

Chapter 2

Constructing the Tariff Dataset for the ERIA FTA Database

Arata Kuno

Faculty of Social Science, Kyorin University, Japan.

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CHAPTER 2

Constructing the Tariff Dataset for the ERIA FTA Database¹

ARATA KUNO

Faculty of Social Sciences, Kyorin University, Japan.

This chapter provides technical notes on the preferential tariff dataset in the ERIA FTA Database and briefly shows sample analyses that can be conducted with the dataset. The current version of our dataset consists of variables including, among others, status of preferential tariff elimination, MFN tariff rates, and a set of dummy variables indicating product category, and it is utilizable for empirical and policy studies in which preferential tariff data on East Asian countries are required. By utilizing the dataset, we investigate the level of liberalization by FTA, by country, and by sector (HS 2-digits chapter) and identified some commonly liberalized or protected products among the ASEAN countries.

¹ We would like to extend a special note of appreciation to the ASEAN Secretariat (ASEC) and the Ministry of Economy, Trade, and Industry (METI) of Japan, for their contribution in providing relevant data and technical advice.

1. Introduction

The preferential tariff is undoubtedly one of the most traditional and essential measures under any free trade agreements (FTAs), and its theoretical and policy implications, including its impacts on trade, have been studied for a long time. However, despite its importance, few empirical studies have attempted to investigate the impacts of FTAs by using a *product-level* preferential tariff dataset, mainly due to data availability and/or data inconsistency of product classification among FTAs and countries.²

This chapter provides technical notes on a newly constructed preferential tariff dataset in the *ERIA FTA Database* and briefly shows sample analyses that can be conducted with the dataset.³ To our knowledge, this is the first and the most consistent and comprehensive preferential tariff dataset for this region, with which one can easily analyze the level of liberalization and the tariff structure of a country under the relevant FTAs. The current version of our product-level tariff dataset covers 12 FTAs with 70 country-level tariff schedules, namely, five “ASEAN+n” FTAs and Japan’s seven bilateral FTAs. By utilizing the dataset, we calculated the “level of liberalization index” by FTA, by country, and by sector (HS 2-digits chapter) and identified some commonly liberalized or protected products among the ASEAN countries. It is expected that publicizing this database *per se* contributes to enhance the transparency of tariff structure in the region and to make policy discussion more accurate and future FTA negotiations more efficient. We also believe that the database will serve as an important

² Medvedev (2010) tries to investigate the effects of FTAs on bilateral trade using a product-level preferential tariff dataset.

³

“public good” for economists and policy analysts who need tariff dataset for their econometric and policy analysis on FTAs.

This chapter is organized as follows: Section 2 discusses issues related to the compilation of preferential tariff data in this region. It is followed by the specification of our dataset as well as some results of simple comparative analyses on the degree of tariff elimination by FTA/country/industry. Section 3 presents some policy implications.

2. Data Specification

2.1. Original tariff data

Before presenting the specification of our preferential tariff dataset, we briefly review some characteristics and heterogeneity observed in the original tariff data across FTAs.

The current version of our dataset covers 70 signatory-level tariff schedules bound under the five ASEAN+n FTAs, namely, the ASEAN-Japan Comprehensive Economic Partnership (AJCEP), the ASEAN-Korea FTA (AKFTA), the ASEAN-China FTA (ACFTA), the ASEAN-Australia-New Zealand FTA (AANZFTA), and the ASEAN-India FTA (AIFTA). The number of FTAs covered in this study and the number of tariff schedules stipulated under the relevant FTAs are not identical. This is because there are as many tariff schedules as there are signatories under each FTA. For example, for the AJCEP, tariff schedules of 11 signatories (Japan and the ten ASEAN member countries) are stipulated under the agreement.

The original data on 70 signatory-level tariff schedules, originally published by each national authority and provided through the ASEAN Secretariat (ASEC) in electronic formats, have some inconsistency among themselves for the following

reasons. First, while some files contain time-series data on preferential tariff rates applied during the “transitional period”, others only contain categorical information indicating the status of tariff elimination (e.g., Normal Track, Sensitive List, Highly Sensitive List). Second, while some files contain data on MFN applied tariff rates (Base Rate), others do not. Third, original tariff schedules are not necessarily consistent among FTAs and countries, in terms of version of the Harmonized Commodity Description and Coding System (HS) of tariff nomenclature (HS2002 or HS2007) as well as level of HS code digit employed in the tariff schedules. Finally, the type of electronic file provided (MS-Excel, MS-Word, or PDF), the shape of table within the files, and the language are different.

2.2. Data compilation

Given the data inconsistency mentioned in the previous subsection, reshaping and converting the original data into a unique format in a systematic and comparable way is essential in developing a tariff dataset and conducting comparative studies on tariff structure in the region. In doing so, we wrote a data management program (STATA do-files) for each tariff schedule, in order to secure full traceability and reproducibility of the data transformation, and we generated 70 csv-files and STATA dta-files that contain common variables described below, and are consistent amongst each other *except for* HS versions.

Any tariff dataset usable for future empirical studies should be converted into a single classification, that is, either HS2002 or HS2007 version, so that the tariff data can easily be merged with trade data. However, depending on the years of negotiation or conclusion of the FTAs, countries employ different versions of tariff classification

(HS2002 or HS2007). This means a spreadsheet containing a country's tariff schedule in an FTA cannot share the same row (tariff lines) with that of the country's other FTAs or that of other countries' FTAs, unless we take a further step to convert the tariff schedules into a unique HS version. Although the United Nations Statistics Division publishes a correspondence table between HS2002 and HS2007 versions, it only provides correspondence for the HS 6 digits level classifications, which are internationally standardized.⁴ Each national authority, who autonomously defines and revises the most detailed tariff classification for HS 8-10 digits, does not usually publish any correspondence tables. As this concordance exercise at the HS 8-10 digits level has to be done by the human eye, which is sometimes discretionary, we did not compile the tariff schedules into a single file at this stage of the project.

2.3. Data specification

Our product-level preferential tariff dataset contains the following variables.

rta: categorical variable indicating the names of FTAs.

country: categorical variable indicating the names of signatories.

hs07org: original HS classification number (HS2007 version) corresponding to the most disaggregated tariff lines. (*hs02org* in case the tariff schedule follows HS2002 version.)

hssec: categorical variable indicating the HS section the product belongs to.

hs07dg2: categorical variable indicating the HS chapter (2 digits) the product belongs to.

⁴ Available at <http://unstats.un.org/unsd/cr/registry/regot.asp>. (accessed March 15, 2010).

hs07dg4: categorical variable indicating the HS heading (4 digits) the product belongs to. (*hs02dg4* in case the tariff schedule follows HS2002 version.)

hs07dg6: categorical variable indicating the HS subheading (6 digits) the product belongs to. (*hs02dg6* in case the tariff schedule follows HS2002 version.)

agri: dummy variable taking unity when the product belongs to the agricultural sector (HS2-24).

mfn: Most-Favored-Nation (MFN) applied tariff rate (or Base Rate) for each tariff line applied by the country.

mfnyear: year for the MFN applied tariff rate data. The years differ across FTAs depending on the year of negotiation/conclusion of the FTAs.

zeromfn: dummy variable taking unity if $mfn=0$.

zerorta: dummy variable taking unity if the final preferential tariff rate for the tariff line is zero vis-à-vis FTA members.

free: dummy variable taking unity if either $zeromfn=1$ or $zerorta=1$.

zerobyрта: dummy variable taking unity if $zeromfn=0$ and $zerorta=1$.

Our data management program is designed to automatically generate a summary table for (i) conventional FTA liberalization index⁵ (share of $free=1$ tariff lines), (ii) share of $zeromfn=1$ tariff lines, (iii) share of $zerobyрта=1$ tariff lines for each tariff schedule. It also generates lists of sensitive product groups (HS heading), in which all

⁵ In other words, the numerator of this index is the union of tariff lines subject to duty free MFN applied tariff and tariff lines subject to preferential tariff elimination committed by a country under a particular FTA, whereas the denominator is a total number of tariff lines.

the tariff lines included are non-zero (protected) in the tariff schedule of a country under an FTA.

3. Sample analyses using the tariff dataset

Even though our dataset only covers the 12 FTAs at this stage, and tariff schedules with HS2002 classification have to be converted into HS2007 classification before we use the dataset for rigorous empirical studies, we can still utilize the current version of our dataset for various policy studies.

First, with our dataset, one can calculate the conventional liberalization index by FTA and by country, and investigate how levels of liberalization differ across countries (See Table 1). The most liberalized ASEAN+n FTA in the region is the AANZFTA (94.6% after the transitional period). This is followed by the ACFTA (92.0%), AKFTA (91.6%), AJCEP (89.2%), and AIFTA (76.5%). It is therefore a key to realize further liberalization among India and ASEAN countries in forming a clean FTA among ASEAN+6 countries. The average level of liberalization by country indicates that, when compared with CLMV countries, the ASEAN 6 countries except for Indonesia achieved much higher level of liberalization (more than 90%) under the ASEAN+n FTA.

