



Asia-Pacific Research and Training Network on Trade
Working Paper Series, No. 11 , April 2006

Preferential Trading Agreements and Agricultural Liberalization in East and Southeast Asia

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Executive Summary

The paper analyzes how various preferential trading arrangements deal with agriculture liberalization and examines a few case studies highlighting the provisions on agriculture. It assesses the effect of preferential trade agreements on agriculture trade flows in the case of ASEAN. It finds that while the tariff reduction on all goods, including agriculture, in ASEAN provides a marked advantage from the MFN tariff rates, intra-ASEAN agriculture trade have not been all that significant. Most of the growth in the intra-ASEAN trade had come from trade in industry; and if total agriculture trade had expanded, much of it was due to trade outside the region. The paper argues that AFTA, by original design, had not really been made to boost intra-regional agriculture trade, but rather to facilitate the inter-industry trade arising out of the vertically integrated network of manufacturing transnational corporations.

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1.Introduction

In all trade negotiations, opening domestic agriculture market is always a sensitive issue. Even though agriculture takes a relatively small share of Gross Domestic Product compared to manufacturing and services, the sector manages to slow or derail even a most promising trading arrangement. Deadlock in the recent Hong Kong WTO Ministerial Conference is one illustration of how disagreements over agriculture can block further progress towards any new agreement. In ASEAN6¹, agriculture is, on average, only slightly over 10 percent of 2003 GDP compared to about 40 and 50 percent share of industry and services, respectively, yet, the initial hesitation over China-ASEAN trade pact was largely due to agriculture concern. The Japan-Singapore Agreement, despite very little threat of agriculture export from Singapore, still incited Japanese farmers' protest. Korean farmers' concern threatened to scuttle the Korea-Chile agreement, and the fate of several other negotiations, like Japan-Korea FTA, remain uncertain primarily due to agriculture.

A major reason why agriculture holds so much sway in the political calculations of various countries is, perhaps, the fact that despite its minimal share in the economy, agriculture's share in employment remains significant. In ASEAN, because more than a third of individual country employment is in agriculture, protection of agriculture employment becomes a primordial concern. In the case of developed countries where the employment share of agriculture is almost trivial, intense lobbying of agriculture groups, nevertheless, make governments circumspect. Countries may cite non-trade reasons such as food security, food safety and quality, or the so-called 'multifunctionality' of agriculture, but the true reason is the difficult political economy of liberalizing agriculture. In Europe, maintenance of 'rurality' as a societal preference, along with an aging farmers' population, is used to justify the use of agriculture subsidies; yet, subsidy is, in fact, a cheaper alternative to government payout for relocation of agricultural unemployment.

Agriculture negotiation is a difficult issue everywhere, but more so in the multilateral forum where many developing countries vowed to indefinitely stall negotiations unless they get more favorable concessions in agriculture market access in developed countries. As a result, regional and preferential trading arrangements (henceforward, PTAs) negotiations escalated after the Seattle and Doha Round, with the aim of advancing market liberalization ahead of the multilateral process.

What are the liberalizing measures in agriculture in these PTAs and how they have actually affected agriculture trade is the question this paper tries to explore. In particular, it takes a look at the common features of PTAs in East and Southeast Asia as far as agriculture is concerned, and examines a few selected trade agreements in more detail. The paper is organized as follows: the next section discusses how various preferential agreements in the region deal with agriculture liberalization – their timelines, type of flexible arrangements, as well as safeguards and non-tariff measures. Because

¹ ASEAN6 countries are Brunei, Indonesia, Malaysia, Philippines, Singapore, and Thailand.

most Asian countries have been avid supporters of multilateral negotiations, bilateral and regional trading agreements are relatively recent in the region, hence not yet susceptible to a historical assessment of trade effects of the PTA. For deeper data analysis, therefore, the paper focuses on the oldest and the first PTA that was formed in the region. Sections 3 and 4 next discuss the effect of one specific PTA, the ASEAN Free Trade Area (AFTA) on regional protection structure and agriculture trade flows, respectively. Section 5 summarizes and concludes.

2. Preferential Trading Agreements and Agriculture

Number and Motivation

Preferential trade arrangements now appear to be a permanent feature of the multilateral trading system. While there were few PTAs before the Uruguay Round, the number has escalated since year 2000 when the multilateral negotiations went into a virtual crawl. According to the list of WTO notified partnership agreements, half of the total PTAs were forged over the last five years.² The PTA fever has affected practically all countries, from the Asian to the African continent, but Asia Pacific and Latin American countries appear most aggressive. Of the 89 WTO-notified PTAs, a quarter involve an East Asian country and counting, as 17 more PTAs involving an East Asian country are under negotiations (see Table 1 and Appendix Table 1), of which, 15 are bilateral trading arrangements.

Table 1. Preferential Trading Arrangements

	Number
WTO Notification (1948-2005)	180
WTO Notification (2000-2005)	89
PTAs in Southeast And East Asia (2000-2005)	22
Southeast and East Asia (1990-2005)	24.72
Notification for Southeast and East Asia (1990-2005)	23
Under Negotiation for Southeast Asia and East Asia (1990-2005)	17

Source: Regional Trade Agreement Gateway, www.wto.org and RTA-BTA Database, UNESCAP

The rush to partner up with other countries or regions in trade has affected even erstwhile ‘multilateralists’ like Japan and Korea. Following the lead of the European

² Seventy-five percent of all PTAs notified in the WTO are bilateral trade agreements; some of which are cross-regional, like Japan-Mexico, while other RTAs are expanding and embracing whole continents, e.g. Free Trade Area of the Americas (FTAA) (still under negotiations).

Union and the US, these two have entered into the PTA-forming bandwagon as a defensive stance to secure and protect market access and as insurance against a possible failure of the WTO consensus. Korea is aggressively pursuing PTAs with scores of trading partners and hopes to sign 15 of them in year 2007. Australia, too, fears being marginalized if the ASEAN plus Three becomes a reality and, thus, forged a tie-up with Singapore as a toehold in the region.

Other reason for initiating free trade agreements is political. China, for instance, courted ASEAN, largely as a confidence-building measure, to ease ASEAN concerns over China as a regional threat and rival by providing preferential access to its domestic market. At the same time, it eyes ASEAN natural resources and large internal market, while seeking to improve geopolitical clout in the region and to counterbalance Japan's and US influence (Chia, 2004). Japan followed suit to preserve its influence in the region and to avoid future exclusion from the \$700 billion ASEAN market. Even the US launched its Enterprise for ASEAN Initiative, in response to the Chinese dalliance with ASEAN, in order to lock in its security relationships in the region.

Whatever the initial motivations, many of the PTAs in Asia have gone beyond WTO provisions. For instance, the Japan-Singapore agreement, considered to be a template for Japan's bilateral agreements with other ASEAN countries, includes chapters on regulatory trade regimes like competition and investment policy that had been rejected in previous WTO rounds. It should, however, be underscored that though these chapters are included, in many cases, they merely state an agreement to discuss these issues in subsequent rounds or provide capacity building grant, e.g. in competition policy, and thus have no major substantial divergence from the WTO.

Treatment of agriculture in Asian PTAs

While to some extent, some PTAs have been considered WTO-plus, for instance, because of restrictions on the imposition of anti-dumping measures or the inclusion of regulatory regimes in investments, the evidence is mixed with regard to provisions that touch on agriculture. As in the multilateral negotiations, agriculture is also a sensitive issue in bilateral and regional trade talks. The same political economy, such as dependence of the rural population on agriculture in developing economies that makes liberalization difficult in the multilateral stage still looms large in small-group negotiations. In many PTAs, negotiators lock horns and face deadlocks because of agriculture as in the on-going negotiations in the FTAA, Japan-Australia, or Japan-Korea.

i. Market access negotiations only

In the WTO, agricultural trade liberalization involves three elements – market access, domestic support, and export subsidies. Various PTAs almost always only readily deal with market access issues, rarely with export subsidies, and almost never with domestic support. Domestic support is deemed impossible to handle within the RTA framework because of externality problems brought about by its removal. That is,

once domestic support is removed, its beneficiaries would not only be the preferential trading partner but all countries that trade and compete in agriculture. Thus, the default arrangement is not to discuss domestic support in RTA and leave it, rather to the WTO. Negotiations on export subsidies, however, have prospered in limited sectors which parties to the agreement intensely trade with one another, as in the case of Australia-New Zealand trade agreement (ANZCERTA).

ii. Exclusions and extended timelines

Yet, even negotiations on agriculture market access issues have not been walks in the park. The usual way that negotiating partners skirt the difficult issue of agriculture is through exclusion of whole or part of agriculture sector as well as more extended time lines for market liberalization relative to other goods sector. The various EU RTAs, for instance, routinely exclude a significant part of agriculture. Others, while including the agriculture sector, almost always have sensitive sectors that are either permanently or temporarily excluded. Others contain a liberal extension time for transition and adjustments, as in AFTA or Korea-Chile, or Thailand-Australia.

iii. Use of applied tariffs

One positive aspect of the PTAs, however, is that the point of departure for negotiations is always the applied, rather than bound, tariffs unlike in the case of the multilateral discussions. Since, almost all the bound tariffs of developing countries are much higher than applied tariffs, this negotiation strategy is already an advance over the WTO talks. PTAs, in essence, therefore, achieve right from the start the end-result that developed countries actually want from previous WTO Rounds, that is, of bringing down bound rates to the actual applied rates.

iv. Safeguards and non-tariff measures³

Besides, market access issues such as extent and timing of tariff cuts on specific agricultural products, discussion on agriculture also deal with the presence of safeguards (that is, anti-dumping, safeguards, and countervailing duties), non-tariff measures, specially sanitary and phyto-sanitary (SPS) measures, and the appropriate design of rules of origin. In general, PTAs in Asia contain safeguards and SPS measures provisions, but most do not go substantially beyond the provisions of the WTO.

With regard SPS measures, some PTAs have provisions for mutual recognition or the application of equivalence. Some take the approach of promoting international harmonization or for using international standards, if one exists (e.g. Singapore-NZ).

³ OECD (2005) discusses in much greater depth the SPS and safeguard measures across 18 PTAs all over the world.

Korea-Chile FTA established a committee dedicated to SPS matters. Others, like China-ASEAN, identify it as an area for future negotiation.

Safeguard measures are also present in many PTAs in the region. Japan-Singapore and Korea-Chile adopt NAFTA-type safeguard measures during transition with criteria similar to WTO rules.⁴ The difference is that the safeguard tariff that is applied is capped at the MFN tariff rate.⁵

Rules of origin is not a very controversial provision as far as agriculture is concerned, except to ensure that the products are indeed produced and harvested in the trading partner and not merely shipped from non-parties.

We next discuss in greater detail a few selected preferential trade agreements in the region to get a clearer idea on how PTAs deal with agriculture issues.

Focus on selected PTAs

i. AFTA

The ASEAN Free Trade Area was signed in 1992 by Brunei, Indonesia, Malaysia, Philippines, Singapore, and Thailand. AFTA signaled to the rest of the world that the ASEAN's focus had morphed from merely political and security concerns towards greater economic cooperation.⁶ Later, four other Asian countries acceded to ASEAN: Vietnam in 1995, Laos and Myanmar in 1997, and Cambodia in 1999. Considered as a South-South trading agreement, AFTA was notified to the WTO under the Enabling Clause, instead of Article XXIV GATT, which means that AFTA was not strictly obliged to liberalize 'substantially all' sectors. Nevertheless, despite the initial exclusion of unprocessed agricultural product from liberalization, AFTA covered more than 89% of tariff lines for scheduled liberalization in 1993 (see Table 2).

Box: AFTA-CEPT In Brief

AFTA follows a negative list approach for liberalizing tariffs using the Common Effective Preferential Tariff (CEPT) Scheme. In the CEPT, concessions are granted on a reciprocal, product by product, basis, and according to various speeds. There are four lists under the CEPT Scheme – the Inclusion List (IL), Temporary Exclusion List (TEL), Sensitive List (SL), and General Exceptions List (GEL). Only products in the IL enjoy

⁴ NAFTA, however, does not apply safeguard actions to preferential trading partners except as part of a global action. See Table 3 of OECD (2005).

⁵ Further details of different agriculture-related measures can be found in Appendix Table 2.

⁶ Prior to AFTA, ASEAN had preferential tariff arrangement as early as the 1970s whereby each country provided a margin of tariff preference for products coming from other ASEAN countries. Member countries also pursued unilateral tariff liberalization in the 1980s rather than through any ASEAN framework

tariff concessions from other countries. Products in the Inclusion List (IL) were targeted to have tariffs brought down between 0-5% by 2002 for Brunei, Indonesia, Malaysia, Philippines, Singapore and Thailand (ASEAN6)⁷ (2006 for Vietnam, 2008 for Laos and Myanmar, and 2010 for Cambodia).

Products in the Temporary Exclusion List (TEL) do not enjoy concessions from other ASEAN partners until transferred to the Inclusion List, which ASEAN countries were obliged to do in equal batches up to year 2000. Once in the Inclusion List, the transferred products are subject to the same rate of tariff reduction as other products (2002 for some and 2010 for others) in the case of ASEAN6 (2015 for CMLV countries). Sensitive and Highly Sensitive Products have different timeframes for phasing into CEPT Scheme as well as ending tariff rates. The Sensitive List (SL) is for some unprocessed agricultural product which would be phased in between 2001-2003 with the ending tariff rates between 0-5% achieved by 2010⁸. Highly sensitive items may have ending rates higher than 5%. For Malaysia and Indonesia, the ending rates are 20%. General Exemption List (GEL) is intended to consist only of items that satisfy Article XX of the GATT and may be permanently excluded from tariff reductions because of national security reasons, protection of public morals, protection of human, animal and plant life and health, or the protection of articles of artistic, historic or archaeological value.

Quantitative Restrictions (QRs) and Non-tariff Barriers (NTBs) are likewise to be removed by 2010 (ASEAN6), 2013 (Vietnam), 2015 (Laos and Myanmar), and 2017 (Cambodia). Rules of origin require 40 percent cumulated local content requirement.

Like other PTAs, AFTA initially excluded unprocessed agricultural products (UAPs) from tariff liberalization but subsequently incorporated it into the CEPT, allowing for flexibilities like adding new Sensitive List and Highly Sensitive List categories. All products in the Sensitive List of ASEAN members are from chapters 1-24 of the Harmonized System, except Myanmar which listed additional products from chapters 50-52 (silk worm cocoons, cotton yarn, etc). Not all UAPs, however, were protected. Table 2 shows that, in 1995, out of the total 2,025 tariff lines of UAPs, more than 50 percent were on the Inclusion List, 377 tariff lines were on the TEL, while 261 in the SL. To date, only a handful of tariff lines remain in the sensitive list while the rest have been liberalized or are on track for eventual tariff reduction to 0-5% (see discussion in section 3 below on AFTA's effect on protection structure).

⁷ Originally, the Fast Track Inclusion List had 2003 as target date, while Normal Track had 2008. In 1994, the ASEAN Economic Ministers decided to accelerate all liberalization from 2008 to 2003, and further advanced it to 2002.

⁸ Again the timeframes for CMLV are different. Vietnam phases in between 2004-2006 and has up to 2013 to reduce tariffs between 0-5% (except for sugar which is scheduled for 2010). Laos and Myanmar can phase in between 2006-2008 and have up to 2015 to reduce. Cambodia can phase in all SL products between 2008-2010 and up to 2017 to reduce tariffs.

Table 2. ASEAN Free Trade Area

Coverage	Number of Tariff Lines	Percent Share to Total	No. of Tariff Lines - UAP ²	UAP - 1994 Import Value US\$ million	UAP % Intra- ASEAN Imports	Timeline to reach 0 to 5% tariff ³	Additional Notes
Inclusion List (IL)	40,773 ¹	89.46 ⁴	1,387	125.68	31.6	Jan 1994 - Jan 2003	2006 for Vietnam
Fast Track	14,855	32.59					2008 for Laos PDR and Myanmar
Normal Track	25,918	56.87					2010 for Cambodia
Temporal Exclusion List (TEL)	2,888 ²	6.11 ⁵	377	130.7	32.9		
1- Manufactured and Processed Agricultural Products	2,496	5.28				Jan 1996 - Jan 2000	
2- Unprocessed Agricultural Products	377	0.80				Jan 1997 - Jan 2003	
3- UAP - STEs ⁸	15	0.03				Jan 2010	
Sensitive List⁶	261 ²	0.55	261	141.15	35.5	2001/2003 - Jan 2010	2013 for Vietnam
General Exemption⁷	467 ²	0.99					2015 for Laos PDR and Myanmar
TOTAL			2,025	397.53	100		2017 for Cambodia

Notes

¹ 1993.² 1995. In 1993, total TEL includes 3,322 tariff lines³ for ASEAN 6⁴ Total tariff lines; 1993 = 45,575⁵ Total tariff lines; 1995 = 47,252⁶ Sensitive List category was added in 1995 after the 26th AEM Meeting, September 1994⁷ General Exemption are products that satisfy Article XX of GATT⁸ UAP = Unprocessed Agricultural Products covered by State-Trading Enterprises (STEs); added in 1995

AFTA is an example of how step-by-step tariff reductions, phased transitions and other flexible arrangements, eventually achieve agricultural liberalization which were not thought possible only a decade ago. Although there were a number of reversals, e.g. Malaysia reintroduced autos into the TEL, or major difficulties to liberalize some agricultural products, e.g., rice for Indonesia and the Philippines, majority of agriculture sector is now included in ASEAN regional liberalization. How the gradual opening of ASEAN agriculture markets via tariff reductions translates to actual growth in trade is discussed in section 4 below.

ii. China-ASEAN (CAFTA)

China and ASEAN signed a Framework Agreement on Comprehensive Economic Cooperation in 2002 which covers tariff elimination on goods, services, investments, trade facilitation, special and differential treatment, and expansion of cooperation in various areas. With regard liberalization of goods CAFTA provides for three tracks: Early Harvest, Normal Track, and Sensitive Track.

