4	50.9			88.5	86.2	20.2	18.2	12.7	18.5	20.2	20.8
Textiles an	d Appare	el: SITC	65 / SITO	C(65 + 8)	34)													
East Asia	62.6	56.0	84.9	79.8	64.4	56.9	91.1	83.0	21.8	18.5	97.6	97.0	14.1	16.6	21.7	23.8	44.5	43.8
ASEAN	63.3	62.5	73.1	74.8	77.8	71.2	94.0	91.1	29.1	37.2	96.3	93.4	9.2	6.3	23.0	18.5	32.7	29.8
NIES	75.4	76.2	91.2	86.9	93.3	88.5	90.8	80.0	19.5	22.9	98.3	97.2	10.7	14.4	13.8	16.9	47.2	53.4
China	37.3	32.4	76.3	62.3	40.8	42.6			23.1	15.4	88.1	98.1	24.0	25.4	31.4	29.0	35.5	33.5
Japan Source Co	93.6	93.6	97.0	97.0	92.2	84.2	94.3	98.3			99.9	99.8	82.7	85.7	82.0	85.1	91.3	92.5

Source: Computed from World Bank trade database

Table 3 Trade Liberalization in Selected East Asian Economies

			All product	s	Primary pr	oducts	Manufactur	ed products	Ad valorem
				Import-		Import-		Import-	equivalent
		Binding	Unweighted	weighted	Unweighted	weighted	Unweighted	weighted	of non-tariff
		Coverage	averages	averages	averages	averages	averages	averages	barriers
China	1992		40.4	32.1	36.1	14.1	40.6	35.6	
	2004	100	9.8	6.0	10.0	5.6	9.7	6.0	1.5
Indonesia	1989		19.2	13.0	18.2	5.9	19.2	15.1	
	2003	96.6	6.4	5.2	8.0	3.1	6.1	5.8	0.5
Japan	1988		4.2	3.6	8.3	4.4	3.5	2.7	
	2004	99.6	2.9	2.4	5.3	3.9	2.4	1.6	1.6
Korea	1988		18.6	14.0	19.3	8.3	18.6	17.0	
	2002	94.4	15.5	9.5	20.9	19.0	7.8	5.0	0.0
Malaysia	1988		14.5	9.7	10.9	4.6	14.9	10.8	
	2003	83.7	7.3	4.2	4.5	2.1	7.8	4.6	1.7
Phillipines	1988		28.3	22.4	29.9	18.5	27.9	23.4	
	2003	66.8	4.5	2.6	5.7	5.0	4.2	2.0	0.4
Singapore	1989		0.4	1.1	0.2	2.5	0.4	0.6	
	2003	69.8	0.0	0.0	0.0	0.0	0.0	0.0	0.5
Thailand	1989		38.5	33.0	30.0	24.3	39.0	35.0	
	2003	75.0	14.0	8.3	16.4	4.4	13.5	9.3	0.3

Source: World Bank, World Development Indicators 2005

Table 4 Major FTAs Involving East Asian Economies (as of August 2009)

In e	effect	In neg	gotiation
Bangkok Treaty(1976)	Singapore-India(2005)	Japan-Korea	China-Singapore
AFTA(1992)	China-Chile (2006)	Japan-GCC	Malaysia-Australia
Singapore-NZ (2001)	Korea-Singapore(2006)	Japan-Vietnam	Malaysia-NZ
Japan-Singapore (2002)	Japan-Malaysia(2006)	Japan-India	Malaysia-Pakistan
Singapore-Australia (2003	Korea-EFTA(2006)	Japan-Australia	Malaysia-US
Singapore-EFTA (2003)	Korea-ASEAN(2006)	Korea-US*	Singapore-Canada
Singapore-US (2004)	Singapore-Panama(2006	Korea-Canada	Singapore-Mexico
Korea-Chile (2004)	Japan-Chile (2007)	Korea-India	Singapore-Egypt
China-Hong Kong (2004)	Japan-Thailand (2007)	Korea-Mexico	Sigapore-Qatar
China-Macao(2004)	China-Pakistan (2007)	Korea-EU	Singapore-Peru
Singapore-Jordan(2004)	Japan-Philippines(2008)	China-Australia	Thailand-EFTA
Japan-Mexico (2005)	Japan-ASEAN(2008)	China-NZ	Thailand-India*
China-ASEAN(2005)	Japan-Indonesia(2008)	China-GCC	Thailand-US
Thailand-Australia(2005)	Japan-Brunei(2008)	China-Pakistan	ASEAN-CER*
Thailand-NZ(2005)		China-SACUFTA	ASEAN-India*

Notes: \* indicates that treaty has been signed and waiting for the ratification by the legistative bodies.