Table 1: Level of Liberalization by country under the ASEAN+n FTAs

	ASEAN-Korea	ASEAN-China	ASEAN-ANZ	ASEAN-India	ASEAN-Japan	Average
SGP	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
BRN	97.8%	97.9%	98.5%	82.6%	96.4%	94.6%
MLS	93.5%	93.7%	95.5%	79.6%	92.1%	90.9%
THA	93.7%	88.3%	98.8%	74.3%	96.9%	90.4%
IDN	90.3%	89.0%	93.4%	50.4%	88.7%	82.3%
PHI	97.9%	86.5%	94.8%	75.8%	96.0%	90.2%
VTN	84.3%	na	90.9%	69.7%	84.7%	82.4%
CAM	85.5%	86.7%	86.2%	84.1%	76.0%	83.7%
LAO	85.4%	96.4%	90.7%	77.5%	84.2%	86.8%
MYA	87.5%	86.9%	86.1%	73.6%	79.4%	82.7%
KOR	92.2%					
CHN		94.6%				
AUS			100.0%			
NZ			100.0%			
IND				74.3%		
JPN					86.3%	
Average	91.6%	92.0%	94.6%	76.5%	89.2%	

Source: author's calculation.

Note: Data on Myanmar under the ASEAN-China FTA is missing for HS01-HS08.

The relatively lower average level of liberalization of Indonesia (82.3%) is heavily influenced by its level of liberalization under the AIFTA (50.4%).

If we focus on the liberalization effort made by ASEAN's partners under the ASEAN+n FTAs, the highest level of liberalization vis-à-vis ASEAN countries has been achieved by Australia and New Zealand (100%), followed by China (94.6%), Korea (92.2%), Japan (86.3%), and India (74.3%).

Second, one can easily transform the conventional liberalization into more aggregated classification such as HS 2-digit or HS 4-digit. It should be mentioned that commonly liberalized product groups achieved by partner countries vis-à-vis ASEAN10 include, among others, some textile products (HS56, 58, 60), some base metals (HS71, 72, 75, and 78-82) including iron and steel, clocks and watches (HS91) and musical instruments (HS92) (See Table 2). Partner countries except for India further and

commonly eliminate their tariffs on some other textile products (HS53, 57, 59), cement (HS68), iron and steel products (HS73), aluminum products (HS76), optical, technical, medical apparatus (HS90), and toys, games, and sport requisites (HS95). Tariffs on machinery, electrical and electronic products (HS84-85) and automobile products (HS87) are also to be fully eliminated by Japan, Australia, and New Zealand. On the other hand, commonly liberalized product groups achieved by ASEAN6 countries vis-à-vis partners (except for India) include vegetable products (HS14), cereal products (HS19), furskins, cork, and plaiting material (HS43, 45-46), some textile products (HS51, 53), some base metal (HS75, 77-80), and musical instruments (HS92) (See Table 3). It should also be pointed out that among the so-called ASEAN sensitive sectors, liberalization index of tobacco (HS24) and beverages and spirits (HS20) are the lowest among the ASEAN countries, whereas vegetable products (HS14), live animals (HS1), products of animal origins (HS5), cocoa (HS18), articles of apparel (not knit or crochet) (HS62) are relatively and commonly liberalized by them vis-à-vis partners.⁶

Third, the duty-free tariff lines, vis-à-vis an FTA member country, can easily be decomposed into “tariff lines already liberalized under the MFN regime” and “tariff lines newly liberalized under the FTA” (See Figure 1). This decomposition exercise is particularly useful in identifying true liberalization efforts made by a particular country during an FTA negotiation, as well as how truly preferential a country’s commitment is against member countries. We can even further extend this decomposition by sector (Figure 2), by HS chapter (Figure 3), or even by HS heading, depending on the purpose of analysis.

⁶ For more comprehensive results, see Table A-1 to A-5 in the Annex.

Table 2: Level of Liberalization achieved by Partners vis-à-vis ASEAN10

HS	CHN	KOR	AUS	NZ	IND	JPN	HS	CHN	KOR	AUS	NZ	IND	JPN
1	100.0%	96.4%	100.0%	100.0%	85.3%	84.6%	50	100.0%	100.0%	100.0%	100.0%	100.0%	73.2%
2	100.0%	46.3%	100.0%	100.0%	91.8%	42.5%	51	84.7%	62.1%	100.0%	100.0%	66.5%	100.0%
3	100.0%	65.8%	100.0%	100.0%	59.9%	40.9%	52	96.9%	82.4%	100.0%	100.0%	27.9%	100.0%
4	100.0%	15.7%	100.0%	100.0%	25.0%	9.7%	53	100.0%	100.0%	100.0%	100.0%	92.5%	100.0%
5	100.0%	94.1%	100.0%	100.0%	100.0%	100.0%	54	95.5%	96.4%	100.0%	100.0%	70.0%	100.0%
6	100.0%	82.9%	100.0%	100.0%	62.5%	100.0%	55	95.4%	100.0%	100.0%	100.0%	43.0%	100.0%
7	100.0%	60.9%	100.0%	100.0%	54.3%	81.8%	56	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
8	100.0%	38.0%	100.0%	100.0%	50.0%	81.8%	57	100.0%	100.0%	100.0%	100.0%	95.8%	100.0%
9	87.5%	86.5%	100.0%	100.0%	14.8%	91.7%	58	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
10	46.4%	69.2%	100.0%	100.0%	32.4%	68.9%	59	100.0%	100.0%	100.0%	100.0%	86.8%	100.0%
11	72.2%	18.2%	100.0%	100.0%	2.9%	28.0%	60	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
12	100.0%	78.8%	100.0%	100.0%	73.2%	82.4%	61	100.0%	95.0%	100.0%	100.0%	65.3%	100.0%
13	100.0%	77.8%	100.0%	100.0%	100.0%	90.5%	62	100.0%	90.5%	100.0%	100.0%	64.3%	100.0%
14	100.0%	85.7%	100.0%	100.0%	87.5%	100.0%	63	100.0%	100.0%	100.0%	100.0%	71.0%	100.0%
15	79.6%	85.7%	100.0%	100.0%	32.5%	57.0%	64	100.0%	100.0%	100.0%	100.0%	4.2%	37.2%
16	100.0%	59.3%	100.0%	100.0%	64.7%	25.0%	65	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
17	66.7%	72.7%	100.0%	100.0%	81.6%	28.0%	66	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
18	100.0%	90.3%	100.0%	100.0%	29.6%	23.3%	67	100.0%	100.0%	100.0%	100.0%	86.7%	100.0%
19	100.0%	70.2%	100.0%	100.0%	85.7%	0.7%	68	100.0%	100.0%	100.0%	100.0%	97.8%	100.0%
20	94.9%	60.6%	100.0%	100.0%	48.6%	51.6%	69	100.0%	91.9%	100.0%	100.0%	89.7%	100.0%
21	100.0%	76.1%	100.0%	100.0%	37.5%	34.0%	70	100.0%	98.6%	100.0%	100.0%	84.0%	100.0%
22	100.0%	69.2%	100.0%	100.0%	23.1%	52.7%	71	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
23	100.0%	87.0%	100.0%	100.0%	19.7%	95.2%	72	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
24	0.0%	100.0%	100.0%	100.0%	0.0%	54.5%	73	100.0%	100.0%	100.0%	100.0%	94.2%	100.0%
25	100.0%	97.2%	100.0%	100.0%	94.3%	98.7%	74	100.0%	98.9%	100.0%	100.0%	80.0%	100.0%
26	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	75	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
27	92.4%	91.0%	100.0%	100.0%	55.4%	100.0%	76	100.0%	100.0%	100.0%	100.0%	92.7%	100.0%
28	99.2%	98.6%	100.0%	100.0%	96.6%	100.0%	78	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
29	99.1%	96.3%	100.0%	100.0%	75.3%	99.3%	79	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
30	100.0%	100.0%	100.0%	100.0%	34.1%	100.0%	80	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
31	89.7%	94.7%	100.0%	100.0%	37.9%	100.0%	81	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
32	100.0%	100.0%	100.0%	100.0%	94.7%	100.0%	82	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
33	100.0%	95.6%	100.0%	100.0%	60.0%	100.0%	83	94.7%	100.0%	100.0%	100.0%	95.2%	100.0%
34	100.0%	94.3%	100.0%	100.0%	72.9%	100.0%	84	99.5%	99.3%	100.0%	100.0%	92.5%	100.0%
35	100.0%	82.8%	100.0%	100.0%	71.1%	77.3%	85	95.6%	99.2%	100.0%	100.0%	86.3%	100.0%
36	100.0%	100.0%	100.0%	100.0%	92.0%	100.0%	86	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
37	70.1%	97.7%	100.0%	100.0%	98.1%	100.0%	87	73.0%	90.3%	100.0%	100.0%	38.8%	100.0%
38	100.0%	98.6%	100.0%	100.0%	78.6%	100.0%	88	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
39	97.5%	91.4%	100.0%	100.0%	30.4%	100.0%	89	52.4%	100.0%	100.0%	100.0%	100.0%	100.0%
40	95.5%	98.6%	100.0%	100.0%	52.9%	100.0%	90	100.0%	100.0%	100.0%	100.0%	95.1%	100.0%
41	100.0%	100.0%	100.0%	100.0%	100.0%	69.0%	91	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
42	100.0%	100.0%	100.0%	100.0%	3.2%	87.5%	92	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
43	100.0%	100.0%	100.0%	100.0%	100.0%	33.3%	93	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
44	65.7%	55.2%	100.0%	100.0%	98.8%	78.8%	94	95.0%	98.9%	100.0%	100.0%	94.1%	100.0%
45	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	95	100.0%	100.0%	100.0%	100.0%	83.9%	100.0%
46	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	96	100.0%	100.0%	100.0%	100.0%	97.8%	100.0%
47	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	97	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
48	6.0%	100.0%	100.0%	100.0%	91.7%	100.0%							
49	58.3%	100.0%	100.0%	100.0%	79.4%	100.0%							

Source: author's calculation.