The Normal Track follows a positive list approach, i.e., products listed by countries for liberalization on their own accord, and targets January 2005 up to January 2010 for phased reduction to 0% tariffs for ASEAN6 and 2015 for CMLV. The Sensitive Track follows the same positive list approach but has no negotiated timelines yet for liberalization.

The Early Harvest Program (EHP) has both a negative list (for chapters 1-8 of the HS) and a positive list for other products from other chapters. The aim is an accelerated tariff reduction for these products to zero percent starting January 2004 and no later than January 2006 (for ASEAN 6; 2010 for CMLV). China-ASEAN emphasizes reciprocity for the products that are to be liberalized, whereby China matches the concessions for exactly the same products.

Chapters 1-8 is approximately 10 percent of tariff lines in the HS classification. The products belong to categories in live animals, meat and edible meat offal, fish, dairy produces, other animal products, live trees, vegetables fruits and nuts. In addition, a small list of additional products from other chapters is included in the early harvest.

Table 3 summarizes the content of Annexes 1 and 2 of the China-ASEAN. The Philippines, by opting for an inclusion list for Annex 1 ended up excluding more than 60% of products in chapters 1-8, while other ASEAN countries have liberalized practically all of the chapters vis-à-vis China.

Table 3. China ASEAN FTA Early Harvest Program

	Annex 1 - Exclusion Chapters 1 - 8	Number Tariff Lines (Ch 1-8) ²	Annex 2 - Inclusion List
Brunei	0	510	to match China
Cambodia	30	248	
Indonesia	0	512	14
Laos	n.a.	208	0
Malaysia	n.a.	504	
Myanmar	0	345	0
Philippines	209 ¹	586	5
Singapore	0	510	to match China
Thailand	0	539	2
Vietnam	15	510	0

Source: China-ASEAN Framework Agreement, Annex 1 and 2

Note:

¹ Philippines chose an inclusion list instead of exclusion list for annex 1

² Based on 2004 CEPT Rates

What is significantly different with CAFTA is that, while other FTAs skirt around agriculture, the agreement, instead, negotiated it upfront by having an Early Harvest Program which covers a significant portion of agriculture products as per the Harmonized System chapters. Of course, the usual flexibility applies via exclusion list. However, it

appears that, except for the Philippines which opted for positive list, the other ASEAN countries are eager to engage China with more open agriculture trade, shown in relatively little excluded products. Because of the strong reciprocity condition of market access, the willingness to allow Chinese unprocessed agriculture products to ASEAN markets also reflects ASEAN interest to make inroads in the large Chinese market. In contrast, the Philippines, by liberalizing mainly products that are not significantly produced domestically also signals its relative lack of interest in penetrating the Chinese agricultural market.

iii. Korea-Chile

Korea-Chile FTA is important for Korea, not only because it is its first bilateral FTA, but also because it was able to reach an agreement on agricultural products, thus proving the government's commitment to the pursuit of FTAs. In Korea-Chile, agriculture access was again a central issue. Yet, amidst public concern, the bilateral FTA contains one of the most wide ranging coverage of agriculture liberalization.

The approach is negative listing with exceptions and phased tariff reductions. In the final result, Korean conceded 1,432 farm products with ten types of schedules for tariff elimination (see Table 4) but exempted rice, apples, and pears from tariff reductions. Manufacturing is mostly liberalized upon date of entry into force of the agreement, compared to only 16 percent of farm products. The rest are to be liberalized in 5, 7, 9, 10, and 16 years. In addition, grapes, the product of interest for Chile, have seasonal tariffs (over 10-year transition period) on May-October during Korea's harvest season. Items subject to tariff rate quota (TRQ)+DDA include beef, chicken, whey, and plums where in-quota tariffs are eliminated and out-of-quota tariffs are at the prevailing tariff rates and to be renegotiated after the Doha Development Agenda (DDA) round (Chung, 2003). Tariff elimination of some 373 agricultural products, about 26 percent of agriculture tariff lines, shall be negotiated after the end of the Doha Negotiations⁹.

⁹ Chung (2003) highlights the fact that some products are classified with DDA, or to be negotiated after the Doha Round, as showing that some sectors are more pliable to liberalization at the multilateral than at the regional level. In exchange for the Korean exemption, Chile also permanently excluded 54 items covering mainly washing machine, refrigerators, sugar, wheat, and oilseeds.

Table 4. Korea's Tariff Limitation Schedule
(Unit : Korea's 10-digit HS codes, %)

Category	Total	Industrial Products	Farm Products	Forest Products	Marine Products	Description
Year 0	3,740(87.2)	3,101(99.9)	224(15.6)	138(58.2)	277(69.5)	Mixed feeds, pure-bred breeding animals, silk fabrics, coffee
Year 5	701(6.3)	-	545(38.1)	70(29.5)	86(21.5)	Bracken, roses, bean curd, wine, almonds
Year 7	41(0.4)	1(0.01)	40(2.8)	-	-	Fruit juice, prepared fruit, meat of poultry or heading, soup, potatoes
Year 9	1(0.01)	-	1(0.07)	-	-	Other fruit juices
Year 10	262(2.3)	-	197(13.8)	29(12.3)	36(9.0)	Tomatoes, pork, cucumbers, kiwis
10S*	1(0.01)	-	1(0.07)	-	-	Grapes
Year 11	12(0.1)	-	12(0.8)	-	-	Prepared dry milk
TRQ**	18(0.15)	-	18(1.26)	-	-	Beef, chicken,
DDA***	373(3.3)	-	373(26)	-	-	Garlic, onions, red peppers, dairy products
E****	21(0.2)	-	21 (1.5)	-	-	Rice, apples, pears
Total	11,170	9,102	1,432	237	399	

Source: Chung (2003)

Notes:

* liberalization over a transitional period of 10 years on a seasonal basis

** Liberalization with tariff quota

*** Tariff elimination schedule shall be negotiated after the end of the Doha Development Agendas of the WTO

**** Customs duty applied shall not be eliminated.

The agreement relies on the WTO for most of the disciplines on safeguard and SPS measures. It establishes a committee dedicated to SPS matters to facilitate the application of SPS related provisions and monitor compliance. It also has best endeavour wording for harmonization towards international standards and application of equivalence (OECD, 2004). Interestingly, concerned that the preferential access be eroded through multilateral concessions, the Korea-Chile FTA contains provisions that, should any party grants an MFN concession, it should consult the other party to consider adjustments to tariffs applied to reciprocal trade. Such type of provisions can potentially make bilateral agreements a stumbling block to multilateral negotiations.

iv. Thailand-Japan

After hitting several snags in the negotiation, the Thailand-Japan FTA appears to be ready for signing within the year and to be enforced in 2006. The main battlefield, as usual is agriculture.

Among the ASEAN countries, Thailand is the biggest exporter of agricultural and fisheries products to Japan, even if nearly half of its current agricultural export each year face market access restrictions. Predictably, Thailand pushed for greater market access for their farm products in the Japan-Thailand bilateral trade agreement. But Japan finds it practically impossible to scrap tariff on imported rice and sugar because it would hurt the economies of Okinawa and Hokkaido.

The compromise agreement was to exclude rice and sugar along with other products from the current Agreement, and to renegotiate those in five years (see Table 5). Chicken meat, another contentious product, however, would have its tariffs lowered from 6 percent to 3 percent in 5 years. In exchange for the exclusion of rice and sugar, Japan did not manage to pry the Thai car market wide open especially for Japanese luxury cars.

While it appears that Japan proposed import tariff cuts on more than 500 food and farm products, actual market access benefit depends on negotiations on rules of origin and reduction of food safety standards in Japan¹⁰. As of this writing, however, no publicly available information could be found on final agreement on rules of origin and safety standards, except the fact that Japan would provide technical assistance to improve food safety in Thailand as part of efforts to increase Thai exports of meat and other foodstuffs.

¹⁰ For instance, currently Japan bans import of live chickens and raw meat from Thailand for quarantine reasons, and only meat cooked at designated food processing facilities is allowed entry.

Table 5. Thailand - Japan FTA Highlights: Agricultural, Fishery and Forestry Products

<u>Tariff Elimination Schedule</u>	<u>Timeline</u>
A. Japan's Schedule	
1. Products covered	
A. Agricultural Products	
Mangoes, Mangoste	immediate
Fresh bananas	
in-quota rate	duty free
TRQ quantity	year 1 - 4,000 metric tons year 5 - 8,000 metric tons
Fresh pineapples	
in-quota rate	duty free
TRQ quantity	year 1 - 100 metric tons year 5 - 300 metric tons
Fresh, frozen vegetable Mixed fruit, fruit	Tariff elimination within 5-10 years immediate
Prepared, preserved c Prepared, preserved pork and ham	Tariff reduction from 6% to 3 % in 5 years
in-quota rate	immediate reduction by 20% of MFN rate
TRQ quantity	1,200 metric tons from the 1st year
Rice bran oil	Tariff reduction by 55.5% in 5 years
Pet food	Tariff elimination in 10 years
Cane molasses	TRQ on the 3rd year
in-quota rate	Reduction by 50% of out-quota rate
TRQ quantity	year 3 - 4,000 metric tons year 4 - 5,000 metric tons
Esterified Starch	
in-quota rate	duty free
TRQ quantity	200,000 metric tons from 1st year
B. Fishery Products	
Shrimp and prawn	immediate
Fish Fillet and jellyfish, fresh and frozen Mongol Prepared, preserved t	Tariff elimination in 5 years Tariff elimination in 5 years
other bonito and crab	
C. Forestry Products	
Forestry products othe plywood, particle board and fiberboard	immediate
Particle board and fibr	Tariff elimination in 10 years
2. Exclusion or for Re-negotiation	
Rice, wheat, barley, fresh, frozen and chilled	
B. Thailand's Schedule	
1. Products covered	
A. Agricultural Products	
Apples, Pears and Pe	immediate
B. Fishery Products	
Yellowfin Tuna, Skipja Herrings, Cod	Tariff elimination in 5 years immediate
2. Exclusion or for Re-negotiation	
mackerel, tobacco,	

Source: Japan-Thailand FTA, Attachment 2

Preferential Trading Arrangements versus Multilateral Trade

The section has discussed the various ways that agriculture exceptions are accommodated in PTAs which includes permanent or temporary exceptions, flexible timelines for adjustments, and less stringent discussions on non-tariff measures.

This special treatment of agriculture has both a positive and negative side. On the positive side, the ability to remove sensitive agriculture sectors out of the discussion allows the negotiations to move forward, to focus on other sectors that can give mutual benefits, and prevents it from being lengthily stalled, as in the case of the multilateral talks. PTA negotiations, therefore, become simpler and faster relative to the WTO, not only because there are fewer parties to talk to and convince, but also because it is easier to agree on temporary exclusions of highly sensitive sectors. Scolley (2003) even argues that for trading partners that are not competitive in agriculture, such exclusion reduces the trade diversion that is associated with preferential trading arrangements, hence makes the PTA more welfare enhancing. Allowing exclusions, therefore, could be mutually beneficial.

Moreover, others say that, even with the extended time for liberalization or permanent exclusion of sensitive agricultural products, the PTAs still prepares the way for future multilateral liberalization, as they condition the political economy about the workability of a liberalized environment. In fact, some RTAs reflect progress in traditionally difficult sectors such as rice and sugar using this extended time frame strategy, without which, these products would never have found their place on the negotiating table. For instance, for many Asian countries, rice is a politically sensitive product that they would rather not put under trade negotiations, yet, under the PTAs, these types of product have been included in the country schedules and timelines for liberalization.

The negative side of the PTAs is that this encourages economies to increasingly focus on these negotiations at the expense of their commitment to multilateralism. Given the thin number of government officials who are knowledgeable about trade, both PTAs and WTO negotiations would not receive the same adequate level of attention, with the multilateral negotiations normally taking the back seat. Moreover, with different countries having different sensitive agricultural sectors being excluded from liberalization, future harmonization of different PTAs also becomes bleaker, thereby possibly locking countries into present-day spaghetti bowl trading system. For instance, a bilateral agreement that excludes rice from liberalization would be difficult to expand to an Asia-wide agreement unless other countries, like Thailand, would likewise agree to exclude rice.

3. Effect on Agriculture Protection Structure

This section and next discuss the effect of PTAs on protection structure and trade flows. Since many of the PTAs in East Asia are relatively recent phenomena, an

econometric *ex-post* analysis of their impact on trade is not possible. Instead, the section focuses only on the effect of the ASEAN FTA, the original free trade agreement in the region.

What can be generally observed from the tables and graphs in this section is the significant progress in lowering tariffs in AFTA compared to each country's MFN rates. To analyze the effect of AFTA on protection structure of ASEAN-member countries, we use the Harmonized System (HS) tariff schedules available from UNCTAD and World Bank. Some tariff schedules go as detailed as 10 digits, while majority go only as far as eight digits¹¹. For computation of means and tariff distribution, we used the raw data of tariffs up to whatever digits were available. But for weighted tariffs, we averaged the tariffs up to six-digit classification to harmonize with six-digit trade data. Since trade protection is not only by way of tariff, we supplement the analysis by a brief discussion of other non-tariff measures in section 4.

Mean and Median Tariffs

What is immediately evident, by looking at Figure 1, is that AFTA agriculture tariff has made an enormous improvement over its MFN equivalent. While average MFN agriculture tariff for Philippines and Indonesia is over 11 percent, it is roughly four and three percent in the CEPT, respectively. Thailand's concessions in the CEPT is even more pronounced, with mean tariff of four percent compared to over 29 percent MFN. Singapore and Brunei, of course, have always had liberal trade policies, whether in the multilateral or regional stage. Our analysis of standard deviations of tariff lines (not shown) also confirms that CEPT had lowered the dispersion of tariffs; while average standard deviation of MFN tariffs is 12 percent, CEPT's is only two percent.

The fact that the Philippines and Indonesia have MFN means that are greater than their medians indicates the simultaneous presence of a large number of tariff lines that are far below the means and a few tariff lines with very high rates. This phenomenon, commonly called tariff peaks, typically results from the application of very high tariffs is on a small group of politically sensitive products while the rest of the tariffs are kept at low levels. In ASEAN, the fact that certain products like rice remain outside the ambit of tariff reduction illustrates the tariff peaks that still exist in AFTA. Table 6 shows that whatever tariff peaks that exist, they occur in agriculture. In Indonesia, 19 products out of 25 highly sensitive products – hence temporarily exempted from tariff reduction - are agriculture products, while another 60 agriculture products are classified under the General Exclusion List. In the Philippines, all 19 sensitive products are agricultural ones.

¹¹ In the HS classification, chapters are at 2 digits, headings are 4 digits, and subheadings are at 6 digits. The first 6 digits are harmonized under the HS system, but countries assign the last two digits, and thus are no longer uniform across countries.