Source: WTO website and respective government sources.

Table 5 Tariff Rates of East Asian Countries (import-weighted average tariff rates by sector, 2001)

	Japan	China	Korea	ASEAN I	ndonesia	Malaysia	Philippin es	Singapor e	Thailand	Vietnam	Other Souteast Asia	Australia	New Zealand	India
Agriculture and food	30.2	37.6	81.7	13.9	5.0	17.1	9.5	0.4	29.4	36.6	20.4	2.8	2.0	50.2
Fishery and forestry	1.8	0.7	6.9	2.7	0.6	0.2	0.5	0.0	10.3	3.9	1.0	0.1	0.0	6.8
Mining	0.0	0.3	3.7	0.7	0.3	1.6	3.2	0.0	0.2	3.8	2.6	4.9	0.0	16.2
Texitle and apparel	9.0	20.5	10.0	11.1	8.6	12.3	6.5	0.0	18.5	31.3	10.1	17.0	6.0	26.6
Wood and paper	1.1	9.0	4.0	5.4	3.4	6.6	4.7	0.0	11.0	14.7	5.3	3.6	1.1	22.0
Mineral products	1.1	13.0	6.7	5.2	4.4	5.9	4.5	0.0	11.7	7.8	5.4	3.0	1.3	28.8
Iron and steel	0.5	7.5	3.8	5.6	5.9	8.5	3.9	0.0	9.3	5.1	3.5	3.6	1.4	33.6
General machinery	0.1	13.1	6.1	3.3	3.0	3.9	2.3	0.0	8.2	8.0	6.0	3.5	2.1	25.4
Electronic machinery	0.0	10.1	1.1	0.8	2.1	0.4	0.1	0.0	4.7	8.8	8.8	0.8	1.2	15.1
Transport equipment	0.0	20.5	3.9	14.6	9.6	31.7	11.5	0.0	24.0	46.9	25.0	12.9	3.5	27.4
Other manufacturing	5.3	13.9	8.5	6.1	6.5	6.8	6.1	0.0	7.1	20.2	13.7	5.2	3.8	33.8
Construction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Trade	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Transport and communica	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Public services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
All	4.1	11.6	8.5	4.0	3.6	4.7	2.8	0.0	8.8	10.3	9.0	4.3	1.7	21.8

Source: GTAP database

Table 6 Effects of Region-wide FTAs on GDP (%)

	EAF	ΓA (ASEA	N+3)	(ASEAN+	1)x5	CEPE	A (ASEAN	(+6)
·	Sim 1	Sim 2	Sim 3	Sim1	Sim 2	Sim 1	Sim 2	Sim 3
Japan	0.01	0.44	0.44	-0.01	0.10	0.05	0.54	0.54
China	0.13	1.66	4.72	0.01	0.20	0.14	1.77	4.84
Korea	1.13	3.56	3.55	-0.04	0.20	1.15	3.72	3.71
Indonesia	0.07	1.74	3.94	0.07	1.00	0.07	1.94	4.14
Malaysia	0.39	5.83	8.62	0.51	3.30	0.50	6.21	9.00
Philippines	0.21	3.94	6.28	0.20	2.20	0.25	4.18	6.52
Singapore	0.06	4.22	4.24	0.10	2.30	0.05	4.40	4.42
Thailand	0.68	4.49	7.02	0.80	2.80	0.74	4.78	7.32
Vietnam	2.21	7.08	9.67	2.33	5.00	2.25	7.33	9.92
Other Souteast Asia	0.09	0.88	2.91	0.11	0.50	0.10	0.92	2.95
Australia	-0.03	-0.09	-0.09	0.01	0.20	0.16	1.35	1.35
New Zealand	-0.03	-0.06	-0.06	0.00	0.10	0.10	1.87	1.87
India	-0.04	-0.10	-0.10	0.31	0.50	0.41	1.30	3.45
Hong Kong	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	-0.01
Taiwan	-0.06	-0.09	-0.08	-0.03	0.00	-0.07	-0.10	-0.10
NAFTA	0.00	-0.01	-0.01	0.00	0.00	0.00	-0.01	-0.01
EU15	0.00	-0.01	-0.01	0.00	0.00	-0.01	-0.01	-0.01
Rest of the World	-0.03	-0.06	-0.06	-0.02	0.00	-0.03	-0.08	-0.08
ASEAN	0.36	3.60	5.67	0.41	2.14	0.39	3.83	5.89
ASEAN+3	0.14	1.18	1.93	0.04	0.30	0.17	1.30	2.05
ASEAN+6	0.12	1.02	1.68	0.05	0.31	0.19	1.30	2.11

Source: author's calculation, based on the simulation results

Note: Simulations 1-3 are as follows:

Sim1: Trade liberalization

Sim2: Trade liberalization and facilitation.