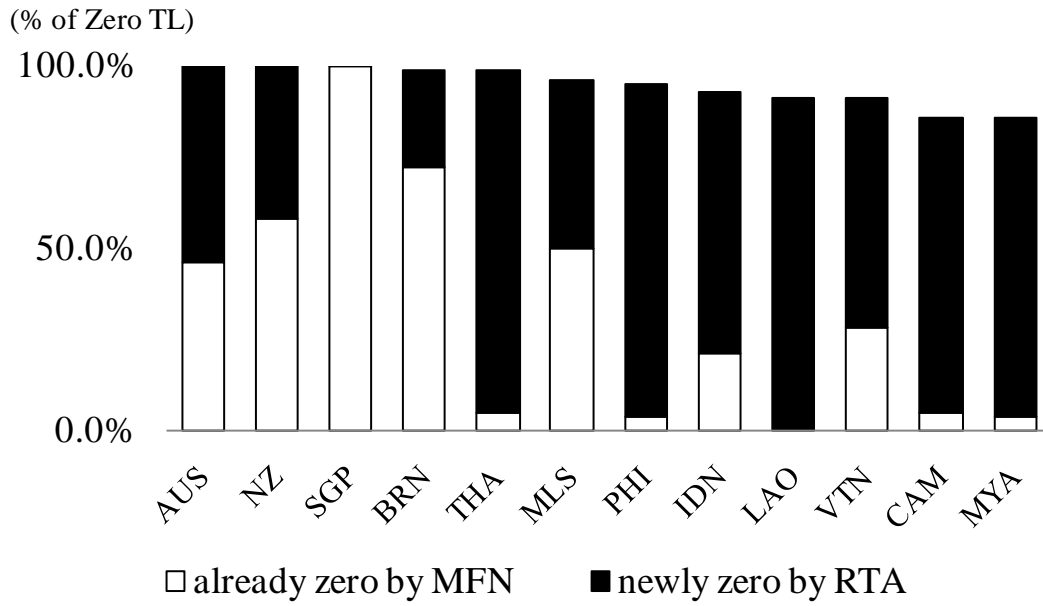
Table 3: Average Level of Liberalization Achieved by ASEAN6 vis-à-vis Partners

HS	ACFTA	AKFTA	AANZFTA	AIFTA	AJCEP	HS	ACFTA	AKFTA	AANZFTA	AIFTA	AJCEP	HS	ACFTA	AKFTA	AANZFTA	AIFTA	AJCEP
1	97.4%	95.4%	96.9%	82.7%	90.4%	33	93.3%	98.7%	98.5%	73.3%	88.4%	65	100.0%	97.4%	98.9%	67.9%	94.4%
2	91.5%	87.1%	89.3%	71.5%	84.7%	34	99.4%	98.9%	95.6%	70.1%	97.3%	66	100.0%	100.0%	97.1%	76.2%	92.6%
3	100.0%	98.3%	98.8%	78.6%	97.3%	35	98.3%	100.0%	100.0%	79.8%	92.1%	67	100.0%	87.5%	100.0%	79.2%	90.7%
4	98.4%	96.2%	90.9%	63.5%	88.0%	36	95.8%	95.2%	100.0%	76.2%	87.1%	68	97.1%	97.3%	100.0%	66.8%	96.9%
5	100.0%	98.9%	99.4%	97.8%	99.5%	37	98.8%	100.0%	100.0%	76.5%	99.3%	69	85.4%	96.9%	100.0%	68.8%	96.3%
6	100.0%	96.8%	90.1%	71.2%	98.6%	38	95.2%	99.5%	100.0%	85.8%	98.4%	70	90.5%	96.8%	96.7%	75.9%	98.9%
7	91.8%	99.3%	92.9%	79.5%	97.7%	39	80.6%	87.8%	90.4%	63.0%	97.1%	71	98.2%	94.7%	98.5%	84.9%	92.6%
8	99.1%	95.9%	92.7%	76.0%	93.1%	40	88.6%	93.1%	99.0%	66.2%	94.2%	72	82.7%	85.5%	78.3%	61.4%	83.6%
9	87.9%	100.0%	83.7%	63.2%	94.3%	41	100.0%	97.7%	100.0%	94.2%	100.0%	73	90.9%	85.8%	91.6%	59.0%	87.3%
10	66.9%	84.2%	61.0%	55.2%	72.0%	42	96.2%	99.0%	95.1%	56.4%	100.0%	74	98.4%	99.5%	99.8%	87.7%	99.0%
11	97.8%	98.7%	97.4%	56.5%	96.2%	43	100.0%	100.0%	100.0%	84.4%	97.5%	75	100.0%	100.0%	100.0%	96.8%	100.0%
12	98.5%	100.0%	98.5%	79.6%	98.5%	44	99.6%	100.0%	100.0%	95.3%	99.9%	76	100.0%	100.0%	100.0%	69.4%	99.4%
13	100.0%	98.2%	100.0%	91.2%	100.0%	45	100.0%	100.0%	100.0%	95.2%	100.0%	78	100.0%	100.0%	100.0%	94.9%	100.0%
14	100.0%	100.0%	100.0%	90.5%	100.0%	46	100.0%	100.0%	100.0%	76.0%	100.0%	79	100.0%	100.0%	100.0%	89.2%	100.0%
15	96.4%	100.0%	97.8%	73.9%	98.0%	47	100.0%	100.0%	100.0%	97.3%	99.3%	80	100.0%	100.0%	100.0%	98.1%	100.0%
16	95.4%	97.5%	95.4%	76.5%	96.5%	48	98.7%	99.9%	100.0%	85.5%	100.0%	81	100.0%	100.0%	100.0%	100.0%	94.7%
17	82.6%	96.0%	81.8%	80.1%	86.2%	49	97.9%	100.0%	100.0%	90.5%	100.0%	82	100.0%	100.0%	100.0%	86.0%	98.5%
18	100.0%	100.0%	98.8%	80.2%	100.0%	50	93.3%	87.0%	97.8%	79.2%	98.5%	83	100.0%	99.7%	100.0%	83.3%	99.1%
19	100.0%	100.0%	100.0%	90.8%	100.0%	51	100.0%	100.0%	100.0%	93.4%	100.0%	84	94.8%	98.5%	99.3%	89.6%	98.5%
20	97.7%	99.5%	100.0%	79.4%	99.1%	52	97.7%	100.0%	100.0%	83.0%	99.8%	85	91.8%	94.1%	99.0%	71.8%	92.8%
21	94.1%	97.4%	93.5%	76.5%	92.2%	53	100.0%	100.0%	100.0%	94.0%	100.0%	86	100.0%	100.0%	100.0%	100.0%	100.0%
22	83.2%	72.4%	50.0%	41.0%	58.2%	54	99.5%	99.8%	100.0%	86.5%	100.0%	87	53.6%	67.9%	92.2%	46.2%	69.9%
23	91.7%	95.4%	97.6%	82.6%	97.7%	55	97.4%	99.2%	100.0%	84.9%	100.0%	88	100.0%	100.0%	100.0%	100.0%	100.0%
24	68.0%	83.3%	43.4%	40.6%	52.3%	56	95.7%	99.6%	99.0%	79.9%	100.0%	89	100.0%	100.0%	100.0%	99.7%	100.0%
25	95.9%	99.2%	98.8%	90.5%	98.4%	57	92.5%	98.3%	95.1%	39.0%	98.1%	90	99.7%	99.9%	100.0%	85.5%	99.3%
26	100.0%	100.0%	100.0%	100.0%	100.0%	58	99.3%	97.7%	100.0%	71.8%	100.0%	91	98.8%	100.0%	100.0%	77.1%	99.4%
27	98.9%	99.1%	95.7%	88.2%	98.1%	59	99.1%	100.0%	100.0%	73.9%	100.0%	92	100.0%	100.0%	100.0%	73.3%	100.0%
28	98.1%	98.0%	99.5%	91.3%	97.3%	60	97.3%	98.5%	100.0%	66.7%	100.0%	93	97.3%	92.6%	80.8%	82.8%	83.6%
29	99.0%	99.6%	100.0%	93.4%	99.5%	61	89.5%	94.6%	95.9%	55.9%	100.0%	94	94.0%	98.5%	99.3%	70.3%	96.0%
30	98.6%	98.8%	99.2%	81.5%	98.5%	62	93.4%	94.9%	96.7%	59.3%	100.0%	95	93.4%	99.1%	100.0%	73.3%	87.4%
31	100.0%	100.0%	100.0%	100.0%	100.0%	63	86.7%	99.6%	97.7%	46.7%	100.0%	96	99.6%	99.6%	99.8%	78.0%	97.1%
32	95.2%	94.3%	100.0%	72.5%	91.2%	64	69.4%	100.0%	94.9%	39.8%	99.6%	97	100.0%	98.6%	100.0%	93.1%	98.6%