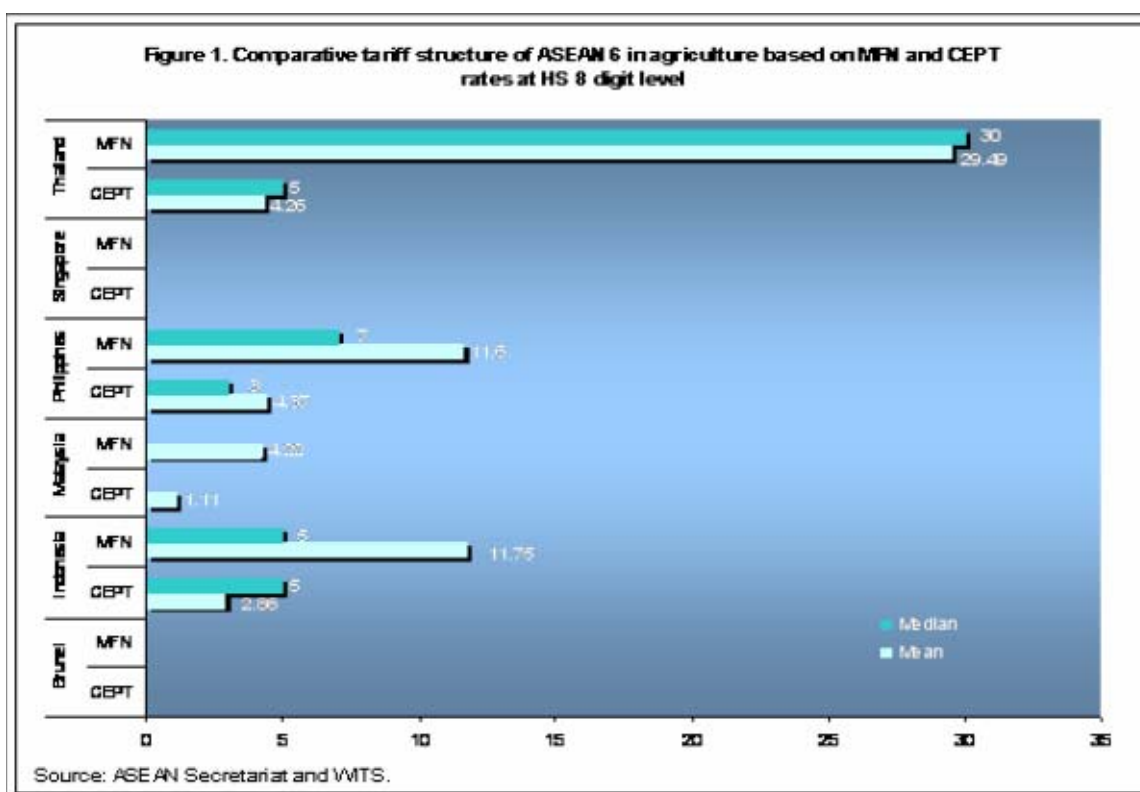


Table 6. Sensitive and Exclusion Lists in AFTA

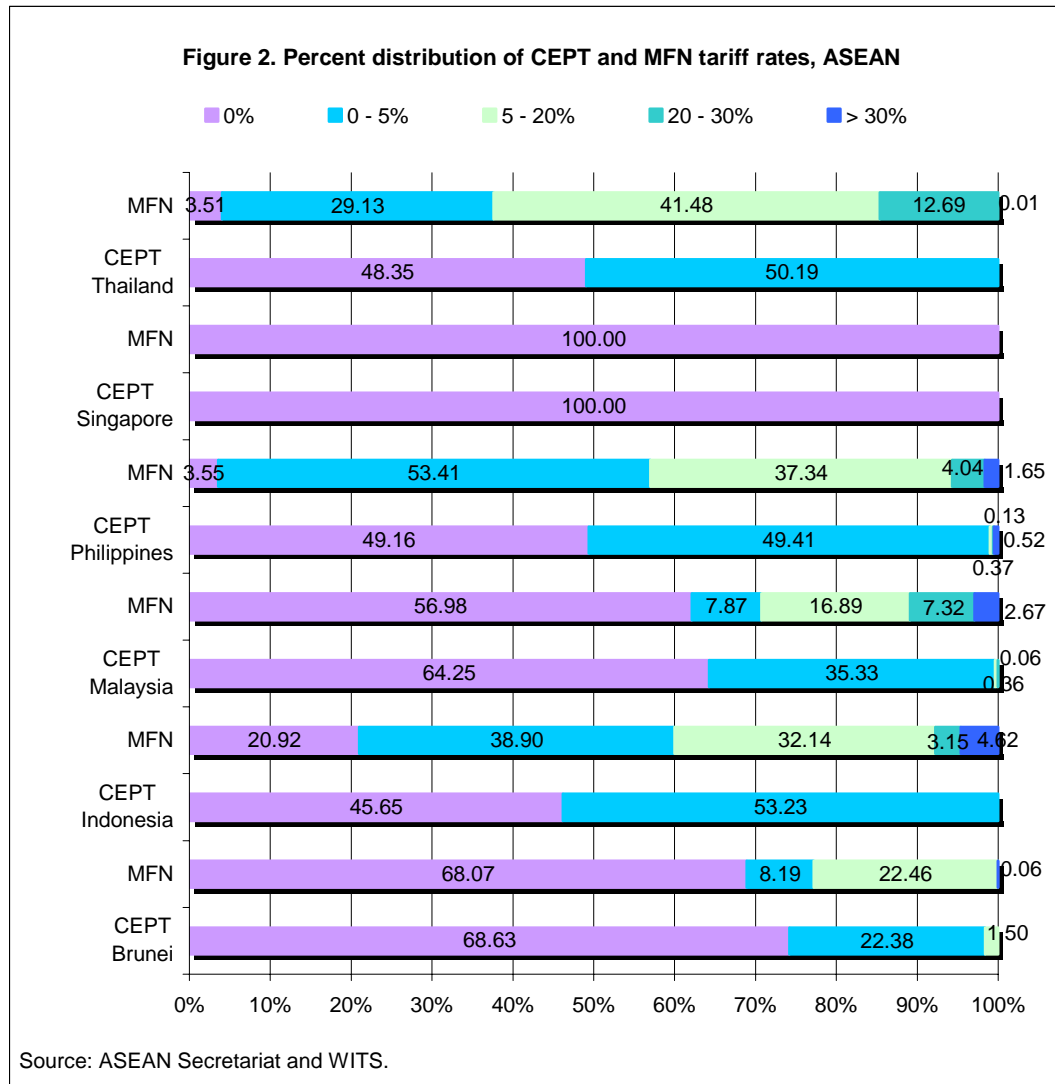
	Brunei	Indonesia	Malaysia	Philippines	Singapore	Thailand
Total tariff lines	10,702	11,153	10,387	11,059	10,705	11,125
Sensitive/Highly Sensitive	-	25	-	19	-	-
Percent of total tariff lines	-	0.2	-	0.2	-	-
Of which: Agriculture		19		19		
General Exclusion List	778	100	-	27	-	-
Percent of total tariff lines	7	1	-	0.2	-	-
Of which: Agriculture	80	60				
Mixed rate	-	-	-	-	-	157
Specific rate	23	-	-	-	-	-

Source: Author's calculation. WITS.

Note: For Malaysia, there is no available information regarding its sensitive and exclusion list in AFTA

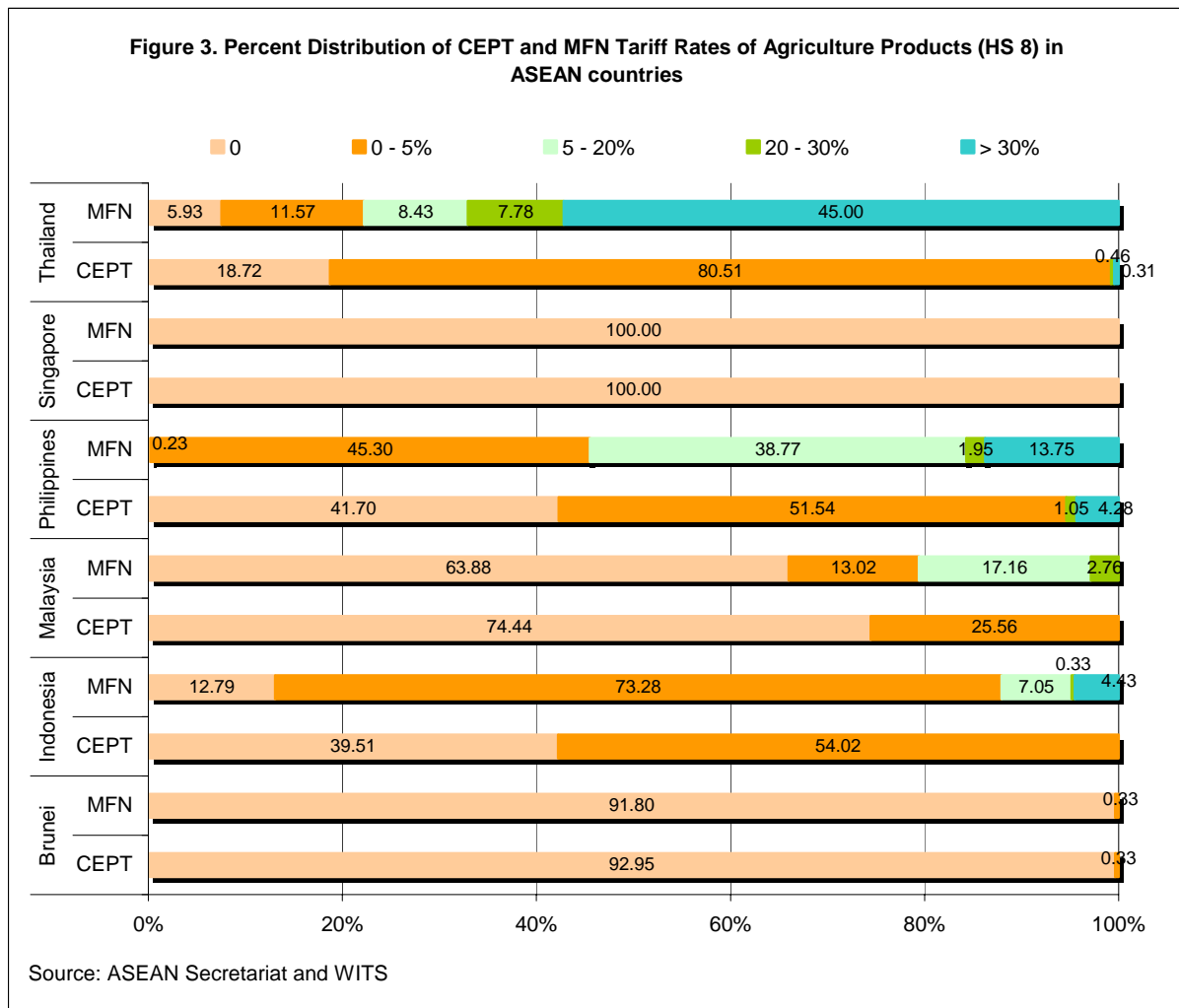
Tariff Distribution

We next examine the MFN and CEPT tariff distribution. Figure 2 shows that AFTA had successfully brought down tariff rates below five percent for almost 99 percent of tariff lines (both agriculture and industry), of which almost half are already traded tariff-free. In contrast, MFN applied rates appear to be relatively more concentrated in the five-to-20 percent range, with a few products still exceeding 30 percent tariff rate. In the case of Indonesia, almost five percent of products are still slapped the highest tariffs, in Malaysia, three percent, and in the Philippines, two percent.

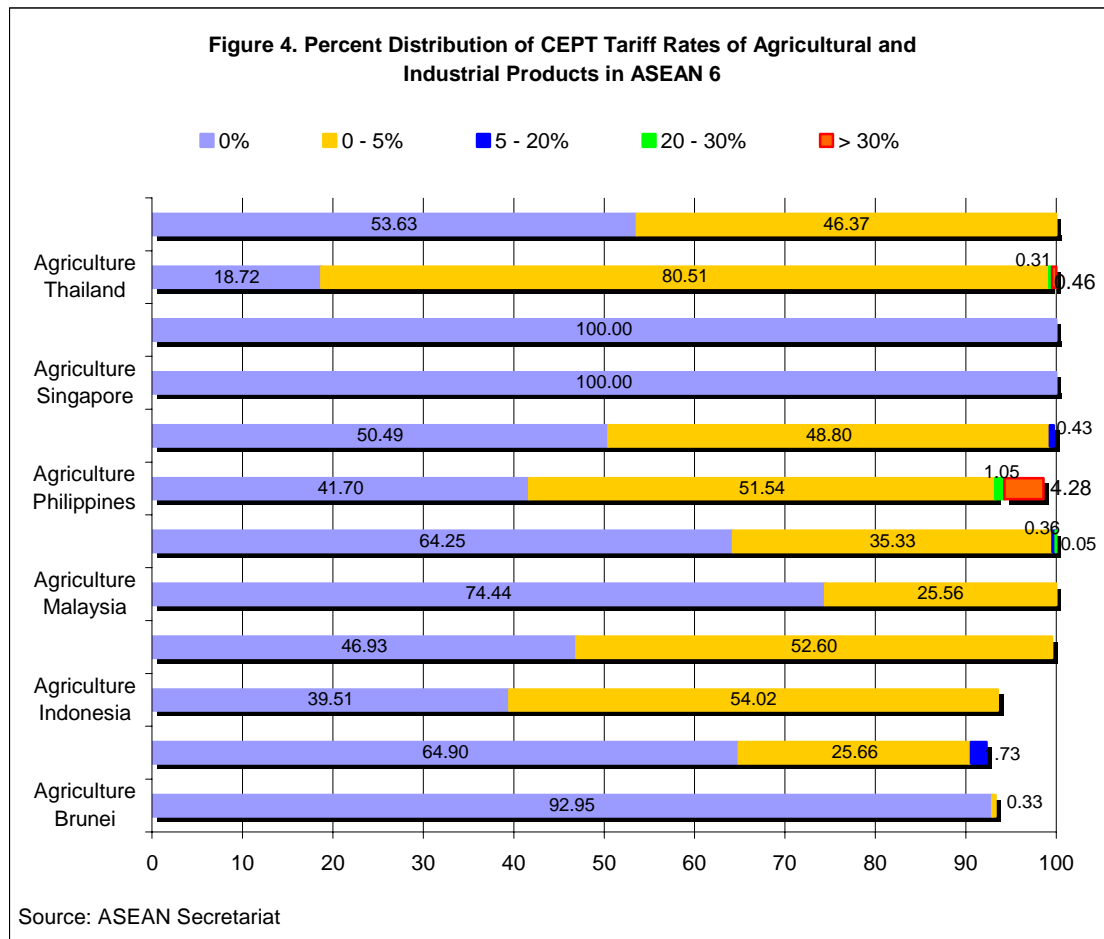


A slightly different picture emerges from the tariff distribution analysis of agriculture tariff lines alone (see Figure 3). Unlike Figure 2, Figure 3 shows relatively less concentration on the zero percent tariff in the CEPT, with the exception of Singapore and Brunei. Still, the CEPT is again proved to be successful in that more than 90 percent of agriculture products are, likewise, below five percent tariff rate. Among the ASEAN6, the Philippines has the most number of agriculture tariff lines (about five percent) with CEPT rates higher than 20 percent.

MFN agriculture tariff concentration is, not surprisingly, in the higher tariff rate range. Malaysia and Indonesia have 76 and 85 percent of tariff lines, respectively, below five percent, while it is only 17 and 45 percent for Thailand and the Philippines. The latter two countries also have the most number of tariff lines with the highest tariff rates: 45 percent of agriculture tariff lines for Thailand and 14 percent for the Philippines have more than 30 percent tariff. However, unlike Thailand which has around 6 percent of tariff lines at zero tariff, practically none enters the Philippines tariff-free.



A comparison of agriculture and industry tariff distribution within CEPT yet shows another interesting contrast. Figure 4 shows that ASEAN countries liberalized industry faster than agriculture. The concentration of industrial goods that are traded tariff-free within ASEAN is higher than those for agriculture products. Moreover, less than one percent of industrial goods still have tariff rates higher than five percent, while the percentage share for agriculture is higher: for the Philippines, it is five percent, while for Thailand, it is close to one percent.