Sim3: Trade liberalization, facilitation and economic cooperation.

Shaded areas indicate FTA members.

Table 7 Effects of Region-wide FTAs on Economic Welfare (\$ million)

	EAF	TA (ASEA	N+3)	(ASEAN+	-1)x5		CEPE	A (ASEAN	J+6)
	Sim 1	Sim 2	Sim 3	Sim1	Sim 2	'	Sim 1	Sim 2	Sim 3
Japan	6,436	29,554	29,336	-903	1,935		7,048	32,656	32,363
China	624	17,952	54,233	-1,457	-301		634	18,964	55,270
Korea	5,945	18,819	18,719	-267	631		6,264	19,787	19,690
Indonesia	693	4,527	7,906	1,733	4,139		1,165	5,270	8,661
Malaysia	1,466	10,443	13,393	3,400	8,717		2,523	12,029	15,040
Philippines	139	3,367	5,054	422	2,334		122	3,457	5,142
Singapore	1,802	7,610	7,765	2,822	6,391		2,046	8,236	8,389
Thailand	2,851	8,815	11,872	3,878	7,421		2,645	8,829	11,888
Vietnam	633	2,723	3,488	942	2,243		645	2,813	3,578
Other Souteast As	-27	691	2,338	12	404		-1	729	2,379
Australia	-723	-1,684	-1,694	-152	359		4,832	11,669	11,682
New Zealand	-146	-230	-224	-10	82		267	1,655	1,669
India	-510	-1,049	-1,077	-602	-79		-885	2,744	13,124
Hong Kong	-460	-691	-487	-69	-40		-515	-798	-589
Taiwan	-1,522	-3,228	-3,250	-753	-1,290		-1,773	-3,637	-3,659
NAFTA	-4,526	-11,843	-12,476	-2,541	-5,016		-5,893	-14,282	-15,022
EU15	-3,154	-7,263	-7,710	-2,267	-4,048		-4,112	-8,942	-9,502
Rest of the World	-2,971	-9,606	-10,038	-1,721	-3,787		-4,311	-13,410	-13,933
ASEAN	7,557	38,174	51,816	13,209	31,648		9,145	41,364	55,078
ASEAN+3	20,562	104,500	154,104	10,581	33,913		23,091	112,771	162,401
ASEAN+6	19,183	101,536	151,110	9,818	34,276		27,305	128,839	188,875

Source: author's calculation, based on the simulation results

Note: Simulations 1-3 are as follows:

Sim1: Trade liberalization

Sim2: Trade liberalization and facilitation.

Sim3: Trade liberalization, facilitation and economic cooperation.

Shaded areas indicate FTA members.

Table 8 Effects of Region-wide FTAs on Welfare Per Capita (\$)

	EAF	TA (ASEA	N+3)	(ASEAN-	+1)x5	CEPE	A (ASEAN	(+6)
<u> </u>	Sim 1	Sim 2	Sim 3	Sim1	Sim 2	Sim 1	Sim 2	Sim 3
Japan	51	233	231	-7	15	56	258	255
China	0	14	43	-1	0	0	15	44
Korea	125	396	393	-6	13	132	416	414
Indonesia	3	21	37	8	19	5	25	41
Malaysia	62	441	566	144	368	107	508	635
Philippines	2	42	63	5	29	2	43	64
Singapore	541	2,285	2,332	847	1,919	614	2,473	2,519
Thailand	45	140	189	62	118	42	141	189
Vietnam	8	34	44	12	28	8	35	45
Other Souteast As	0	10	35	0	6	0	11	35
Australia	-37	-87	-87	-8	18	249	601	601
New Zealand	-38	-60	-58	-3	21	69	430	433
India	0	-1	-1	-1	0	-1	3	13
Hong Kong	-64	-97	-68	-10	-6	-72	-111	-82
Taiwan	-68	-145	-146	-34	-58	-80	-163	-164
NAFTA	-11	-29	-30	-6	-12	-14	-35	-37
EU15	-8	-19	-20	-6	-11	-11	-24	-25
Rest of the World	-1	-4	-4	-1	-2	-2	-6	-6
ASEAN	14	72	98	25	60	17	78	104
ASEAN+3	10	53	78	5	17	12	57	82
ASEAN+6	6	34	50	3	11	9	43	62

Source: author's calculation, based on the simulation results

Note: Simulations 1-3 are as follows:

Sim1: Trade liberalization

Sim2: Trade liberalization and facilitation.

Sim3: Trade liberalization, facilitation and economic cooperation.

Shaded areas indicate FTA members.