Table 4: Average Level of Liberalization Achieved by ASEAN10 vis-à-vis Partners

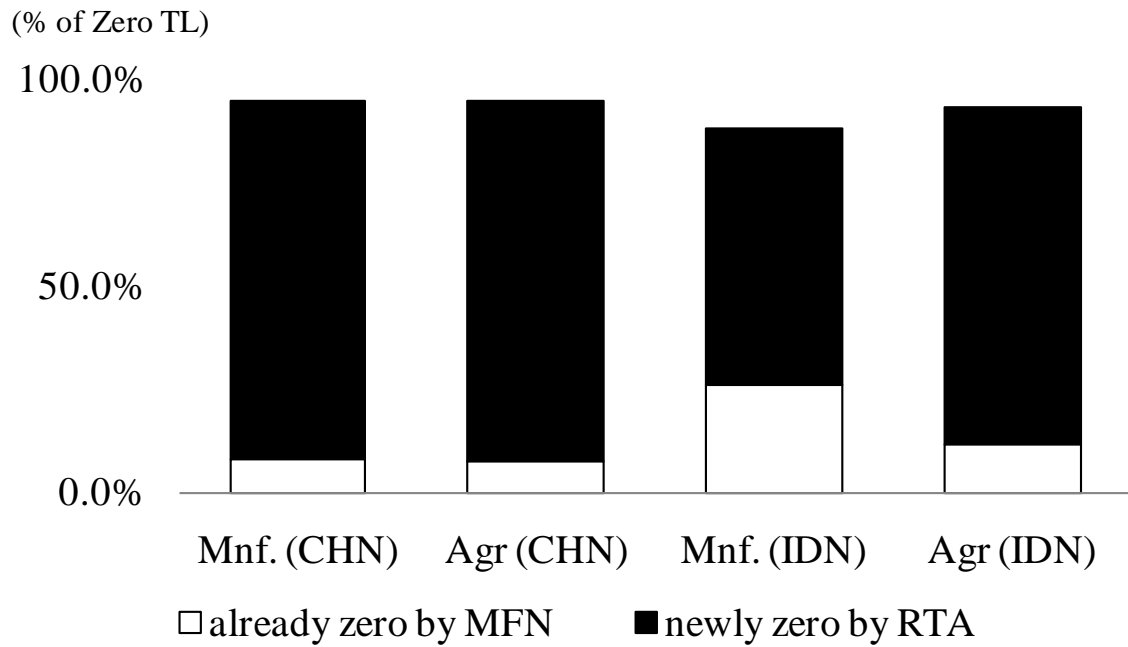
HS	ACFTA	AKFTA	AANZFTA	AIFTA	AJCEP	HS	ACFTA	AKFTA	AANZFTA	AIFTA	AJCEP	HS	ACFTA	AKFTA	AANZFTA	AIFTA	AJCEP
1	94.9%	91.6%	98.3%	79.4%	87.0%	33	91.1%	90.6%	90.4%	62.5%	87.1%	65	100.0%	96.2%	95.1%	72.3%	94.4%
2	86.6%	86.6%	91.2%	70.9%	79.0%	34	94.3%	91.0%	96.1%	65.8%	87.5%	66	95.2%	100.0%	95.2%	78.6%	95.6%
3	99.8%	95.2%	94.1%	80.5%	85.2%	35	96.1%	98.7%	98.9%	77.7%	91.7%	67	100.0%	90.0%	100.0%	76.3%	94.4%
4	97.4%	94.4%	87.5%	73.0%	87.3%	36	97.2%	85.3%	80.6%	62.4%	75.4%	68	95.7%	98.0%	99.6%	77.9%	96.6%
5	99.6%	98.4%	97.2%	93.3%	96.4%	37	98.7%	100.0%	99.4%	84.6%	97.6%	69	86.7%	95.5%	97.1%	71.3%	96.2%
6	100.0%	90.4%	90.6%	73.5%	90.9%	38	96.4%	98.6%	98.4%	87.2%	97.4%	70	91.6%	94.7%	97.8%	78.7%	95.1%
7	87.3%	92.4%	93.3%	75.9%	86.7%	39	79.2%	86.4%	92.3%	69.7%	91.9%	71	98.8%	95.9%	90.5%	76.8%	85.7%
8	93.1%	90.7%	91.1%	73.7%	85.2%	40	91.4%	85.5%	93.2%	69.5%	86.9%	72	87.9%	86.6%	81.0%	64.7%	86.9%
9	89.3%	93.1%	87.1%	63.6%	87.6%	41	100.0%	96.0%	94.6%	82.7%	97.1%	73	91.2%	87.3%	92.6%	65.7%	86.9%
10	63.6%	82.1%	68.9%	64.2%	69.2%	42	93.9%	95.2%	93.7%	64.5%	97.8%	74	98.4%	96.8%	96.1%	87.4%	96.4%
11	98.6%	97.4%	96.1%	71.0%	96.2%	43	99.3%	94.4%	93.8%	78.1%	96.5%	75	100.0%	100.0%	98.8%	98.1%	99.5%
12	97.9%	94.7%	98.1%	76.0%	91.8%	44	91.2%	99.6%	94.7%	83.4%	97.9%	76	97.9%	98.3%	99.0%	76.1%	97.9%
13	98.7%	92.8%	97.7%	83.2%	91.1%	45	100.0%	90.0%	92.1%	97.1%	100.0%	78	100.0%	100.0%	98.0%	94.2%	100.0%
14	100.0%	97.1%	100.0%	84.3%	97.5%	46	99.3%	100.0%	100.0%	75.6%	90.0%	79	98.3%	96.7%	97.2%	91.0%	98.7%
15	96.3%	94.8%	96.6%	77.9%	85.9%	47	100.0%	99.5%	90.5%	98.4%	97.7%	80	100.0%	98.8%	100.0%	88.9%	97.5%
16	89.6%	93.2%	75.4%	64.5%	80.7%	48	96.6%	94.7%	96.0%	82.7%	95.2%	81	100.0%	100.0%	100.0%	99.6%	96.7%
17	84.4%	92.6%	78.9%	79.8%	83.4%	49	96.6%	97.9%	96.8%	88.7%	94.8%	82	98.6%	98.3%	97.2%	83.2%	96.5%
18	93.5%	100.0%	86.8%	81.9%	93.5%	50	92.1%	88.9%	93.8%	83.1%	90.6%	83	97.6%	95.5%	92.9%	75.9%	96.7%
19	94.9%	93.3%	86.1%	82.1%	91.1%	51	100.0%	99.7%	100.0%	95.3%	98.5%	84	94.4%	93.2%	94.3%	84.6%	93.2%
20	87.1%	90.4%	82.8%	75.4%	79.9%	52	97.5%	97.8%	99.6%	82.1%	98.2%	85	92.4%	86.3%	92.2%	71.3%	86.8%
21	88.5%	96.2%	90.6%	71.1%	81.4%	53	99.5%	99.2%	100.0%	94.8%	99.7%	86	100.0%	98.8%	99.1%	96.9%	98.4%
22	69.6%	62.6%	39.4%	38.0%	49.0%	54	98.7%	95.6%	98.8%	87.3%	98.2%	87	56.4%	52.0%	78.2%	41.6%	56.2%
23	92.6%	96.0%	95.0%	82.3%	95.9%	55	97.6%	97.5%	99.5%	86.3%	98.7%	88	100.0%	100.0%	88.9%	89.5%	90.4%
24	70.3%	71.7%	49.4%	37.9%	40.7%	56	95.6%	97.4%	97.3%	83.7%	98.2%	89	100.0%	98.5%	85.9%	83.7%	96.3%
25	96.0%	96.8%	97.7%	90.9%	96.9%	57	93.6%	99.0%	97.3%	57.6%	98.6%	90	99.8%	98.2%	96.7%	87.9%	95.3%
26	99.7%	100.0%	99.5%	97.4%	100.0%	58	96.2%	93.8%	99.0%	76.6%	98.4%	91	99.0%	99.8%	99.8%	76.6%	99.2%
27	95.2%	91.5%	83.4%	80.0%	93.2%	59	98.5%	97.7%	98.0%	80.7%	98.1%	92	100.0%	99.0%	97.8%	73.2%	97.9%
28	98.1%	98.4%	98.5%	92.3%	97.8%	60	97.6%	97.0%	99.2%	75.4%	99.2%	93	98.2%	92.5%	64.1%	60.4%	67.6%
29	99.0%	99.1%	99.9%	92.5%	98.4%	61	91.9%	90.1%	97.2%	70.6%	99.7%	94	90.6%	93.5%	95.3%	71.6%	89.7%
30	99.1%	85.0%	97.5%	75.8%	91.5%	62	94.2%	96.3%	97.6%	71.8%	99.9%	95	94.6%	95.6%	95.8%	74.2%	88.3%
31	100.0%	97.7%	100.0%	96.6%	99.1%	63	89.1%	97.0%	96.8%	61.3%	96.6%	96	97.4%	96.5%	96.3%	73.1%	91.9%
32	93.1%	92.6%	98.3%	71.5%	90.3%	64	76.7%	95.7%	92.4%	58.2%	97.1%	97	100.0%	99.2%	88.9%	87.8%	87.5%