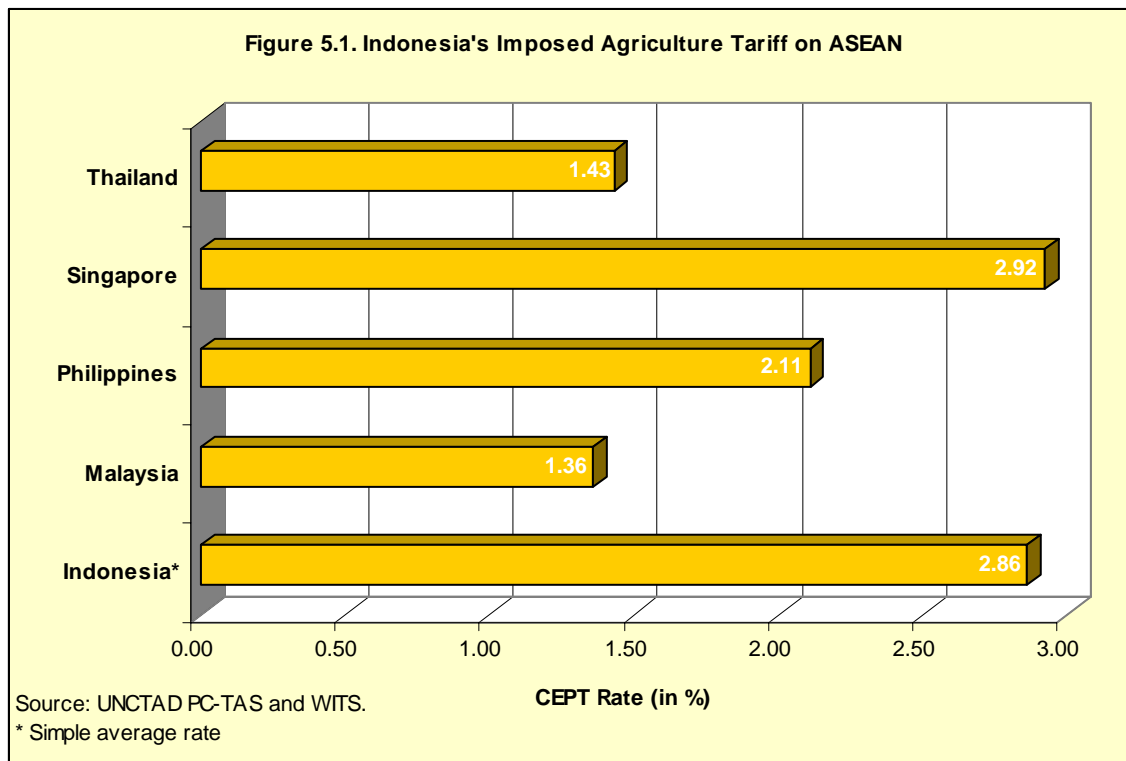
Imposed Tariffs

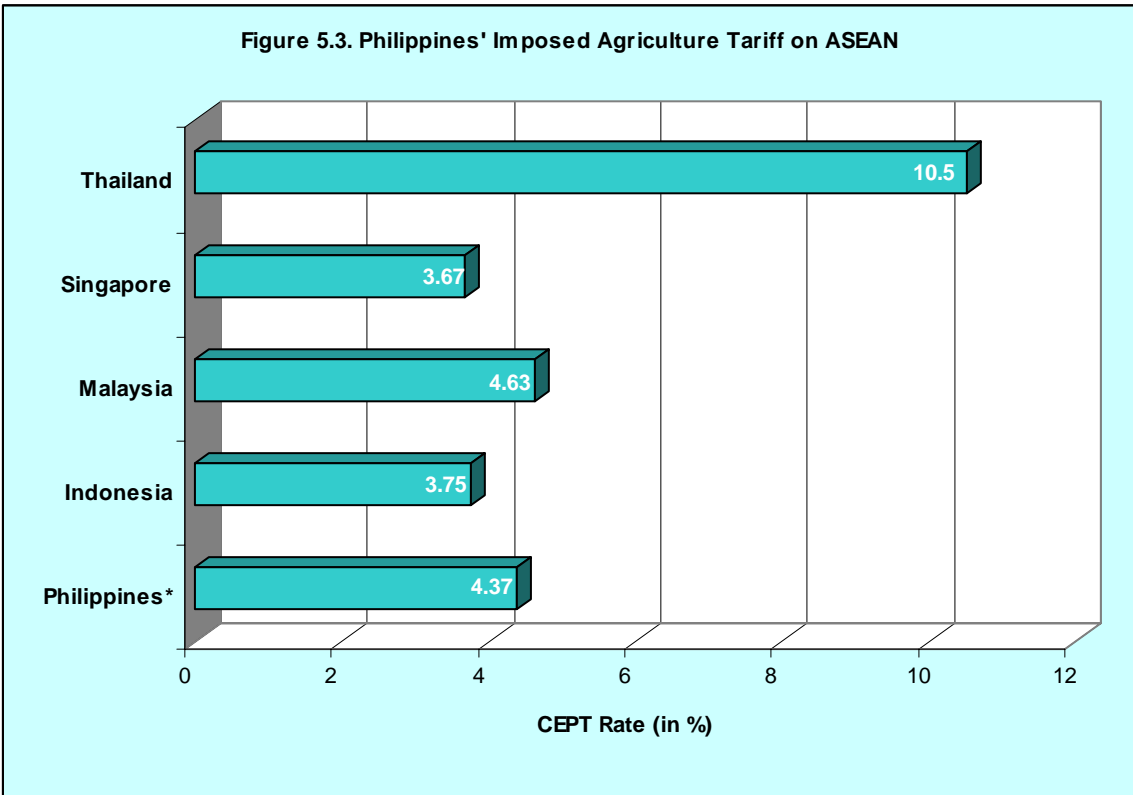
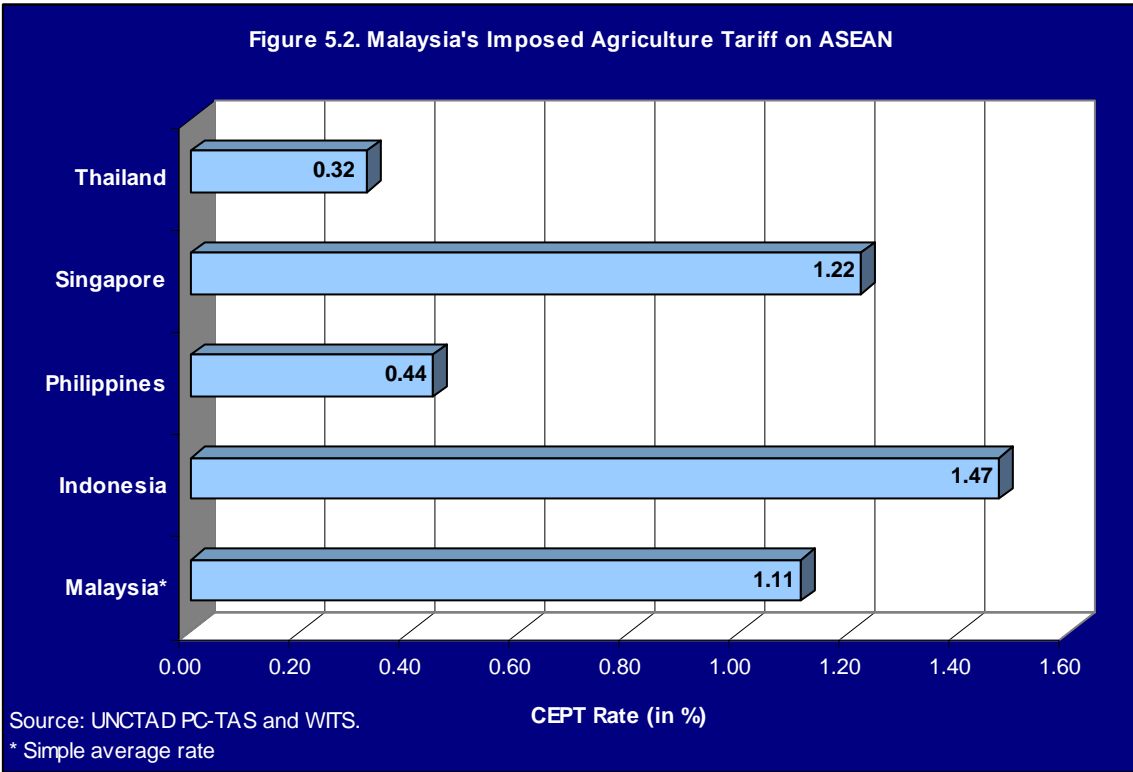
A question that may be asked is whether ASEAN countries have brought down the tariff rates of ‘insignificant’ products while maintaining tariff rates high for export interests of partner countries in the AFTA. To evaluate if this is the case, we measure the export-weighted or the imposed tariffs of each country, that is, the tariff rates of the imposing country multiplied by the export share per tariff line of the partner economy. The assumption is that, if all of a country’s exports go to one partner country, the weighted tariff is the average amount of tariff that is faced by the exporting economy in that country, or conversely, the weighted tariff can show the average amount of tariff that

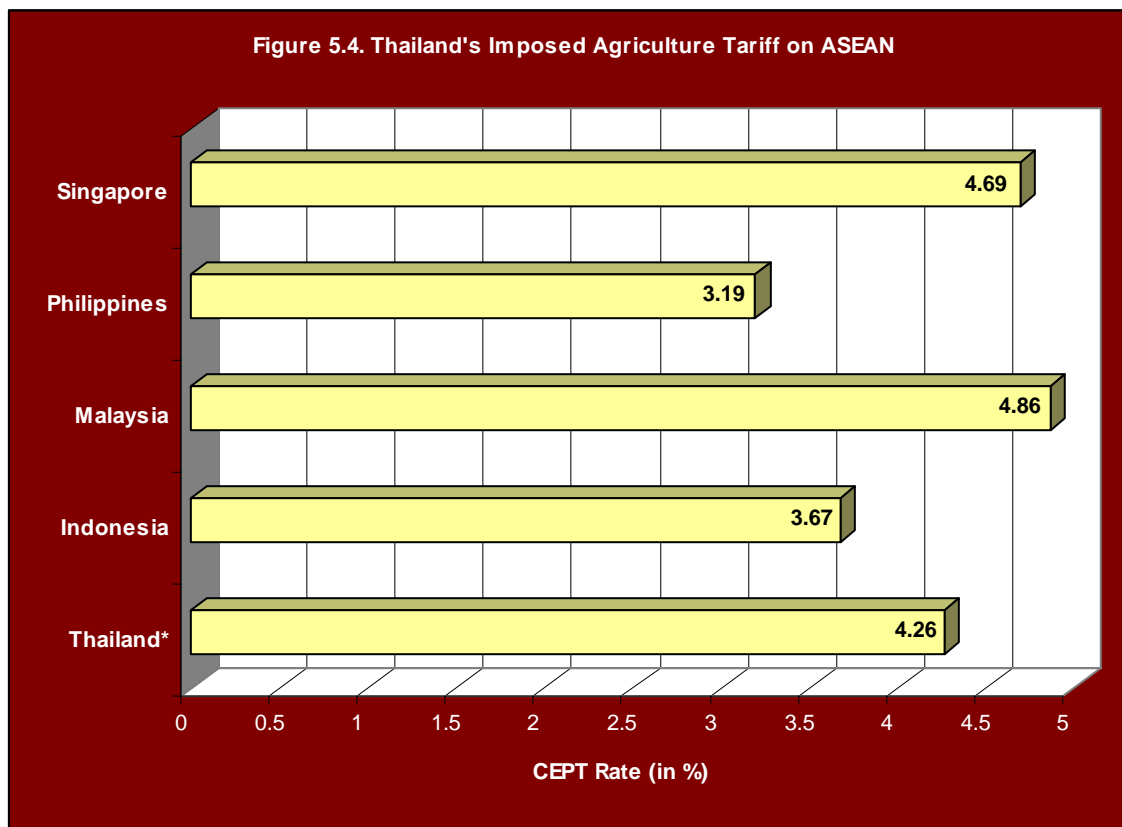
an importing country imposes on the other. If the imposed tariff rates are higher than the simple tariff average, it can mean that the importing country may have lowered tariffs on products that are not so beneficial for the exports of the partner country, hence possibly reflecting a farcical tariff liberalization. Put another way, if a major export product is slapped a high tariff while a non-exported product a low tariff, the export-weighted tariff is likely going to be higher than average.

i. Export-weighted tariffs

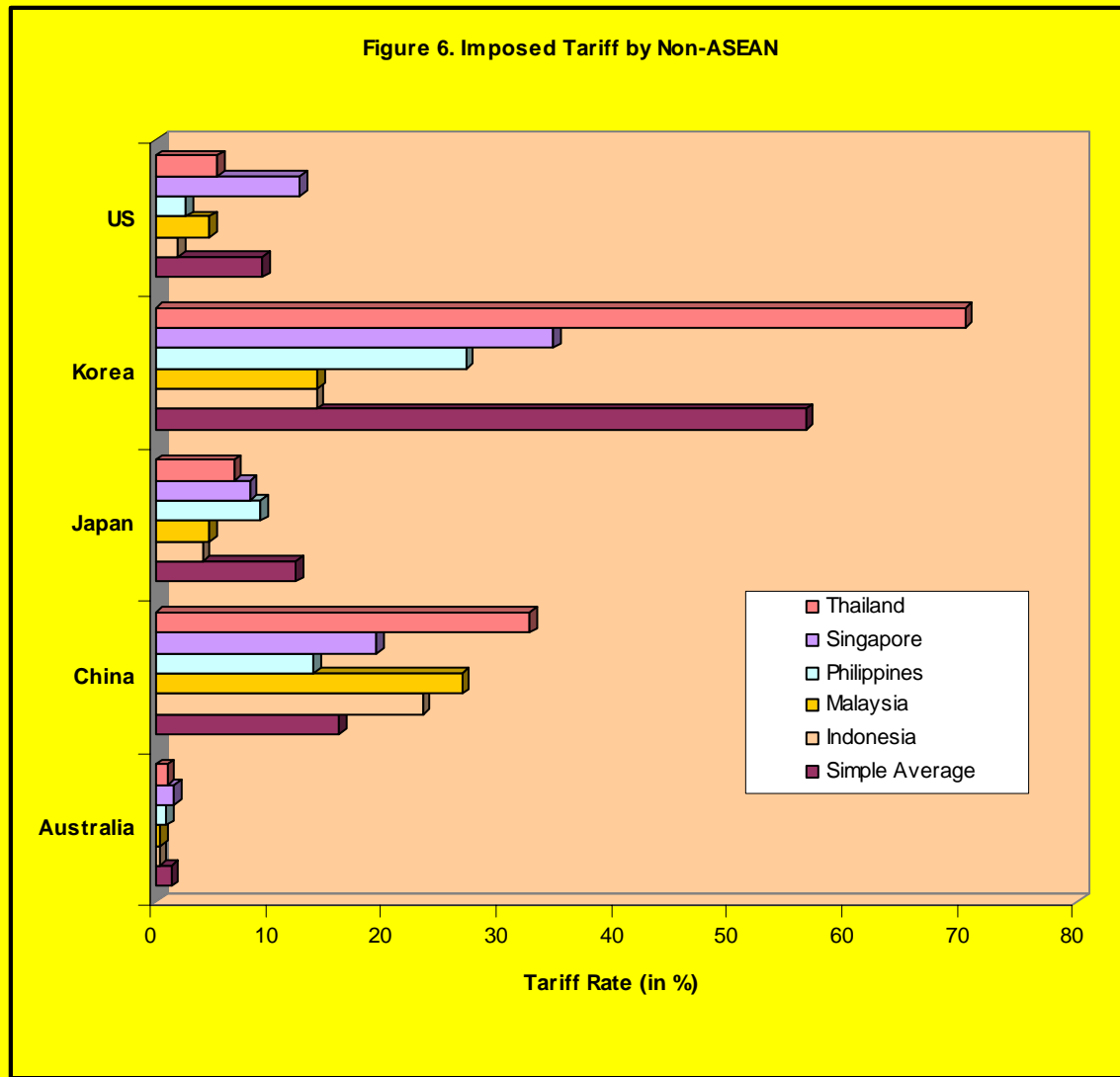
Figures 5.1-5.4, based on the comparison of simple tariff average and imposed tariffs, show a somewhat mixed result. The CEPT export-weighted agriculture tariffs of Thailand, for example, are higher than its simple average, against Singapore and Malaysian products, but lower for those of Indonesia and the Philippines. In contrast, the Philippines' imposed tariff on Thai agriculture products is way higher than its simple average of 4.37, while it is lower for products from Indonesia. Malaysia's imposed tariff is highest on Indonesia. This result may also reflect the fact that one country's major exports are likewise the importing country's major exports and protected sector, as in the case of Malaysia and Indonesia, or Thailand and the Philippines. Put differently, cases where the imposed tariff exceeds the simple average may reflect the lack of complementarity of agriculture exports among subgroups or pairs of ASEAN countries, or merely that the export interest of one country is well protected in the domestic market of another.







In contrast, non-ASEAN export markets like Australia, US, Korea, and Japan have imposed tariffs on ASEAN agriculture products that are less than the simple averages in these respective countries (see Figure 6). Korea's simple average agriculture tariff of 56.43 percent, for instance, is greater than imposed tariffs on Philippines, Malaysia, and Indonesia but lower than that on Thailand. This shows possible complementarity of agriculture exports between Korea and the three ASEAN countries, but possible competition with Thai products. China's imposed tariff on ASEAN (except the Philippines), on the other hand, are greater than its simple average tariff, which means that China's domestic market is well protected from competition from ASEAN agriculture products.



ii. Incidence on top exports

Table 7 further illustrates why some countries receive higher export-weighted tariffs than others. In general, the table shows that, of the top ten agriculture exports of each ASEAN country, most already receive CEPT tariffs of five percent or lower, except for a sprinkling of a few products. These few exceptions are: Indonesia’s coffee exports (HS 090111) which, in Thailand, is slapped 40 percent; Malaysia’s sugar exports (HS170199) which, in the Philippines, has tariff of 29 percent; and Thailand’s sugar, fowl, and cassava exports which receive still high tariffs in the Philippines. The latter result explains why the imposed tariff of the Philippines on Thai agriculture products is 10.5 which far exceeds its simple average of 4.37.