Figure 1: Decomposition of conventional index (AANZFTA)



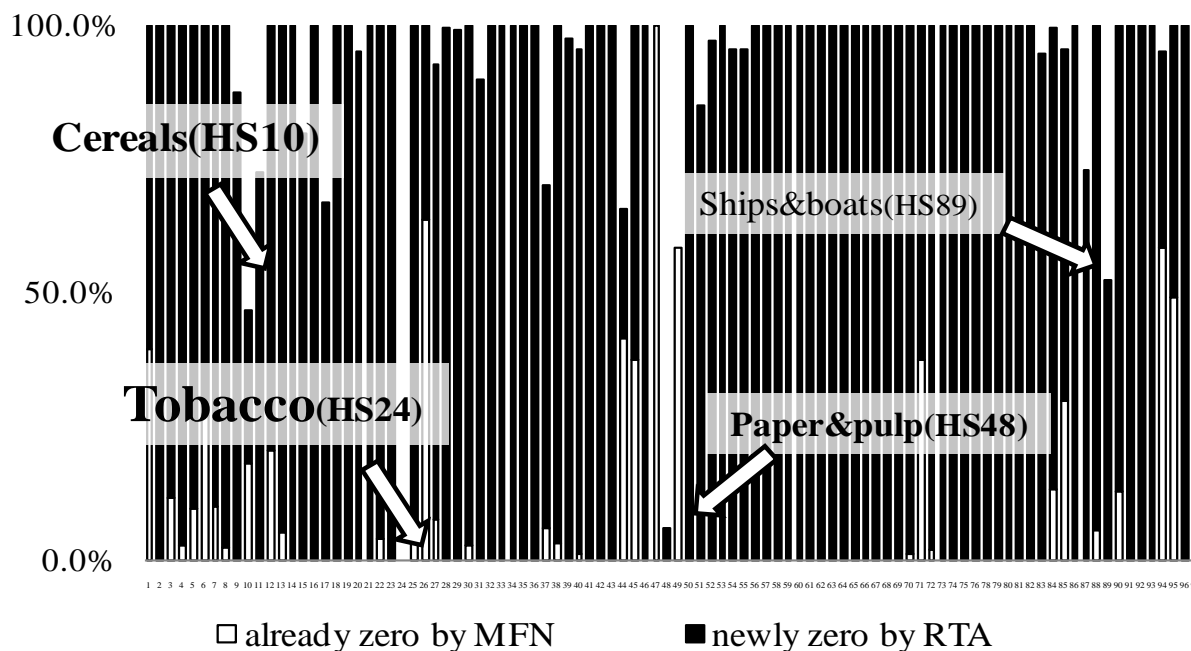
Source: author's calculation.

Figure 2: Decomposition of index by sector (ACFTA)



Source: author's calculation.

Figure 3: Decomposition of index by HS Chapter (China’s commitment under the ACFTA)



Source: author’s calculation.

4. Policy Implications

This chapter provides technical notes on the preferential tariff dataset in the ERIA FTA Database and briefly shows sample analyses that can be conducted with the dataset. A policy implication can be pointed out regarding the preparation and distribution of tariff data by East Asian countries. The countries could standardize the contents and the format of publicly available electronic data on MFN and preferential tariffs. We also observe the serious irregularity of data in terms of the shape of table, available information, and even language. Standardizing publicly available MFN and preferential tariff data could contribute to enhancing the transparency of tariff structures in the region for business and public sectors, and promote more effective and efficient FTA negotiations in this region in the future.

Our database could be extended in several directions in the future. Firstly, as mentioned above, the current version of our dataset is still incomplete in the sense that it only covers five “ASEAN+n” FTAs and Japan’s seven bilateral FTAs. Our database should be extended to cover the rest of FTAs between/among ASEAN+6 countries, namely other bilateral FTAs in the region and the ASEAN Trade in Goods Agreement

(ATIGA), in order to make our database more comprehensive and usable for potential database users.

Secondly, a possible extension is to add into our database a new categorical variable “staging category” that indicates whether a particular tariff line is categorized by a member country as a “Normal Track (NT) item”, “Sensitive List (SL) item”, or “Highly Sensitive List (HSL) item” under a particular FTA. This qualitative information is very crucial in developing a politically feasible path to the creation of a region-wide and WTO consistent FTA.

Thirdly, the information of non tariff barriers (NTBs), such as “state trading”, “quota”, and “tariff-rate quota (TRQ)” should be incorporated into our database as much as possible, considering the fact that eliminating tariffs alone is not a sufficient condition for the free movement of goods between/among member countries. The market of a product can easily be distorted by the state trading or quota system, even if its tariff rate is totally eliminated.

Lastly, we observed that total number of tariff line of a tariff schedule is totally different depending on countries as well as versions of HS classification. In addition to the most disaggregated tariff dataset, a tariff dataset with HS 6-digit level, which is internationally standardized, should be developed and uniquely convert them into either HS2002 or HS2007 version, so that we can calculate more comparable liberalization index. This extension also enables researchers to easily merge our tariff data with data on ROOs to be published by the ERIA and trade data, and to conduct more rigorous empirical studies.

References

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Review of World Economy 146, no. 2: 199-222.

Annex

Table A-1: Level of Liberalization by FTA (ACFTA)

HS	CHN	SGP	BRN	MLS	THA	IDN	PHI	VTN	CAM	LAO	MYA
1	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	84.3%	na	97.3%	77.3%	na
2	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	49.1%	na	89.9%	53.5%	na
3	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	na	98.7%	99.3%	na
4	100.0%	100.0%	100.0%	100.0%	90.6%	100.0%	100.0%	na	100.0%	88.9%	na
5	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	na	100.0%	97.0%	na
6	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	na	100.0%	100.0%	na
7	100.0%	100.0%	100.0%	100.0%	90.3%	100.0%	60.4%	na	83.9%	63.7%	na
8	100.0%	100.0%	100.0%	100.0%	96.1%	100.0%	98.6%	na	86.3%	63.8%	na
9	87.5%	100.0%	100.0%	100.0%	34.2%	100.0%	93.2%	na	100.0%	95.7%	80.9%
10	46.4%	100.0%	100.0%	61.9%	38.9%	56.0%	44.4%	na	100.0%	45.7%	25.4%
11	72.2%	100.0%	100.0%	100.0%	94.7%	97.4%	94.9%	na	100.0%	100.0%	100.0%
12	100.0%	100.0%	100.0%	100.0%	91.2%	100.0%	100.0%	na	95.1%	94.8%	100.0%
13	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	na	100.0%	100.0%	88.2%
14	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	na	100.0%	100.0%	100.0%
15	79.6%	100.0%	100.0%	100.0%	78.6%	100.0%	100.0%	na	100.0%	100.0%	88.2%
16	100.0%	100.0%	100.0%	100.0%	93.2%	93.4%	85.9%	na	100.0%	100.0%	33.8%
17	66.7%	100.0%	100.0%	100.0%	64.7%	75.9%	55.0%	na	82.1%	100.0%	81.8%
18	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	na	100.0%	100.0%	41.2%
19	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	na	88.9%	100.0%	65.6%
20	94.9%	100.0%	100.0%	100.0%	86.3%	100.0%	100.0%	na	90.4%	100.0%	7.1%
21	100.0%	100.0%	88.6%	100.0%	87.2%	88.6%	100.0%	na	31.8%	100.0%	100.0%
22	100.0%	100.0%	100.0%	100.0%	82.1%	16.9%	100.0%	na	91.5%	23.3%	12.9%
23	100.0%	100.0%	100.0%	100.0%	67.6%	100.0%	82.4%	na	100.0%	100.0%	83.8%
24	0.0%	100.0%	100.0%	0.0%	41.5%	66.7%	100.0%	na	34.5%	100.0%	90.2%
25	100.0%	100.0%	100.0%	94.9%	84.3%	96.4%	100.0%	na	90.1%	100.0%	97.9%
26	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	na	97.4%	100.0%	100.0%
27	92.4%	100.0%	100.0%	100.0%	100.0%	93.6%	100.0%	na	62.8%	100.0%	100.0%
28	99.2%	100.0%	100.0%	92.4%	100.0%	96.9%	99.0%	na	94.8%	100.0%	100.0%
29	99.1%	100.0%	100.0%	99.7%	100.0%	94.2%	100.0%	na	97.7%	100.0%	99.3%
30	100.0%	100.0%	100.0%	100.0%	100.0%	95.2%	96.5%	na	100.0%	100.0%	100.0%
31	89.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	na	100.0%	100.0%	100.0%
32	100.0%	100.0%	100.0%	96.6%	74.7%	100.0%	100.0%	na	72.2%	94.5%	100.0%
33	100.0%	100.0%	95.6%	90.7%	100.0%	73.3%	100.0%	na	60.0%	100.0%	100.0%
34	100.0%	100.0%	100.0%	96.5%	100.0%	100.0%	100.0%	na	58.7%	100.0%	93.8%
35	100.0%	100.0%	100.0%	100.0%	90.0%	100.0%	100.0%	na	75.0%	100.0%	100.0%
36	100.0%	100.0%	93.8%	100.0%	100.0%	81.3%	100.0%	na	100.0%	100.0%	100.0%
37	70.1%	100.0%	100.0%	98.3%	100.0%	94.4%	100.0%	na	98.6%	100.0%	97.2%
38	100.0%	100.0%	100.0%	96.7%	99.1%	77.0%	98.2%	na	96.5%	100.0%	100.0%
39	97.5%	100.0%	100.0%	91.1%	100.0%	44.0%	48.7%	na	75.1%	99.7%	54.3%
40	95.5%	100.0%	99.4%	88.0%	80.9%	76.5%	86.5%	na	91.6%	100.0%	100.0%
41	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	na	100.0%	100.0%	100.0%
42	100.0%	100.0%	96.8%	100.0%	100.0%	80.6%	100.0%	na	67.7%	100.0%	100.0%
43	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	na	93.8%	100.0%	100.0%
44	65.7%	100.0%	99.1%	98.3%	100.0%	100.0%	100.0%	na	83.9%	100.0%	39.6%
45	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	na	100.0%	100.0%	100.0%
46	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	na	93.8%	100.0%	100.0%
47	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	na	100.0%	100.0%	100.0%
48	6.0%	100.0%	100.0%	99.6%	92.3%	100.0%	100.0%	na	77.1%	100.0%	100.0%
49	58.3%	100.0%	100.0%	100.0%	87.5%	100.0%	100.0%	na	82.1%	100.0%	100.0%