Table 7. CEPT and MFN Tariffs of Top ASEAN Agriculture Exports

HS Code	Product Description	Trade Value	Share to Agricultural Exports	Malaysia		Philippines		Thailand	
				CEPT	MFN	CEPT	MFN	CEPT	MFN
				Indonesia		Philippines		Thailand	
Indonesia									
151190	Palm oil and its fractions refined but not chemically modified	1,392,411	0.25	5	5	5	15	0	5
151110	Palm oil, crude	1,062,215	0.19	0	0	3	15	0	5
180100	Cocoa beans, whole or broken, raw or roasted	410,278	0.07	0	0	3	3	5	27.3
090111	Coffee, not roasted, not decaffeinated	250,882	0.05	0	0	5	35	40	40
151321	Palm kernel or babassu oil, crude	206,242	0.04	0	0	3	15	0	5
240220	Cigarettes containing tobacco	135,550	0.02	0	0	5	10	5	60
180400	Cocoa butter, fat and oil	118,340	0.02	0	25	0	3	5	10
151311	Coconut (copra) oil crude	99,368	0.02	0	5	3	10	0	5
090411	Pepper of the genus Piper, ex cubeb pepper, neither crushed nor ground	93,203	0.02	0	0	5	12	5	30
090240	Black tea (fermented) & partly fermented tea in packages exceeding 3 kg	90,509	0.02	5	25	0	3	5	60
				Indonesia		Philippines		Thailand	
Malaysia									
151190	Palm oil and its fractions refined but not chemically modified	4,117,561	0.50	0	0	5	15	5	0
151620	Veg fats & oils & fractions hydrogenated, inter/re-esterified, etc, refined	753,520	0.09	5	10	2.7	13.9	5	27.3
151110	Palm oil, crude	512,078	0.06	0	0	3	15	5	0
151329	Palm kernel/babassu oil their fraction, refined but not chemically modified	241,966	0.03	0	0	5	15	5	0
180400	Cocoa butter, fat and oil	147,808	0.02	5	5	0	3	5	10
151790	Edible mix/ prep of animal/veg fats & oils/ of fractions ex hd No 15.16	121,936	0.01	1.8	5	3	15	5	30
240220	Cigarettes containing tobacco	111,143	0.01	5	15	5	10	5	60
170199	Refined sugar, in solid form, nes	96,307	0.01	0	0	28.8	34.9	5	0
210690	Food preparations nes	90,326	0.01	5	47.6	2.7	5.9	4.9	25.7
230660	Palm nut/kernel oil-cake & other solid residues, whether/ not ground/ pellet	88,168	0.01	0	0	3	15	5	9.1
				Indonesia		Malaysia		Thailand	
Philippines									
151311	Coconut (copra) oil crude	399,436	0.22	0	0	0	5	5	0
080300	Bananas including plantains, fresh or dried	333,000	0.18	5	5	0	0	0	42
151319	Coconut (copra) oil & its fractions refined but not chemically modified	105,424	0.06	0	0	0	5	5	0
080111	Coconuts, desiccated	95,745	0.05	0	5	5	20	0	54.6
200820	Pineapples nes, o/w prep or preserved, sugared, sweetened, spirited or not	84,279	0.05	5	5	0	10	5	60
170111	Raw sugar, cane	62,023	0.03	0	0	0	0	5	0
040229	Milk and cream powder sweetened exceeding 1.5% fat	57,160	0.03	0	5	0	0	0	5
130239	Mucilages & thickeners nes, modified or not, derived from vegetable products	47,167	0.03	0	5	0	0	5	20
200940	Pineapple juice, unfermented & not spirited, whether or not sugared or sweet	46,810	0.03	0	0	0	30	0	0
080450	Guavas, mangoes and mangosteens, fresh or dried	44,734	0.02	0	5	5	0	0	42

Table 7 continued. CEPT and MFN Tariffs of Top ASEAN Agriculture Exports

Product Description		Trade Value	Share to Agricultural Exports								
HS Code	Top Ten Agricultural Exports of ASEAN			Indonesia	Malaysia	Philippines	Thailand	Indonesia	Malaysia	Philippines	Thailand
Singapore											
240220	Cigarettes containing tobacco	346,687	0.13	5	15	0	0	5	10	5	60
220820	Spirits obtained by distilling grape wine or grape marc	161,788	0.06	0	170	0	0	5	10	5	60
151190	Palm oil and its fractions refined but not chemically modified	126,150	0.05	0	0	5	5	5	15	5	0
210690	Food preparations nes	108,417	0.04	5	47.6	3.2	11	2.7	5.9	5	25.7
220410	Grape wines, sparkling	88,877	0.03	0	170	0	0	0	5	5	54.6
210111	Coffee extracts, essences, concentrates	82,359	0.03	5	5	0	5	5	37.5	5	49.6
240310	Smokg tobacco, whether or not cntg tobacco substitutes in any proportion	73,602	0.03	5	15	0	0	5	7	5	60
220300	Beer made from malt	67,854	0.03	0	40	0	0	5	15	5	60
190190	Malt extract&food prep of Ch 19 <50% cocoa&hd 0401 to 0404 < 10% cocoa	64,866	0.02	4.7	5	2.8	5	3.1	4.3	4	18
220830	Whiskies	57,418	0.02	0	170	0	0	5	15	5	60
Thailand											
100630	Rice, semi-milled or wholly milled, whether or not polished or glazed	1,572,222	0.20	0	0	0	0	5	50		
020714	Fowls (gallus domesticus), cuts & offal, frozen	597,883	0.07	0	5	0	0	40	40		
170199	Refined sugar, in solid form, nes	502,369	0.06	0	0	0	0	28.8	34.9		
170111	Raw sugar, cane	425,678	0.05	0	0	0	0	48	57.5		
160232	Fowl (gallus domesticus) meat, prepared/preserved	379,281	0.05	0	5	0	0	5	40		
200820	Pineapples nes, o/w prep or presvd, sugared, sweetened, spirited or not	282,515	0.04	5	5	0	10	5	10		
230910	Dog or cat food put up for retail sale	273,948	0.03	0	0	0	0	0	5		
210690	Food preparations nes	257,536	0.03	5	47.6	0	4	2.7	5.9		
071410	Manioc (cassava), fresh or dried, whether or not sliced or pelleted	252,468	0.03	2.5	5	5	5	35	40		
100640	Rice, broken	225,428	0.03	0	0	0	0	0	50		

Source: ASEAN Secretariat, UNCTAD - PC-TAS

Relative Tariff Ratio (RTR) Index

The Relative Tariff Ratio (RTR) Index, originally developed by Sandrey (2000), is a summary measure that helps evaluate the effects of trade liberalization in a bilateral negotiation. The index considers the bilateral protection between two countries where each tariff line of country A is weighted by country B's total exports to the world for the same tariff line, and vice versa. The index is the ratio of the country's *faced tariffs* in the numerator and its *imposed tariffs* in the denominator (Jank, et.al., 2003). A ratio close to

one means that the two countries have similar tariff protection, or that the tariff barriers are comparable¹².

The RTR's main advantage is that it summarizes a large amount of trade flows and tariff level data into a concise number which is easy to interpret. It can be an excellent instrument for measuring progress in PTAs. However, the index is mostly influenced by sensitive or major exported products and major trading partners¹³.

Table 8 presents the agriculture relative tariff ratio index of ASEAN agriculture exporting countries. The table does not reflect the level of tariffs but only their relative ratios. A ratio between, say, Indonesia and Malaysia, of 1.08 means that for every percentage point that Malaysia faces in Indonesia (or that Indonesia imposes on Malaysia), Indonesia faces 1.08 points in Malaysia. This ratio is close to one which indicates that the bilateral protection between the two countries is comparable. The table also reveals that countries with a bigger percentage of high tariffs like the Philippines or Thailand tend to have CEPT RTR ratios that are less than one vis-à-vis their other ASEAN trading partners, whether they be agriculture or industry. Generally, this implies that these countries impose higher tariffs on agriculture products than what they face in trade partners. Conversely, Malaysia and Indonesia, which have all their tariffs practically capped at five percent, have RTR ratios greater than one, that is, they face more protection than what they impose.

In the MFN column, the general picture is that of relatively greater domestic protection in ASEAN markets vis-à-vis non-ASEAN. Almost all RTRs are less than one meaning that ASEAN countries face relatively less protection than they impose, except for China and Korea in the agriculture market. Indonesia, Malaysia and Thailand face higher relative protection in China, while Malaysia, the Philippines and Thailand face relatively higher protection in Korea. In industry, Indonesia and the Philippines face higher protection in Japan than what they impose on Japanese industrial goods, while Thailand has a broadly comparable protection level.

¹² $RTR_{AB} = [\sum_i^n (X_i^B * Y_i^A)] / [\sum_i^n (X_i^A * Y_i^B)]$ where A, B are countries, X_i are the ad valorem tariff for product i and Y_i is the share of exports of product i in total exports, n is the number of tariff lines. For agriculture RTR, n considers only the number of tariff lines considered as part of agriculture under the WTO definition. The value of the numerator is the faced tariff of country A from B while the denominator is the imposed tariff of country A on B. For agriculture RTR, the trade share Y_i is computed as the product share in total agriculture export; for industry RTR, it is the share in total industry export.

¹³ Jank, et.al (2003) summarize the weaknesses of RTR as including the fact that it ignores elasticity effects and substitution possibilities when tariff barriers are decreased. The index does not also account for many non-tariff measures and subsidies, and may be unrealistic for some least developed countries.

Table 8: Relative Tariff Ratio (RTR) Index in ASEAN 4 by type of commodity

	Relative Tariff Ratio Index							
	Indonesia		Malaysia		Philippines		Thailand	
	CEPT	MFN	CEPT	MFN	CEPT	MFN	CEPT	MFN
Agricultural Commodities								
Indonesia			0.93	1.01	0.56	0.64	0.23	0.35
Malaysia	1.08	0.99			0.1	0.41	0.07	0.34
Philippines	1.78	1.56	10.52	2.44			3.29	1.04
Thailand	4.39	2.86	15.19	2.97	0.3	0.96		
Australia		0.02		0.34		0.15		0.04
China		3.63		6.13		0.87		1.13
Japan		0.26		0.69		1.07		0.22
Korea		0.69		1.14		2.26		1.99
US		0.27		2.01		0.26		0.24
Industrial Commodities								
Indonesia			1.6	0.44	0.33	0.49	1.51	0.68
Malaysia	0.63	2.28			0.33	1.43	0.96	1.51
Philippines	3.05	2.06	3.02	0.7			2.6	0.9
Thailand	0.66	1.47	1.04	0.66	0.38	1.11		
Australia		0.91		0.24		0.55		0.58
China		0.89		0.42		0.51		0.6
Japan		2.8		0.59		1.75		1
Korea		0.65		0.18		0.39		0.32
US		0.38		0.1		0.29		0.23
All Commodities								
Indonesia			1.52	0.47	0.35	0.48	1.07	0.62
Malaysia	0.66	2.14			0.29	1.16	0.73	1.34
Philippines	2.89	2.10	3.50	0.86			3.11	1.09
Thailand	0.93	1.61	1.37	0.75	0.32	0.92		
Australia		0.53		0.30		0.54		0.35
China		1.10		0.59		0.57		0.71
Japan		2.90		0.89		2.52		1.41
Korea		0.77		0.23		0.62		0.77
US		0.38		0.14		0.28		0.24

Source: Author's Calculation. WITS

Note: The figures should be read as follows: Example: Column under Indonesia – for every one percentage point protection that Malaysia faces in Indonesia, Indonesia faces 1.08 point in Malaysia.

4. Effect of AFTA on Trade

This section will first review the literature on PTAs' effect on trade flows. Most of these types of studies use gravity models to empirically assess the importance of trade agreements on bilateral exports. Fortunately, some of these studies applied the gravity equation to test the effectiveness of AFTA. The section next tackles intra- and extra-ASEAN trade in agriculture, and closes with a brief discussion of non-tariff measures.

What past studies say?

Academics have always worried about trade diversion effects of preferential trading arrangements that, in some cases, can fully offset the positive benefits from trade creation. Various empirical work using gravity models have, until recently, however, found net trade creation from most PTAs. This means that the adverse impact on non-members of the PTA (trade diversion) is more than offset by the benefits created to members (trade creation). In fact, in AFTA, studies even found no necessarily negative effect on countries outside the bloc, or if ever there is, trade diversion is small relative to trade creation¹⁴.

Table 9 shows that various past estimates of trade diversion (normally the estimate of Dummy2 coefficient)¹⁵, show that, unlike other PTAs like NAFTA that yield negative coefficients, AFTA shows positive ones. These results suggest that AFTA had not discriminated against imports from outside the ASEAN bloc and is, therefore, considered a building bloc, not a stumbling bloc, to multilateral trade.

¹⁴ Past studies also support the hypothesis of a natural trading bloc within East Asia, which includes ASEAN plus China, Japan, and Korea. Simulation studies show that should ASEAN plus Three (APT) integration takes place, Australia would find itself on the losing side, thus its intent on being included in a possible East Asian trading bloc.

¹⁵ The gravity model is the key econometric technique used to examine the determinants of bilateral trade flows. In brief, trade between two countries is positively related to their size and inversely related to the distance between them. A number of other explanatory variables are added to this model. Critical for trade creation and trade diversion tests are the PTA-specific dummy variables. The first dummy variable takes the value of one when the two countries are members of the same PTA. The second dummy variable is one if either country in a particular pair belongs to the PTA. A positive coefficient on the first dummy variable indicates that the PTA enhances intra-bloc trade and hence is trade creating. A negative and significant coefficient for the second dummy variable suggests that the PTA leads to trade diversion. The sum of the two coefficients indicate whether there is a net trade creation or net trade diversion, or whether the PTA is a building bloc or a stumbling bloc. See Adams, et. Al. (2003) for an incisive explanation of the gravity models as used in the trade literature.

Table 9. Past estimates of trade creation and diversion effects of ASEAN-FTA

Author	Year	Static Estimates			2nd wave ^a
		Dummy 1 (trade creation)	Dummy 2 (trade diversion)	Dummy 3	
Frankel (1997)	1970–92	1.318***	0.767***		BB
Fink and Primo Braga (1999)	1989	2.476***			
Krueger (1999a)	1986–96	0.78*	0.16*		BB
Li (2000)	1970–92	1.311***	0.653***		BB
Clark and Tavares (2000)	1995	1.673*	0.489*		BB
Gilbert, Scollay and Bora (2001)	1984–98 (merch)	0.65***	0.54***		BB
	1984–98 (manf)	0.63***	0.54***		BB
	1984–98 (agric)	0.32***	0.45***		BB
	1997 (services)	1.08***	1.01***		BB
Soloaga and Winters (2001)	1986–88	0.18	0.15	0.70***	BB
	1989–94	0.09	0.30**	0.67***	BB
	1995-96	-1.06***	0.82***	0.99***	BB

^a Denotes whether a PTA is building block (BB) or stumbling block (SB) — the second wave issue — based on ‘net trade effects’ of a PTA, that is, the sum of intra-bloc and extra-bloc effects.

*** denotes the significance at the 1% level; ** denotes the significance at the 5% level; and * denotes the significance at 10% level.

Sources:

Frankel, Stein and Wei (1995), Frankel (1997), Krueger (1999a), Li (2000), Clark and Tavares (2000), Gilbert, Scollay and Bora (2001), Soloaga and Winters (2001). As cited in Adams, R., et.al., 2003.

Soloaga and Winter (2001) used a third dummy variable to indicate export diversion. That is, while dummy2 is one for imports from extra-bloc country (country *i* is in the PTA), dummy3 is one for exports from extra-bloc country (country *j* is in the PTA).

Part of the reasons why AFTA had shown little trade diversion could be that when AFTA was launched in 1993, ASEAN countries had already embarked on major unilateral nondiscriminatory trade liberalization. As a result, the difference of import barriers against ASEAN and non-ASEAN products is low as shown in the average margin of preference (Table 10) for intra-ASEAN imports. Except for Thailand, the average margin of preference are in the single digit for all countries; Thailand and the Philippines have relatively high MFN-CEPT difference for agriculture, while Thailand and Malaysia have high margin of preference for industrial products.

Table 10. Margin of Preference by type of commodities (in %)

	Margin of Preference* (in %)
Agricultural Commodities	
Brunei	0
Indonesia	1.53
Malaysia	1.99
Philippines	6.71
Singapore	0
Thailand	26.05
Industrial Commodities	
Brunei	3
Indonesia	3.8
Malaysia	7.08
Philippines	4.68
Singapore	0
Thailand	11.6
All Commodities	
Brunei	1
Indonesia	2.1
Malaysia	4.35
Philippines	5.68
Singapore	0
Thailand	14.2

Source: Author's Calculation. ASEAN Secretariat

*The average difference between MFN and CEPT rate

Note: For Malaysia and Thailand, 2003 MFN rates were used

Another possible reason is that ASEAN countries, as a whole, have been the production base of multinational companies, with vertically integrated operations within the region, for products that were ultimately destined for outside the region, specially the United States and Japan. Hence, trade volumes with non-ASEAN were little affected after AFTA. If at all, it even facilitated trade outside the region by lowering transaction costs of trade in industrial inputs within ASEAN and by making the vertical integration of MNCs more seamless.

Most of the gravity model results above, however, use total trade in the equation and not particularly agriculture trade. Of these, only Gilbert, Scollay and Bora (2001) disaggregated the AFTA effect on agriculture, manufacturing and services trade. Interestingly, their empirical work reveals that while there is net positive effect on both agriculture and manufactures trade, the impact on agriculture declined after 1992 and is of more lose statistical significance. Hence, the authors conclude that ASEAN had only been successful in promoting manufactures trade, but not trade in agriculture. Moreover, within ASEAN, net benefits had not been uniform across countries. Higher income ASEAN countries, especially Singapore and Malaysia, took the greatest gain in trade

diverted towards the region and supplied the bulk of increased inter-regional demand in manufactures.