Source: author's calculation

Table A-1: Level of Liberalization by FTA (ACFTA Cont.)

HS	CHN	SGP	BRN	MLS	THA	IDN	PHI	VTN	CAM	LAO	MYA
50	100.0%	100.0%	100.0%	100.0%	60.0%	100.0%	100.0%	na	100.0%	100.0%	69.2%
51	84.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	na	100.0%	100.0%	100.0%
52	96.9%	100.0%	100.0%	86.1%	100.0%	100.0%	100.0%	na	91.9%	100.0%	99.2%
53	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	na	95.8%	100.0%	100.0%
54	95.5%	100.0%	100.0%	97.2%	100.0%	100.0%	100.0%	na	90.7%	100.0%	100.0%
55	95.4%	100.0%	100.0%	84.7%	100.0%	100.0%	100.0%	na	93.5%	100.0%	100.0%
56	100.0%	100.0%	100.0%	100.0%	84.6%	100.0%	89.7%	na	86.5%	100.0%	100.0%
57	100.0%	100.0%	84.8%	100.0%	100.0%	100.0%	70.0%	na	87.9%	100.0%	100.0%
58	100.0%	100.0%	100.0%	99.4%	100.0%	100.0%	96.5%	na	69.6%	100.0%	100.0%
59	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	94.7%	na	92.1%	100.0%	100.0%
60	100.0%	100.0%	100.0%	83.7%	100.0%	100.0%	100.0%	na	94.3%	100.0%	100.0%
61	100.0%	100.0%	100.0%	83.2%	100.0%	78.0%	75.6%	na	90.2%	100.0%	100.0%
62	100.0%	100.0%	100.0%	93.8%	100.0%	85.7%	80.9%	na	87.0%	100.0%	100.0%
63	100.0%	100.0%	95.0%	100.0%	100.0%	79.1%	46.3%	na	81.3%	100.0%	100.0%
64	100.0%	100.0%	71.4%	95.9%	32.5%	71.4%	45.0%	na	74.3%	100.0%	100.0%
65	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	na	100.0%	100.0%	100.0%
66	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	na	57.1%	100.0%	100.0%
67	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	na	100.0%	100.0%	100.0%
68	100.0%	100.0%	100.0%	100.0%	85.7%	96.8%	100.0%	na	80.4%	100.0%	98.6%
69	100.0%	100.0%	100.0%	76.9%	80.6%	54.8%	100.0%	na	67.7%	100.0%	100.0%
70	100.0%	100.0%	100.0%	87.0%	82.7%	89.2%	84.2%	na	81.6%	100.0%	100.0%
71	100.0%	100.0%	100.0%	100.0%	96.0%	93.3%	100.0%	na	100.0%	100.0%	100.0%
72	100.0%	100.0%	100.0%	74.0%	61.5%	78.2%	82.8%	na	95.0%	99.8%	100.0%
73	100.0%	100.0%	100.0%	93.0%	75.8%	77.2%	99.1%	na	76.3%	100.0%	99.7%
74	100.0%	100.0%	100.0%	100.0%	90.3%	100.0%	100.0%	na	95.2%	100.0%	100.0%
75	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	na	100.0%	100.0%	100.0%
76	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	na	81.5%	100.0%	100.0%
78	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	na	100.0%	100.0%	100.0%
79	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	na	91.7%	93.3%	100.0%
80	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	na	100.0%	100.0%	100.0%
81	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	na	100.0%	100.0%	100.0%
82	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	na	87.5%	100.0%	100.0%
83	94.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	na	78.6%	100.0%	100.0%
84	99.5%	100.0%	99.1%	94.0%	88.9%	97.8%	89.2%	na	80.7%	100.0%	99.5%
85	95.6%	100.0%	85.9%	98.6%	76.0%	97.0%	93.2%	na	81.9%	99.6%	99.5%
86	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	na	100.0%	100.0%	100.0%
87	73.0%	100.0%	93.1%	45.6%	58.0%	12.9%	12.2%	na	76.9%	79.6%	28.9%
88	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	na	100.0%	100.0%	100.0%
89	52.4%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	na	100.0%	100.0%	100.0%
90	100.0%	100.0%	100.0%	100.0%	99.2%	100.0%	98.9%	na	99.6%	100.0%	100.0%
91	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	92.9%	na	100.0%	100.0%	98.4%
92	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	na	100.0%	100.0%	100.0%
93	100.0%	100.0%	100.0%		100.0%	89.3%		na	100.0%	100.0%	
94	95.0%	100.0%	66.7%	100.0%	100.0%	100.0%	97.4%	na	51.4%	100.0%	100.0%
95	100.0%	100.0%	98.2%	100.0%	72.7%	89.3%	100.0%	na	100.0%	91.0%	100.0%
96	100.0%	100.0%	100.0%	100.0%	100.0%	97.6%	100.0%	na	78.8%	100.0%	100.0%
97	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	na	100.0%	100.0%	100.0%

Source: author's calculation

Table A-2: Level of Liberalization by FTA (AKFTA)