More recent results from gravity equations, however, are showing a different conclusion. Adams and others (2003) employed a dynamic gravity model on panel data and found that, unlike many previous studies, trade diversion outweighs trade creation in most PTAs, including those that were initially found to be building blocs like AFTA (see Table 11).¹⁶ With this result, they underscore the fact that many PTAs have not truly been liberalizing because of the many provisions, like rules of origin, that were needed to underpin and enforce the preferential agreement, and that were, in truth trade restricting. These non-tariff measures are discussed later in this section.

Table 11. New evidence on PTAs as causing net trade creation or diversion

<i>Past estimates</i>			<i>New estimates</i>	
Net trade creation	nonconclusive	Net trade diversion	Net trade creation	trade diversion
Andean	LAIA	NAFTA	Andean	AFTA
CER	MERCOSUR		LAFTA/LAI/	EFTA
AFTA			US-Israel	EC/EU
EEC/EU?			SPARTEC/MERCOSUR	
EFTA?				NAFTA
				CER
				EU-Switzerland
				Chile-Colombia
				Australia-PNG
				Chile-MERCOSUR
				EU-Egypt
				EU-Poland

Source: Adams, R., et al., 2003. Trade and Investment effects of preferential trading arrangements, Productivity Commission Working paper, Canberra, Australia. May.

Growth in intra-ASEAN trade

While gravity models remain the better test for determining the effect of AFTA on trade in general, and on agriculture trade in particular, an analytical evaluation of trade data can supplement the models' results. This subsection attempts to make an analytical presentation of how AFTA affected inter-regional trade.

¹⁶ Adams, et al. employed different gravity model specification that address product differentiation and possible selectivity bias from exclusion of partners with zero trade. They also made use of so-called dynamic dummies, and estimated a Tobit model with fixed effects to account for unobserved heterogeneity. Previous empirical results did not used fixed effect models which, according to Adams and others, leads to an omitted variable bias. Indeed, they found that the fixed effects model removed the upward bias in the estimate of net trade effect of PTAs.

One of the main issues to overcome is the problem of attribution. Was the growth in intra-regional trade, for instance, due to the trade agreement or to other factors? At best, the answer can only be indicative. In Table 12, for instance, in those products in which tariffs had been completely eliminated, ASEAN country imports from ASEAN had increased. The tariff elimination may not be the only factor that can explain such growth nor can we be sure that these imports have taken advantage of the PTA considering the burden of satisfying rules of origin requirements, but such information gives us reason to pause and reflect about the potential role of PTAs.

Table 12. Intra-ASEAN Imports of Selected Countries (In thousand US dollars)

	# of Tariff Lines w/ CEPT=0 (HS 6-digit)	Imports from ASEAN	
		2003	1999
Philippines	72	180,027	136481*
Thailand	43	20,323	16,019
Malaysia	539	1,188,935	629,868
Indonesia	223	497,258	878,654

Source: ASEAN Secretariat and UNCTAD PC-TAS

* Year 2000 figures were used

Another caveat in analyzing trade data is that a large portion of products that cross country borders come from illegal trade that, necessarily, does not get reflected in the official trade figures. Their importance is evident in the fact that, often trade flows do not exhibit significant change after tariffs have been lowered because many of them have already managed to come inside the country tariff-free anyway. In addition, tariffs are not the only way by which countries protect their domestic markets. There is a whole gamut of non-tariff measures that can obviate whatever liberalization that tariff reduction aimed to accomplish. Thus, perhaps a more apt indicator of liberalization would be the difference in border and home prices, i.e. liberalization's effect is shown in decrease in the price difference, but data limitation precludes this paper from undertaking analysis through this method.

We turn next to the analysis of intra-regional trade in agriculture.

i. Growth in intra-ASEAN trade due to industry trade

A descriptive analysis of trade creation and trade diversion can be gleaned from analyzing shares of intra-ASEAN and extra-ASEAN trade to total. From Table 13, total intra-ASEAN trade share to total regional trade (ASEAN6 to ASEAN10) had indeed increased by more than ten percentage points. But, judging from the share of intra-ASEAN agriculture trade to total, most of this increase had come, not from increased agriculture trade, but from industry trade. Intra-ASEAN agriculture trade share to total

ASEAN trade increased from 1.44 percent in 1995 to 1.9 in 2003, roughly 0.5 percentage point increase, even as total intra-ASEAN trade share had increased from 21.41 percent in 1995 to 31.74 percent in 2003, or by about ten percentage points.

Table 13. Direction of ASEAN 6 Trade: 1995, 2000, 2003

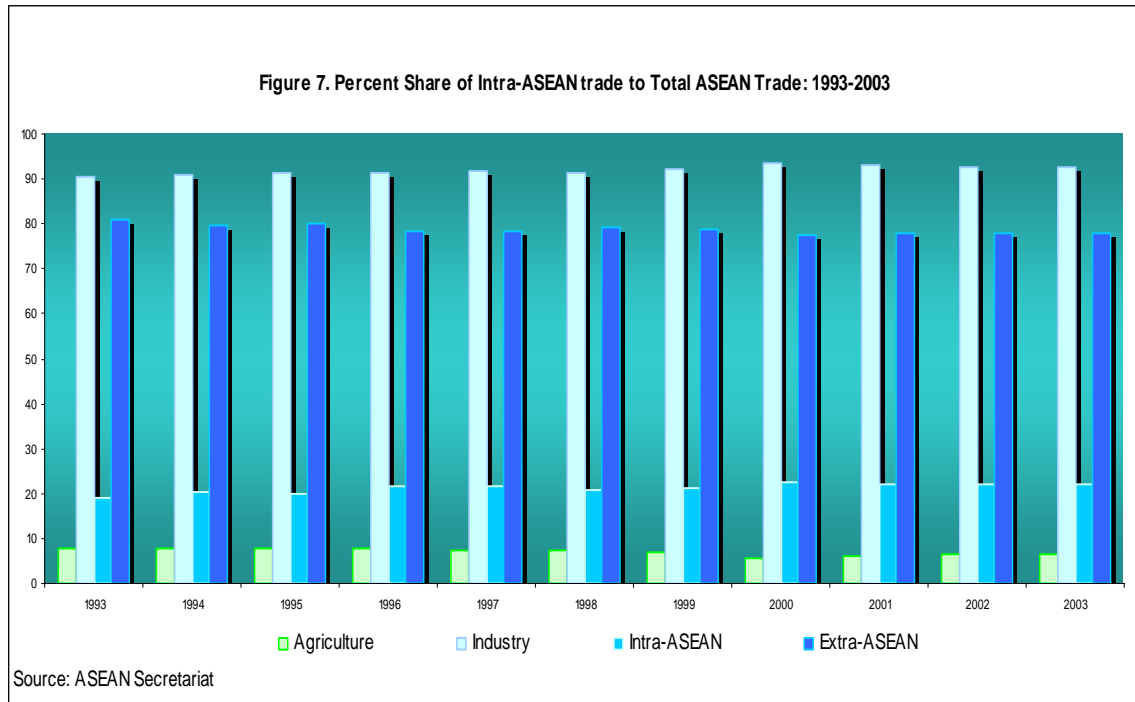
	Imports			Exports			Percentage Share to Total Trade		
	1995	2000	2003	1995	2000	2003	1995	2000	2003
A. ASEAN 6 Trade (in million US \$)									
ASEAN 6	53,244	72,511	75,393	69,518	87,634	88,476	20.23	29.25	29.61
ASEAN 10	54,900	75,237	79,140	74,994	94,047	96,504	21.41	30.92	31.74
Non-ASEAN	258,058	174,113	164,086	218,810	204,112	213,718	78.59	69.08	68.26
B. ASEAN 6 Agricultural Trade (in million US \$)									
ASEAN 6	2,997	2,792	4,097	4,021	3,909	5,101	1.16	1.22	1.66
ASEAN 10	3,536	3,292	4,523	5,224	4,767	6,003	1.44	1.47	1.9
Non-ASEAN	11,237	7,481	7,242	18,147	6,970	10,334	4.84	2.64	3.18

Source: UNCTAD PC-TAS

Total trade among ASEAN6 as a share to total averaged 21 percent from 1993-2003 as compared to 79 percent for non-ASEAN6¹⁷. Figure 7 shows the share of agriculture and industry to total trade, as well as the share of intra- and extra-ASEAN trade. It indicates that much of ASEAN trade, more than 90 percent is in industry, and only about ten percent in agriculture. In fact, the average growth of agriculture share to total trade from 1993-2003 is -2 percent while growth of industry share averaged 0.22 percent. While this indicates that little much had changed as far as the importance of industry to total trade is concerned, it implies that the importance of agriculture to ASEAN trade had dissipated even more.

Average growth of intra-ASEAN trade share to total is roughly 1.5 percent from 1993-2003 while growth of extra-ASEAN share averaged -0.35 percent. This, possibly, indicates a little trade diversion effect of AFTA but is relatively small compared to the growth effect on intra-ASEAN trade. Of the growth of intra-ASEAN trade, much of that is again accounted for by industry trade rather than agriculture.

¹⁷ Based on computation of ASEAN6 to ASEAN6 trade from ASEAN Statistical Yearbook 2004



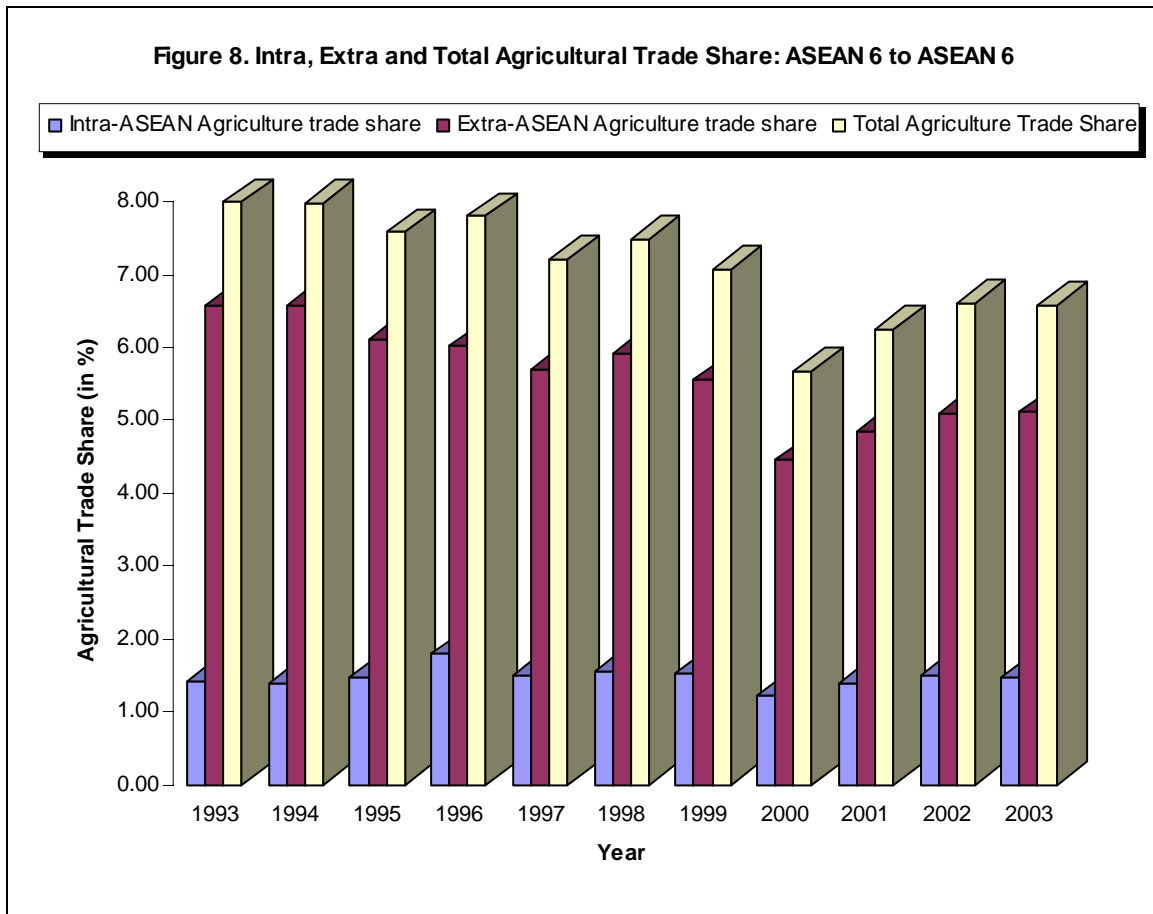
That most of the growth of intra-ASEAN trade came from trade in industry is, to a certain extent, not surprising. First, as mentioned above, the ASEAN countries produce agriculture products that are broadly similar, i.e., mostly tropical products and, hence, provide relatively little room for trade with one another. Second, the AFTA itself was originally conceived, not to foster trade in agriculture but to facilitate the already burgeoning intra-industry trade in manufacturing that arose from the vertically-linked operations of transnational corporations in ASEAN. The extension of AFTA to agriculture goods came almost as an afterthought. Being notified in the WTO under the Enabling Clause, rather than under GATT Chapter XXIV, ASEAN was not under any obligation to satisfy the “substantially all trade” requirement, and could, therefore, initially exclude the entire agriculture sector. It was only later that agriculture liberalization was appended in the agreement. Consequently, agriculture tariff reduction had been one of those carried out in more recent years, unlike some industrial goods which had been opened up almost from day one of the FTA.

ii. Growth in total agriculture trade due to extra-ASEAN trade

Figure 8 shows that total agriculture trade share to total ASEAN trade¹⁸ had been on the decline since 1993, and that this trend started to reverse starting 2000. From 2000 to 2003, total share of agriculture trade increased by almost one percentage point from 5.7 in 2000 to 6.6 percent in 2003. Much of this increase, however, came from extra-

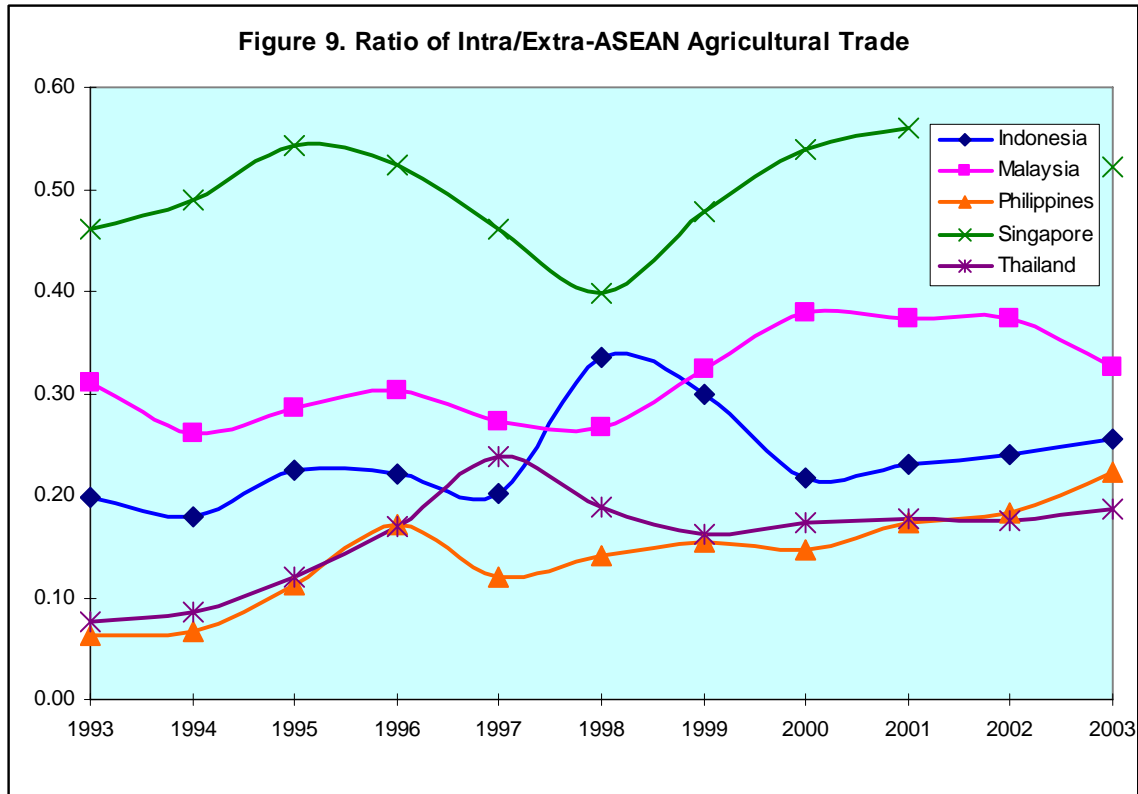
¹⁸ Figures are from ASEAN6 to ASEAN6.

ASEAN agriculture trade which increased its share to total trade by 0.6 percentage point from 4.5 in 2000 to 5.1 percent in 2003, while intra-ASEAN agriculture export share to total increased by merely 0.3 percentage point (from 1.2 in 2000 to 1.5 percent in 2003). This implies that ASEAN, as a group does not trade a lot in agriculture products among one another, presumably because they produce similar agriculture goods. Rather, as in industrial goods, their agriculture trade tends to be mostly with countries outside ASEAN.