HS	KOR	SGP	BRN	MLS	THA	IDN	PHI	VTN	CAM	LAO	MYA
1	96.4%	100.0%	100.0%	90.7%	100.0%	100.0%	82.0%	100.0%	81.1%	62.2%	100.0%
2	46.3%	100.0%	100.0%	86.2%	82.6%	98.6%	55.0%	100.0%	81.2%	62.3%	100.0%
3	65.8%	100.0%	100.0%	100.0%	100.0%	89.7%	100.0%	100.0%	93.7%	100.0%	68.6%
4	15.7%	100.0%	100.0%	77.2%	100.0%	100.0%	100.0%	94.2%	100.0%	87.5%	85.4%
5	94.1%	100.0%	100.0%	100.0%	96.9%	96.8%	100.0%	100.0%	100.0%	96.8%	93.5%
6	82.9%	100.0%	100.0%	100.0%	80.8%	100.0%	100.0%	100.0%	53.8%	76.9%	92.3%
7	60.9%	100.0%	100.0%	98.8%	100.0%	100.0%	96.9%	100.0%	82.8%	47.3%	97.8%
8	38.0%	100.0%	100.0%	76.9%	100.0%	98.7%	100.0%	100.0%	74.0%	57.5%	100.0%
9	86.5%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	83.7%	63.3%	83.7%
10	69.2%	100.0%	100.0%	61.9%	100.0%	60.0%	83.3%	100.0%	84.0%	64.0%	68.0%
11	18.2%	100.0%	100.0%	100.0%	94.7%	97.4%	100.0%	100.0%	86.8%	100.0%	94.7%
12	78.8%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	98.4%	82.0%	88.5%	78.3%
13	77.8%	100.0%	100.0%	100.0%	100.0%	89.5%	100.0%	89.5%	100.0%	84.2%	64.7%
14	85.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	71.4%
15	85.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	98.7%	100.0%	49.3%
16	59.3%	100.0%	100.0%	100.0%	84.7%	100.0%	100.0%	100.0%	100.0%	69.5%	78.0%
17	72.7%	100.0%	100.0%	100.0%	100.0%	75.9%	100.0%	78.6%	100.0%	78.6%	92.9%
18	90.3%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
19	70.2%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	82.4%	68.9%	93.3%	88.9%
20	60.6%	100.0%	100.0%	100.0%	97.3%	100.0%	100.0%	100.0%	93.2%	16.4%	97.3%
21	76.1%	100.0%	100.0%	100.0%	100.0%	88.6%	95.7%	89.4%	88.6%	100.0%	100.0%
22	69.2%	100.0%	100.0%	17.5%	100.0%	16.9%	100.0%	23.7%	76.3%	78.0%	13.8%
23	87.0%	100.0%	100.0%	100.0%	75.8%	100.0%	96.7%	97.0%	100.0%	100.0%	90.9%
24	100.0%	100.0%	100.0%	0.0%	100.0%	100.0%	100.0%	0.0%	93.1%	51.7%	72.4%
25	97.2%	100.0%	100.0%	95.0%	100.0%	100.0%	100.0%	83.1%	95.1%	100.0%	95.1%
26	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
27	91.0%	100.0%	100.0%	100.0%	100.0%	94.9%	100.0%	78.2%	62.8%	100.0%	79.5%
28	98.6%	100.0%	100.0%	92.4%	100.0%	95.3%	100.0%	99.0%	98.4%	100.0%	99.0%
29	96.3%	100.0%	100.0%	99.2%	100.0%	98.5%	100.0%	97.7%	99.5%	98.7%	97.2%
30	100.0%	100.0%	100.0%	100.0%	100.0%	92.8%	100.0%	86.3%	100.0%	35.4%	35.4%
31	94.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	76.7%	100.0%	100.0%	100.0%
32	100.0%	100.0%	100.0%	93.4%	72.2%	100.0%	100.0%	79.6%	93.7%	100.0%	87.3%
33	95.6%	100.0%	100.0%	96.7%	100.0%	95.6%	100.0%	73.9%	77.8%	100.0%	62.2%
34	94.3%	100.0%	100.0%	96.6%	100.0%	100.0%	96.7%	84.6%	57.1%	100.0%	74.6%
35	82.8%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	87.0%	100.0%	100.0%	100.0%
36	100.0%	100.0%	100.0%	76.9%	100.0%	100.0%	94.4%	81.3%	100.0%	100.0%	0.0%
37	97.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
38	98.6%	100.0%	100.0%	96.8%	100.0%	100.0%	100.0%	92.8%	96.5%	100.0%	100.0%
39	91.4%	100.0%	100.0%	90.0%	100.0%	50.0%	86.9%	77.6%	83.1%	88.3%	87.8%
40	98.6%	100.0%	96.6%	73.2%	88.8%	100.0%	100.0%	73.5%	84.9%	57.5%	80.4%
41	100.0%	100.0%	100.0%	100.0%	86.5%	100.0%	100.0%	100.0%	89.5%	100.0%	83.8%
42	100.0%	100.0%	100.0%	94.0%	100.0%	100.0%	100.0%	100.0%	100.0%	61.3%	96.8%
43	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	43.8%	100.0%
44	55.2%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	95.6%
45	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	100.0%
46	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
47	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	95.2%
48	100.0%	100.0%	100.0%	99.7%	100.0%	100.0%	100.0%	82.1%	78.3%	95.4%	92.0%
49	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	92.9%	100.0%	85.7%

Source: author's calculation

Table A-2: Level of Liberalization by FTA (AKFTA Cont.)

HS	KOR	SGP	BRN	MLS	THA	IDN	PHI	VTN	CAM	LAO	MYA
50	100.0%	100.0%	100.0%	100.0%	22.2%	100.0%	100.0%	100.0%	100.0%	100.0%	66.7%
51	62.1%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	97.4%	100.0%	100.0%
52	82.4%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	89.5%	95.2%	100.0%	93.5%
53	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	95.8%	100.0%	95.8%
54	96.4%	100.0%	100.0%	99.0%	100.0%	100.0%	100.0%	96.1%	78.7%	100.0%	82.7%
55	100.0%	100.0%	100.0%	95.0%	100.0%	100.0%	100.0%	92.6%	91.6%	100.0%	96.3%
56	100.0%	100.0%	100.0%	97.8%	100.0%	100.0%	100.0%	94.7%	86.5%	100.0%	94.6%
57	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	90.0%	100.0%	100.0%	100.0%	100.0%
58	100.0%	100.0%	100.0%	86.5%	100.0%	100.0%	100.0%	96.5%	57.1%	100.0%	98.2%
59	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	97.6%	92.1%	100.0%	86.8%
60	100.0%	100.0%	100.0%	90.9%	100.0%	100.0%	100.0%	94.3%	90.6%	100.0%	94.3%
61	95.0%	100.0%	100.0%	98.3%	100.0%	69.1%	100.0%	100.0%	98.4%	37.7%	97.5%
62	90.5%	100.0%	100.0%	97.0%	83.2%	89.4%	100.0%	100.0%	93.1%	100.0%	100.0%
63	100.0%	100.0%	100.0%	100.0%	97.5%	100.0%	100.0%	94.0%	86.3%	100.0%	92.5%
64	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	97.1%	91.4%	100.0%	68.6%
65	100.0%	100.0%	100.0%	100.0%	100.0%	84.6%	100.0%	100.0%	92.3%	100.0%	84.6%
66	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
67	100.0%	100.0%	100.0%	100.0%	100.0%	25.0%	100.0%	100.0%	100.0%	75.0%	100.0%
68	100.0%	100.0%	100.0%	100.0%	85.5%	98.4%	100.0%	98.3%	100.0%	100.0%	98.2%
69	91.9%	100.0%	100.0%	81.3%	100.0%	100.0%	100.0%	90.3%	83.9%	100.0%	100.0%
70	98.6%	100.0%	100.0%	86.7%	96.0%	100.0%	97.8%	67.6%	99.0%	100.0%	100.0%
71	100.0%	100.0%	100.0%	100.0%	89.3%	78.7%	100.0%	100.0%	100.0%	100.0%	90.7%
72	100.0%	100.0%	100.0%	77.3%	93.6%	41.9%	100.0%	59.7%	100.0%	100.0%	93.8%
73	100.0%	100.0%	100.0%	100.0%	87.3%	28.5%	99.0%	80.2%	82.9%	100.0%	94.8%
74	98.9%	100.0%	100.0%	100.0%	96.8%	100.0%	100.0%	97.0%	96.8%	100.0%	77.4%
75	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
76	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	97.2%	87.7%	100.0%	98.5%
78	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
79	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	91.7%	100.0%	75.0%
80	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	87.5%
81	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
82	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	94.4%	93.1%	95.8%	100.0%
83	100.0%	100.0%	100.0%	100.0%	98.2%	100.0%	100.0%	70.7%	89.3%	100.0%	96.4%
84	99.3%	100.0%	97.4%	100.0%	96.6%	97.4%	99.8%	84.5%	77.3%	85.3%	94.3%
85	99.2%	100.0%	91.9%	100.0%	79.0%	96.6%	97.2%	69.3%	79.1%	69.7%	80.1%
86	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	88.5%	100.0%	100.0%
87	90.3%	100.0%	86.6%	40.6%	48.4%	65.1%	66.7%	25.3%	32.0%	14.8%	40.6%
88	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
89	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	85.2%	100.0%	100.0%	100.0%
90	100.0%	100.0%	100.0%	100.0%	99.2%	100.0%	100.0%	100.0%	89.0%	100.0%	93.6%
91	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	98.2%	100.0%	100.0%
92	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	90.0%
93	100.0%	100.0%	100.0%	63.0%	100.0%	100.0%		76.7%	100.0%	100.0%	
94	98.9%	100.0%	91.1%	100.0%	100.0%	100.0%	100.0%	93.0%	59.7%	100.0%	91.7%
95	100.0%	100.0%	100.0%	100.0%	100.0%	94.6%	100.0%	100.0%	80.0%	83.6%	98.2%
96	100.0%	100.0%	100.0%	100.0%	100.0%	97.6%	100.0%	91.8%	88.2%	100.0%	87.1%
97	100.0%	100.0%	100.0%	100.0%	100.0%	91.7%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: author's calculation

Table A-3: Level of Liberalization by FTA (AANZFTA)