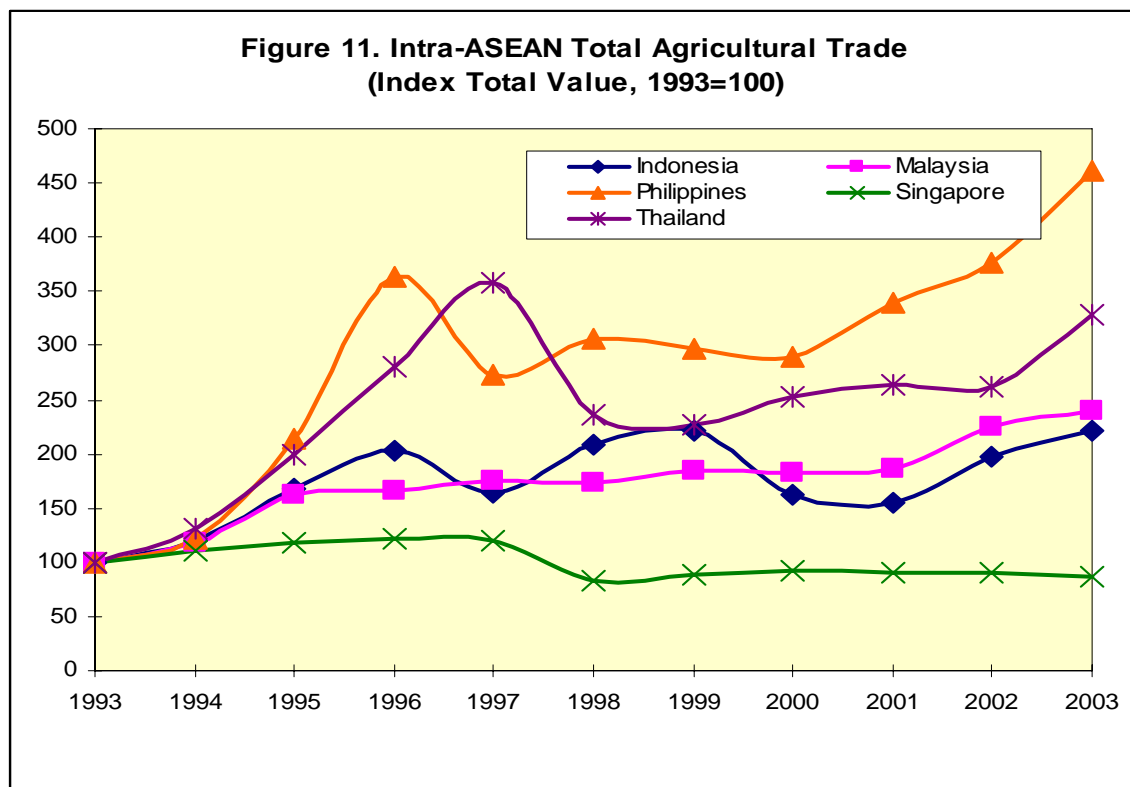
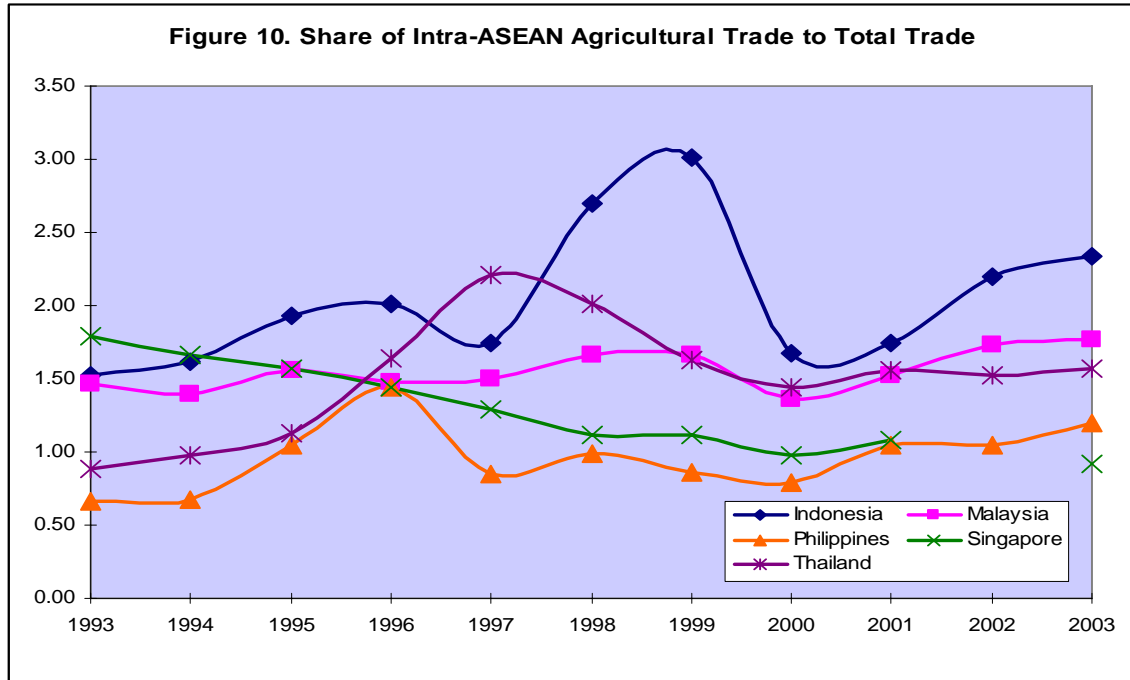


iii. Individual country differences

The apparent sluggish growth of intra-ASEAN agriculture trade of ASEAN6, however, masks individual country performance. While intra-ASEAN share of agriculture trade to total has not been very significant, its ratio to extra-ASEAN trade has actually grown, specially if observed at the individual country level. For example, Figure 9 shows intra-/extra-ASEAN agriculture trade ratio trending upward, but change has been more pronounced for the Philippines and Thailand. In 1995, these two countries' ratio of intra-/extra-ASEAN trade were 0.11 and 0.12, respectively, while in 2003, intra-ASEAN trade relatively expanded to ratios of 0.22 and 0.19.



Similarly, intra-ASEAN agriculture share to total trade shows varied growth across ASEAN6, but the Philippines, Indonesia, Malaysia, and Thailand (ASEAN4) seem to have reaped greater gains compared to Singapore. In terms of growth of values of agriculture intra-ASEAN trade, ASEAN4 trade increased by more than double since 1992 (see Figures 10 and Figure 11).



In summary, although there are individual country differences in agriculture trade performance, the analysis above confirms the results of many gravity trade models that AFTA is not trade diverting, particularly for agriculture as trade in intra-ASEAN agriculture products grew only marginally from 1.44 percent share to total trade in 1995

to 1.9 percent in 2003 (Table 13) and that most of the growth in agriculture trade is due to extra-ASEAN trade.¹⁹ It also adds evidence to the Gilbert, Scollay, Bora (2001) result that manufacturing benefited much more from AFTA than agriculture. However, recent dynamic gravity models have found that AFTA is among the PTAs that are stumbling blocs, i.e. the trade diversion exceeds trade creation. This underscores the non-liberalizing nature of PTAs due to stringent rules of origin and persisting non-tariff measures that are not sufficiently addressed in the agreement. The issue of non-tariff measures is discussed next.

Non-tariff Measures

The pace of the removal of the tariff protection structure as shown in Section 3 stands in stark contrast with an apparently sluggish progress in intra-ASEAN trade in agriculture. One wonders whether the reason is only because ASEAN products are competing with each other and that there is not much scope for intra-(product) trade, that is, two countries exporting and importing rice, for example, or whether the problem lies not in tariffs but in other non-tariff measures. Table 14 gives an indication that this is highly plausible. Of the many non-tariff measures in ASEAN, a good number of them are applied on agricultural products, particularly technical measures or health and safety standards requirements. At least 70 percent of tariff lines in which technical measures are applied belong to agriculture. It even seems that the more developed ASEAN countries like Singapore and Malaysia impose more of it in agriculture than other countries.

Another major non-tariff measure that particularly affects agriculture trade are quantity control and licensing/monopolistic measures. While ASEAN has done away with import quotas, import licensing for some products are only given either to a government monopoly, as in the case of rice imports of the Philippines, or to registered importers.

¹⁹ A referee rightly notes that, based on previous discussions, this conclusion is true primarily because less (slower) liberalization has, so far, been achieved in the agriculture sector.

Table 14. Non-tariff measures in ASEAN

	Number of Tariff Line (1)	Number of Agricultura (2)	% (2)/(1)
Brunei (2004)			
Price Control Measure	34	18	52.9
Automatic Licensing Measure	3	3	100
Quantity Control Measure	205	118	57.6
Monopolistic Measures	4	4	100
Technical Measures	49	44	89.8
Indonesia (2003)			
Price Control Measure	35	1	2.9
Quantity Control Measure	259	81	31.3
Monopolistic Measures	62	25	40.3
Technical Measures	486	411	84.6
Malaysia (2003)			
Price Control Measure	8	0	0
Finance Licensing	2	0	0
Automatic Licensing Measure	16	1	6.3
Quantity Control Measure	412	138	33.5
Monopolistic Measures	6	6	100
Technical Measures	215	167	77.7
Philippines (2001)			
Price Control Measure	18	0	0
Automatic Licensing Measure	26	18	69.2
Quantity Control Measure	264	168	63.6
Technical Measures	339	284	83.8
Singapore (2001)			
Price Control Measure	16	0	0
Automatic Licensing Measure	24	18	75.0
Quantity Control Measure	212	97	45.8
Monopolistic Measures	1	1	100
Technical Measures	264	182	68.9
Thailand (2003)			
Price Control Measure	13	0	0
Finance Licensing	1	0	0
Quantity Control Measure	127	66	52.0
Technical Measures	600	449	74.8

Source: WITS.

Further corroborating this result, Adams, and others (2003) tried to develop a Members Liberalization Index (MLI) for different PTAs all over the world to assess how, in reality, these preferential arrangements, after taking many non-tariff measures and rules of origin requirements into account, have made economies more free. In essence, the higher is their measure of the MLI, the more liberalizing the PTA is supposed to be²⁰. Table 15 shows a portion of the index construction by Adams, et.al (2003), where AFTA got a total measure of only 0.035 out of a “perfect” point of 0.10 for agriculture. It is ranked 16th out of 18 PTAs considered in the study. It ranked slightly better at 14th place for industry, and 11th out of 18 PTAs for overall trade (Table 16). Admittedly, the index construction entails some amount of subjective judgment but the low ranking for

²⁰ The actual computation of the MLI, taken from Adams, et.al. (2003), is shown in the Appendix.

agriculture, nevertheless, is telling of lack of actual liberalization in agriculture within the region. This can, perhaps, partly explain why intra-ASEAN agricultural trade did not significantly increase at close to the same pace as industry did.

Table 16. Ranking of Preferential Trading Arrangements

	All trade	Agriculture	Industry
Singapore-NZ	1	1	1
EU	2	6	2
ANZCERTA	3	2	4
Chile-MERCOSUR	4	4	3
Chile-Mexico	5	3	6
NAFTA	6	11	10
EU-Poland	7	7	13
ANDEAN	8	5	5
MERCOSUR	9	8	7
Chile-Columbia	10	13	9
ASEAN-FTA	11	16	14
EFTA	12	9	8
PATCRA	13	10	12
Israel-US	14	17	15
EU-Switz	15	18	11
EU-Egypt	16	14	17
SPARTECA	17	12	16
LAIA	18	15	18

Source: Adams, 2003

Note: Rank 1 means PTA provisions contain very liberalizing elements

5. Summary and Conclusions

The paper showed that, in the case of AFTA, the preferential agreement helped accelerate the bringing down of tariff barriers against other ASEAN countries. The average and median CEPT tariffs have gone down significantly compared to the MFN levels. The tariff distribution analysis shows that tariffs of a large chunk of agriculture products, and indeed of all commodities, have been capped within zero to five percent, while in the MFN, a large portion of tariffs still lie between five and 20 percent. Major ASEAN export interests are neither prevented entry into each other's domestic markets by high tariffs, except for products like rice, sugar or coffee.

The analysis of relative tariff ratio index reveals ASEAN agriculture tariff protection is relatively high with respect to those of developed countries, except China and Korea. Developed countries, except Japan, are, likewise, relatively more open when it comes to industrial exports. However, they may have very low tariff barriers in agriculture, but various non-tariff measures, not captured in the above tariff analysis, work to the disadvantage of developing countries like those from Southeast Asia. Even among ASEAN, itself, much of the non-tariff measures, particularly health and safety standards, import licensing and quota measures, are applied more especially on agriculture products which, perhaps, partly explain the relatively low growth of intra-ASEAN agriculture trade over total inter-regional trade. Still, the paper highlights the individual country performance in improving trade with other ASEAN.

Our discussion of specific PTAs' treatment of agriculture also shows that while agriculture products remain sensitive and are given special treatments like prolonged timetable for liberalization, the fact that PTAs manage to include many sensitive products in the schedule of liberalization should be considered an advance over multilateral negotiations. It is understandable that some countries, for political reasons, would have greater difficulty opening up certain agricultural sector. But the flexibility afforded them in preferential trading agreements make for a less painful transition process. At the same time, the fact that these countries commit the liberalization of even difficult sectors is a major improvement over the multilateral negotiations. What is now needed are time and patience to see to it that those commitments are observed and not eventually withdrawn through policy reversals.

In the final analysis, the answer to the question of whether PTAs are stumbling or building blocs to multilateral liberalization depends much on the design of the trade agreements, the sector inclusiveness, timetable, and flexibilities that are agreed upon. In the case of AFTA, the answer remains it being a building bloc as far as total trade is concerned. But whether AFTA is also a building bloc when it comes to agriculture trade, an affirmative answer, so far, may be less enthusiastic. Considering that many tariffs in agriculture were lowered later than other goods, a few more years may be needed to see its real effect on agriculture trade within the region.

Table 15. Trade in Agriculture Liberalisation Index

Provisions	EU	EFTA	ANDEAN	EU-Switz	PATCRA	EU-Egypt	LAIA	SPARTEC	ANZCERTA	Israel-US	ASEAN-FTA	MERCOSUF	Chile-Colombia	NAFTA	EU-Poland	Chile-MERCOSUF	Chile-Mexico	Singapore-NZ
Measures covering trade in agriculture																		
Technical barriers to trade	0.0021	0.0006	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0030	0.0000	0.0003	0.0000	0.0021	0.0012	0.0021	0.0021	0.0000	0.0021
Export incentives	0.0000	0.0060	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0060	0.0000	0.0000	0.0000	0.0000	0.0030	0.0000	0.0030	0.0060	0.0060
Safeguards	0.0010	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0020	0.0000	0.0020
Safeguards – time limit	0.0020	0.0015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0005	0.0000	0.0000	0.0005	0.0000	0.0005	0.0000	0.0020	0.0010	0.0020
Safeguards – type of measure	0.0020	0.0000	0.0000	0.0000	0.0015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0015	0.0015	0.0000	0.0015	0.0000	0.0020	0.0015	0.0020
Antidumping and countervailing	0.0000	0.0000	0.0030	0.0000	0.0030	0.0000	0.0000	0.0000	0.0030	0.0000	0.0000	0.0030	0.0000	0.0030	0.0000	0.0045	0.0000	0.0045
Years remaining in tariff reductions	0.0040	0.0040	0.0040	0.0000	0.0040	0.0040	0.0000	0.0040	0.0040	0.0040	0.0000	0.0040	0.0040	0.0004	0.0028	0.0004	0.0040	0.0040
Tariff quotas	0.0153	0.0153	0.0153	0.0000	0.0153	0.0153	0.0153	0.0153	0.0153	0.0043	0.0000	0.0153	0.0153	0.0085	0.0153	0.0153	0.0153	0.0153
Domestic support	0.0000	0.0162	0.0162	0.0162	0.0162	0.0162	0.0162	0.0162	0.0162	0.0162	0.0162	0.0162	0.0162	0.0162	0.0000	0.0162	0.0162	0.0162
Tariff exceptions	0.0100	0.0000	0.0100	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0100	0.0000	0.0000	0.0000	0.0100	0.0050	0.0050	0.0100
Number of different types of ROO	0.0020	0.0000	0.0010	0.0005	0.0000	0.0005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0010	0.0010	0.0010	0.0000	0.0010	0.0005	0.0000
Coverage of ROO	0.0030	0.0000	0.0030	0.0030	0.0030	0.0000	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0000	0.0030	0.0030	0.0000	0.0030
Restrictiveness of ROO	0.0100	0.0020	0.0020	0.0010	0.0020	0.0020	0.0010	0.0060	0.0020	0.0050	0.0040	0.0020	0.0020	0.0020	0.0000	0.0000	0.0020	0.0040
SPS measures	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0150	0.0000	0.0000	0.0000	0.0000	0.0075	0.0150	0.0000	0.0150	0.0038
TOTAL	0.0514	0.0456	0.0545	0.0207	0.0450	0.0380	0.0355	0.0445	0.0680	0.0325	0.0350	0.0465	0.0436	0.0448	0.0482	0.0565	0.0665	0.0749
RANK	6	9	5	18	10	14	15	12	2	17	16	8	13	11	7	4	3	1

Source: Adams, R., et al., 2003. Trade and Investment effects of preferential trading arrangements, Productivity Commission Working paper, Canberra, Australia. May.

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Appendices

Appendix Table 1. FTAs in East and Southeast Asia

In Force	In Negotiation	Under Study
A. Southeast Asia		
AFTA (1993)	ASEAN-Korea	ASEAN-Japan
ASEAN - China (2003)	ASEAN-India	ASEAN-EU
Singapore-NZ (2001)	Japan-Philippines	ASEAN-US
Singapore-Japan (2002)	Japan-Malaysia	ASEAN-CER
Singapore-EFTA(2002)	Japan-Thailand	Singapore-EU
Singapore-Australia (2003)	Japan-Indonesia	Singapore-Bahrain
Singapore-US (2004)	Singapore-Kuwait	Singapore-Egypt
Singapore-S. Korea (2005/6)	Singapore-Panama	Singapore-Iran
Singapore-India (2005/6)	Singapore-South Africa	Thailand-Pakistan
Singapore-Chile-NZ-Brunei (2005/6)	Singapore-Pakistan	Thailand-Peru
Singapore-Jordan (2005/6)	Singapore-Qatar	Thailand-Chile
Thailand-Australia (2005)	Singapore-Canada	Philippines-US
Thailand-NZ (2005)	Singapore-Mexico	Philippines-Australia
	Thailand-US	
	Thailand-EFTA	
	Thailand-India	
	Malaysia-Australia	
	Malaysia-NZ	
	Malaysia-Pakistan	
B. East Asia		
China-Hong Kong (2004)	China-Malaysia	China-India
China-Macau (2004)	China-Australia	China-Singapore
China-Macau (2004)	China-New Zealand	
Japan- Mexico (2005)	Japan-Korea	Japan-Australia
		Japan-Chile
		Japan-Canada
		Japan-Taiwan
Korea-Chile (2004)	Korea-Japan	Korea-New Zealand
Korea-Singapore (signed, 2005 Apr)	Korea-Mexico	Korea-China
Korea-EFTA (signed, 2005 July)	Korea-USA	Korea-Thailand
		Korea-India
		Korea-Canada
		Korea-EU
		Korea-Brazil
		Korea-Mercosur
		Korea-Australia
		Korea-China-Japan

Appendix Table 2. Highlights of FTAs in Select Southeast Asian Countries

Name	Approach to Liberalization	Anti-Dumping	Countervailing Duties	Safeguards	Technical Standards
SOUTHEAST ASIA					
ASEAN Free Trade Area (AFTA)	<ul style="list-style-type: none"> • Positive List: Common Effective Preferential Tariff (CEPT) Inclusion List • Tariff reduction (to 0-5% level) implemented in ASEAN-6, under way in new ASEAN members • Further negotiation needed to include High Sensitive Products List under the agreement 	n.a.	n.a.	n.a. (but there is an exclusions list)	Creates the ASEAN Consultative Committee for Standards and Quality
ASEAN - China Free Trade Area (ACFTA)	<ul style="list-style-type: none"> • Positive list • Tariff elimination by 2010 for ASEAN-6 and China; 2015 for New ASEAN members • Three tracks of tariff reduction: Early Harvest Program (EHP), both for negative and positive list); and Normal Track and Sensitive Track, only for positive list • Calls for negotiations for further accelerating liberalization 	Follow WTO principles	Follow WTO principles	Follow WTO, allowed within 5 years of liberalization for up to 3 years (plus one-year extension)	n.a.
Singapore - Australia Free Trade Agreement (SAFTA)	<ul style="list-style-type: none"> • Negative list • Tariff elimination by entry in effect of the agreement. 	Within WTO rules. Detailed process to initiate measures.	Within WTO rules.	Not allowed	Based on the previous Mutual Recognition Agreement on Conformity Assessment and calls for harmonization within APEC, WTO guidelines.

Name	Approach to Liberalization	Anti-Dumping	Countervailing Duties	Safeguards	Technical Standards
Singapore - EFTA Free Trade Agreement	<ul style="list-style-type: none"> Positive list of products covered, but with exceptions The FTA covers only those products falling within Ch. 25 through 97 of HS Coding System; fish/other marine products; and processed agricultural goods Tariff elimination by signing of the agreement 	Not allowed, should be solved through consultation.	n.a.	For one year only, extendable to 3 years.	Subject to WTO Agreement on SPS
Singapore - India Comprehensive Economic Cooperation Agreement	<ul style="list-style-type: none"> Positive list into India, all goods free into Singapore Full tariff elimination or reduction by 2010 Further liberalization through negotiation 	Allowed	following WTO	Allowed	Cooperation towards mutual recognition
Agreement between Singapore - Japan for a New-Age Economic Partnership (JSEPA)	<ul style="list-style-type: none"> Positive list Full tariff elimination Foresees inclusion of more goods in the list 	n.a.	Following the WTO Agreement on Safeguards	Following the WTO Agreement on Safeguards	Calls for mutual recognition, and sets out the standards to register new conformity assessment bodies in the Sectoral Annexes
Singapore - Jordan Free Trade Agreement	<ul style="list-style-type: none"> Positive List Tariff elimination in 10 years. Possible acceleration through negotiation 	WTO plus	According to WTO commitments	According to WTO plus some specifications on the process	n.a.
Agreement between Singapore and New Zealand on a Closer Economic Partnership (ANZSCEP)	<ul style="list-style-type: none"> Tariff elimination by the signing of the agreement 	WTO rules, with more strict requirements	Not allowed.	Not Allowed	Mutual and unilateral recognition and harmonization of standards

Name	Approach to Liberalization	Anti-Dumping	Countervailing Duties	Safeguards	Technical Standards
Singapore - United States Free Trade Agreement (USSFTA)	<ul style="list-style-type: none"> • Positive list and schedule • Tariff elimination in 10 years at the most (depending on the staging category) • New products/services can be included through negotiation 	Allowed under domestic law principles	Allowed under domestic law principles.	Allowed, linked to WTO Agreement on Safeguards requirements.	Enhance cooperation in standards, certification and conformity assessments
Thailand - Australia Free Trade Agreement (TAFTA)	<ul style="list-style-type: none"> • Positive list and schedule • Tariff elimination by 2010 • Calls for consultations in order to accelerate the schedule 	WTO Agreement on Implementation of WTO Art VI. Time frame: 12 months (6 for seasonal prods)	Accepted, following WTO principles.	Accepted, for up to two years. Special provisions for agricultural products.	SPS: comply with WTO obligations, work towards harmonization and setting up a Experts Group. TBT: same.
Thailand - India Framework Agreement for establishing a FTA	<ul style="list-style-type: none"> • There is an early harvest scheme with products to be liberalized in 2004. 	n.a.	n.a.	n.a.	n.a.
Thailand-Laos Preferential Agreement	<ul style="list-style-type: none"> • n.a. 	n.a.	n.a.	n.a.	n.a.
Thailand - New Zealand Closer Economic Partnership Agreement	<ul style="list-style-type: none"> • Positive List • Upon entry into force, New Zealand will eliminate duties on 5,878 Thai products while Thailand will do the same for 2,978 export items • New Zealand will scrap duties on another 697 items by 2010, and on 858 products on the sensitive list including textiles, clothing and shoes by 2015. 	Following WTO commitments	Following WTO commitments	Specific requirements for bilateral safeguards	Calls for harmonization

Name	Approach to Liberalization	Anti-Dumping	Countervailing Duties	Safeguards	Technical Standards
Trans-Pacific Strategic Economic Partnership Agreement (Brunei, Singapore, New Zealand and Chile)	<ul style="list-style-type: none"> Tariff elimination by 2014 Tariff elimination acceleration is encouraged 	Following WTO	Following WTO	Following WTO	Calls for cooperation
China - Hong Kong SAR Closer Economic Partnership Arrangement (CEPA)	<ul style="list-style-type: none"> Positive List Tariff elimination by 2005 Every year, new products can be included in the no-tariff list (every October 1st) 	Parties commit to not applying them on each other's goods	Parties commit to not applying them on each other's goods	n.a.	n.a.
China - Macao, SAR Closer Economic Partnership Arrangement (CEPA)	<ul style="list-style-type: none"> Positive list, can be reviewed annually Tariff elimination by 2006 	n.a.	n.a.	n.a.	n.a.
Japan - Mexico Economic Partnership Agreement	<ul style="list-style-type: none"> Positive List Tariff elimination in 5 or 7 years (particularly for tariff-quotas) Accelerated elimination possible through consultation 	WTO commitments	WTO commitments	Allowed, maximum 3 years	Cooperation for harmonization

Name	Approach to Liberalization	Anti-Dumping	Countervailing Duties	Safeguards	Technical Standards
Korea - Chile Free Trade Agreement	<ul style="list-style-type: none"> • Positive List • Tariff elimination in 0, 5, or 10 years according to schedule (some exceptions up to 13 years) • Accelerated tariff elimination through consultation 	Subject to GATT Art VI	Subject to GATT Art VI	Subject to GATT Art XIX	WTO plus
SOUTHEAST ASIA (Under Negotiation)					
Malaysia – Japan Economic Partnership Agreement	<ul style="list-style-type: none"> • Positive list • Tariff elimination schedule varies for every product group, maximum 10 years • There is an Early Harvest Schedule 	n.a.	n.a.	n.a.	n.a.
Philippines – Japan Economic Partnership Agreement	<ul style="list-style-type: none"> • Positive list • Tariff reduction within 10 years of implementation 	n.a.	n.a.	n.a.	Mutual recognition

Source: RTA-BTA Database, UN ESCAP Trade and Investment Division Trade Policy Section

Appendix Table 3. Member's Liberalization Index

<i>Weight</i>	<i>Score</i>	<i>Category</i>
Measures covering trade in agriculture		
0.003		Technical barriers to trade
	0.00	No provisions
	0.10	Initiatives to promote the harmonisation of standards
	0.20	Provisions that require notification to a committee, review and/or examination
	0.40	National treatment of standards
	0.70	Voluntary recognition of test results
	1.00	Harmonisation of standards
0.006		Export incentives
	0.00	No provisions
	0.50	Provisions to review and exam
	1.00	Provisions that prohibit export incentives
0.002		Safeguards
	0.00	Safeguard provisions
	0.50	No provisions
	1.00	Safeguard provisions are prohibited
0.002		Safeguards conditions - time limit
	0.00	Safeguard provisions specify no time limit for the measure
	0.25	Safeguard provisions that permit safeguards to be in place for two years or more
	0.50	Safeguard provisions that permit safeguards to be in place for one year
	0.75	Safeguard provisions that permit safeguards to be in place for less than one year
	1.00	No safeguard provisions
0.002		Safeguards conditions - type of measure
	0.00	Safeguard provisions permit any measure to be used
	0.75	Safeguard provisions specify the type of measure - quotas or suspension of preferences
	1.00	No safeguard provisions
0.006		Anti-dumping and countervailing measures
	0.00	No restriction on the use of anti-dumping and countervailing measures
	0.50	Requires consultations with other members before anti-dumping or countervailing measures can be imposed
	0.75	Anti-dumping and countervailing measures can be imposed provided they are consistent with WTO rules
	1.00	Anti-dumping and countervailing measures are prohibited between members
0.004		Years remaining in tariff reduction schedules as at 1 January 2001 for agriculture
	0.00	No provision to reduce tariffs
	0.10	Continuing reductions until 1 January 2008
	0.20	Continuing reductions until 1 January 2007
	0.30	Continuing reductions until 1 January 2006
	0.40	Continuing reductions until 1 January 2005
	0.50	Continuing reductions until 1 January 2004
	0.60	Continuing reductions until 1 January 2003
	0.70	Continuing reductions until 1 January 2002
	0.80	Continuing reductions until 1 January 2002
	1.00	Provisions that abolished tariffs on commencement or tariffs have been eliminated

Source: Adams, R., et al., 2003. *Trade and Investment effects of preferential trading arrangements*, Productivity Commission Working paper, Canberra, Australia. May.

Appendix Table 3a. Construction of Member Liberalization Index (MLI)

<i>Weight</i>	<i>Score</i>	<i>Category</i>
Measures covering trade in agriculture		
0.017		Tariff quotas
	0.00	No provision to liberalise agriculture
	0.25	Agreement does not permit the expansion of tariff quotas
	0.50	Agreement allows for the expansion of some tariff quotas
	0.75	Agreement allows for the expansion of all tariff quotas
	0.25	Subtract this score if preferences are received by only one party
	0.90	No provisions relating to tariff quotas
	1.00	Tariff quotas are prohibited
0.018		Domestic support
	0.00	Agreement allows for the use of WTO "blue box" measures between members
	0.10	Agreement allows for the use of WTO "amber box" measures between members
	0.30	Agreement allows for the use of WTO "green box" measures between members
	0.90	No provision relating to domestic support
	1.00	Domestic support is prohibited
0.010		Tariff exceptions for those PTAs with tariff reduction schedules as at 1 January 2001
	0.00	Exception list for agriculture
	0.50	Variable tariff rates for agriculture
	1.00	No exceptions list for agriculture
0.002		Number of different types of rules of origin available
	0.00	One rule is available
	0.25	Two rules are available
	0.50	Three rules are available
	0.75	Four rules are available
	1.00	No rules of origin
0.003		Coverage of rules of origin for agriculture
	0.00	The rules of origin are applied differently for different agricultural products
	1.00	The rules of origin are applied to all agricultural products
0.01		Restrictiveness of the rules of origin
	0.00	60 per cent value added component or the equivalent change in tariff heading, substantial transformation or specific process
	0.10	55 per cent value added component or the equivalent change in tariff heading, substantial transformation or specific process
	0.20	50 per cent value added component or the equivalent change in tariff heading, substantial transformation or specific process
	0.30	45 per cent value added component or the equivalent change in tariff heading, substantial transformation or specific process
	0.40	40 per cent value added component or the equivalent change in tariff heading, substantial transformation or specific process
	0.50	35 per cent value added component or the equivalent change in tariff heading, substantial transformation or specific process
	0.60	30 per cent value added component or the equivalent change in tariff heading, substantial transformation or specific process
	1.00	No rules of origin
0.015		Sanitary and phytosanitary measures
	0.00	No provisions
	0.25	Mutual recognition of SPS measures
	0.50	Provisions require the adoption of international standards, but permit the implementation of more stringent science-based measures
	1.00	Provisions require the adoption of international standards
0.100		Total weight for measures on trade in agriculture

Source: Adams, R., et al., 2003. *Trade and Investment effects of preferential trading arrangements*, Productivity Commission Working paper, Canberra, Australia. May.

Appendix Table 4. Annexes – China-ASEAN

The Early Harvest Programme shall be implemented no later than 1 January 2004 as follows:

i.) China and ASEAN 6:

Product Category	Not later than Jan. 1, 2004	Not later than Jan. 1, 2005	Not later than Jan. 1, 2006
1 ^a	10%	5%	0%
2 ^b	5%	0%	0%
3 ^c	0%	0%	0%

- a. For China and ASEAN 6, this refers to all products with applied MFN tariff rates higher than 15%. For newer ASEAN Member States, this refers to all products with applied MFN tariff rates of 30% or higher.
- b. For China and ASEAN 6, this refers to all products with applied MFN tariff rates between 5% (inclusive) and 15% (inclusive). For the newer ASEAN Member States, this refers to all products with applied MFN tariff rates between 15% (inclusive) and 30% (exclusive)
- c. For China and ASEAN 6, this refers to all products with applied MFN tariff rates lower than 5%. For the newer ASEAN Member States, this refers to all products with applied MFN tariff rates lower than 15%

ii.) the newer ASEAN Member States:

Product Category 1

Country	Not later than 1 Jan 2004	Not later than 1 Jan 2005	Not later than 1 Jan 2006	Not later than 1 Jan 2007	Not later than 1 Jan 2008	Not later than 1 Jan 2009	Not later than 1 Jan 2010
Vietnam	20%	15%	10%	5%	0%	0%	0%
Lao PDR and Myanmar	-	-	20%	14%	8%	0%	0%
Cambodia	-	-	20%	15%	10%	5%	0%

Product Category 2

Country	Not later than 1 Jan 2004	Not later than 1 Jan 2005	Not later than 1 Jan 2006	Not later than 1 Jan 2007	Not later than 1 Jan 2008	Not later than 1 Jan 2009	Not later than 1 Jan 2010
Vietnam	10%	10%	5%	5%	0%	0%	0%
Lao PDR and Myanmar	-	-	10%	10%	5%	0%	0%
Cambodia	-	-	10%	10%	5%	5%	0%

Product Category 3

Country	Not later than 1 Jan 2004	Not later than 1 Jan 2005	Not later than 1 Jan 2006	Not later than 1 Jan 2007	Not later than 1 Jan 2008	Not later than 1 Jan 2009	Not later than 1 Jan 2010
Vietnam	5%	5%	0-5%	0-5%	0%	0%	0%
Lao PDR and Myanmar	-	-	5%	5%	0-5%	0%	0%
Cambodia	-	-	5%	5%	0-5%	0-5%	0%

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