HS	AUS	NZ	SGP	BRN	MLS	THA	IDN	PHI	VTN	CAM	LAO	MYA
1	100.0%	100.0%	100.0%	100.0%	93.2%	100.0%	95.5%	96.1%	100.0%	100.0%	100.0%	100.0%
2	100.0%	100.0%	100.0%	100.0%	92.2%	100.0%	87.5%	67.0%	81.4%	94.2%	100.0%	98.6%
3	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	95.3%	98.7%	82.6%	100.0%	100.0%	70.6%
4	100.0%	100.0%	100.0%	100.0%	88.3%	92.1%	77.8%	96.1%	100.0%	66.7%	100.0%	66.7%
5	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	97.0%	100.0%	100.0%	100.0%	83.9%	93.8%
6	100.0%	100.0%	100.0%	100.0%	100.0%	80.8%	69.6%	100.0%	100.0%	88.5%	100.0%	76.9%
7	100.0%	100.0%	100.0%	100.0%	100.0%	89.5%	86.8%	88.1%	100.0%	86.0%	100.0%	89.1%
8	100.0%	100.0%	100.0%	100.0%	78.0%	95.9%	89.6%	100.0%	98.6%	57.5%	100.0%	100.0%
9	100.0%	100.0%	100.0%	67.3%	100.0%	51.0%	100.0%	100.0%	100.0%	85.7%	100.0%	79.6%
10	100.0%	100.0%	100.0%	100.0%	61.9%	56.0%	42.9%	44.4%	100.0%	72.0%	100.0%	42.5%
11	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	97.4%	89.7%	100.0%	89.5%	100.0%	88.4%
12	100.0%	100.0%	100.0%	100.0%	100.0%	94.1%	98.5%	100.0%	98.4%	96.7%	96.3%	98.5%
13	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	89.5%	100.0%	100.0%	89.5%
14	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
15	100.0%	100.0%	100.0%	100.0%	100.0%	88.8%	100.0%	100.0%	100.0%	91.3%	100.0%	89.4%
16	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	92.3%	84.6%	25.4%	76.3%	100.0%	0.0%
17	100.0%	100.0%	100.0%	100.0%	100.0%	80.0%	74.1%	55.0%	78.6%	67.9%	100.0%	54.5%
18	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	93.8%	100.0%	87.5%	100.0%	0.0%
19	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	44.4%	100.0%	30.6%
20	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	68.5%	76.7%	0.0%
21	100.0%	100.0%	100.0%	88.6%	100.0%	93.3%	85.5%	100.0%	100.0%	77.3%	100.0%	70.5%
22	100.0%	100.0%	100.0%	22.0%	17.1%	94.1%	16.7%	100.0%	16.9%	66.1%	20.3%	1.6%
23	100.0%	100.0%	100.0%	100.0%	100.0%	97.1%	100.0%	91.2%	97.0%	100.0%	72.7%	97.2%
24	100.0%	100.0%	100.0%	13.8%	0.0%	58.6%	44.8%	100.0%	41.4%	93.1%	93.1%	0.0%
25	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	97.8%	96.4%	100.0%	98.8%	89.0%	97.6%
26	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	95.1%
27	100.0%	100.0%	100.0%	83.3%	100.0%	100.0%	95.2%	100.0%	51.3%	61.5%	59.0%	100.0%
28	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	97.6%	100.0%	99.0%	95.8%	94.0%
29	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	99.5%	99.7%	99.7%
30	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	99.2%	96.6%	94.1%	98.7%	89.9%	98.8%
31	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
32	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	96.2%	98.7%	90.0%
33	100.0%	100.0%	100.0%	95.6%	100.0%	100.0%	96.8%	100.0%	100.0%	75.6%	100.0%	45.8%
34	100.0%	100.0%	100.0%	77.8%	100.0%	100.0%	100.0%	100.0%	100.0%	88.9%	98.4%	100.0%
35	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	95.0%	95.0%	100.0%
36	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	81.3%	100.0%	43.8%	0.0%
37	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	97.2%	97.2%
38	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	92.8%	94.7%	98.2%	100.0%
39	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	88.5%	63.4%	97.3%	89.7%	97.2%	94.4%
40	100.0%	100.0%	100.0%	100.0%	96.1%	100.0%	100.0%	98.9%	73.5%	94.4%	97.2%	78.8%
41	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	97.3%	89.5%	64.9%
42	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	75.7%	100.0%	100.0%	93.5%	93.5%	80.6%
43	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	43.8%	100.0%
44	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	99.1%	85.8%	67.7%
45	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	28.6%	100.0%
46	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
47	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	23.8%	90.9%
48	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	89.4%	86.9%	88.6%	98.9%
49	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	82.1%	92.9%	96.6%

Source: author's calculation

Table A-3: Level of Liberalization by FTA (AANZFTA Cont.)

HS	AUS	NZ	SGP	BRN	MLS	THA	IDN	PHI	VTN	CAM	LAO	MYA
50	100.0%	100.0%	100.0%	100.0%	100.0%	88.9%	100.0%	100.0%	100.0%	100.0%	88.9%	66.7%
51	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
52	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	96.0%
53	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
54	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	89.3%
55	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	99.1%	96.3%
56	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	94.9%	100.0%	100.0%	97.3%	83.8%
57	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	75.6%	100.0%	100.0%	100.0%	100.0%
58	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	98.2%	92.9%
59	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	97.4%	84.2%
60	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	92.5%
61	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	79.4%	100.0%	100.0%	100.0%	97.5%	97.5%
62	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	83.3%	100.0%	100.0%	100.0%	97.7%	97.7%
63	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	88.7%	100.0%	94.0%	100.0%	96.3%	92.5%
64	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	74.4%	100.0%	97.1%	91.4%	68.6%
65	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	94.4%	100.0%	100.0%	76.9%	100.0%	84.6%
66	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	85.7%	100.0%	85.7%	100.0%	85.7%
67	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
68	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	96.4%
69	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	96.8%	77.4%	100.0%
70	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	83.5%	100.0%	100.0%	99.0%	98.1%
71	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	92.6%	100.0%	100.0%	100.0%	98.7%	23.5%
72	100.0%	100.0%	100.0%	100.0%	57.1%	100.0%	75.2%	59.3%	48.4%	95.4%	93.8%	100.0%
73	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	78.7%	79.6%	94.3%	94.3%	87.7%	98.6%
74	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	98.9%	100.0%	100.0%	95.2%	95.2%	75.8%
75	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	89.5%	100.0%
76	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	93.8%	98.5%	98.5%
78	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	81.8%	100.0%
79	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	75.0%	100.0%
80	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
81	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
82	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	98.6%	76.4%	100.0%
83	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	87.9%	78.6%	73.2%	96.4%
84	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	97.3%	99.2%	92.2%	75.7%	85.6%	99.1%
85	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	97.4%	97.6%	99.6%	58.9%	94.8%	81.4%
86	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	92.3%	100.0%
87	100.0%	100.0%	100.0%	100.0%	80.7%	100.0%	84.9%	95.3%	53.0%	70.1%	58.9%	60.5%
88	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	95.2%	4.8%	100.0%
89	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	85.2%	91.8%	93.9%	2.0%
90	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	75.4%	95.1%	100.0%
91	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	98.2%	100.0%	100.0%
92	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	80.0%
93	100.0%	100.0%	100.0%	100.0%	3.8%	100.0%	100.0%	100.0%	73.3%	100.0%	0.0%	0.0%
94	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	99.1%	97.4%	100.0%	63.9%	97.2%	100.0%
95	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	80.0%	92.7%	89.4%
96	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	98.9%	100.0%	100.0%	91.8%	89.4%	86.6%
97	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	80.0%	20.0%

Source: author's calculation

Table A-4: Level of Liberalization by FTA (AIFTA)

HS	IND	SGP	BRN	MLS	THA	IDN	PHI	VTN	CAM	LAO	MYA
1	85.3%	100.0%	100.0%	90.9%	62.2%	100.0%	43.1%	100.0%	97.3%	0.0%	100.0%
2	91.8%	100.0%	100.0%	90.6%	24.6%	85.7%	28.3%	100.0%	79.7%	0.0%	100.0%
3	59.9%	100.0%	100.0%	100.0%	55.3%	58.8%	57.2%	73.7%	91.8%	91.8%	75.9%
4	25.0%	100.0%	100.0%	83.3%	20.8%	39.6%	37.3%	88.5%	100.0%	75.0%	85.4%
5	100.0%	100.0%	100.0%	100.0%	96.8%	90.3%	100.0%	100.0%	96.8%	80.6%	68.8%
6	62.5%	100.0%	100.0%	100.0%	46.2%	15.4%	65.4%	100.0%	65.4%	50.0%	92.3%
7	54.3%	100.0%	100.0%	98.8%	77.4%	58.1%	42.6%	100.0%	81.7%	1.1%	99.3%
8	50.0%	100.0%	100.0%	64.8%	87.7%	50.6%	52.7%	100.0%	82.2%	1.4%	97.6%
9	14.8%	100.0%	67.3%	94.6%	24.5%	51.9%	40.7%	81.6%	79.6%	16.3%	79.6%
10	32.4%	100.0%	100.0%	61.9%	0.0%	44.0%	25.0%	100.0%	80.0%	64.0%	67.5%
11	2.9%	100.0%	100.0%	100.0%	21.1%	15.4%	2.6%	100.0%	94.7%	100.0%	76.7%
12	73.2%	100.0%	100.0%	100.0%	41.3%	60.7%	75.8%	96.8%	67.2%	49.2%	68.7%
13	100.0%	100.0%	100.0%	100.0%	94.7%	52.6%	100.0%	89.5%	57.9%	63.2%	73.7%
14	87.5%	100.0%	100.0%	100.0%	71.4%	71.4%	100.0%	100.0%	100.0%	0.0%	100.0%
15	32.5%	100.0%	100.0%	100.0%	37.3%	66.7%	39.2%	89.4%	93.3%	92.7%	60.8%
16	64.7%	100.0%	100.0%	100.0%	67.8%	45.9%	45.3%	8.5%	93.2%	6.8%	77.6%
17	81.6%	100.0%	100.0%	100.0%	67.9%	65.5%	47.5%	64.3%	100.0%	85.7%	66.7%
18	29.6%	100.0%	100.0%	100.0%	81.3%	81.3%	18.8%	56.3%	100.0%	100.0%	81.3%
19	85.7%	100.0%	100.0%	100.0%	84.4%	87.0%	73.3%	25.5%	100.0%	66.7%	83.7%
20	48.6%	100.0%	100.0%	100.0%	52.1%	80.8%	43.2%	97.3%	86.3%	0.0%	94.0%
21	37.5%	100.0%	77.3%	100.0%	84.1%	63.6%	34.0%	38.8%	90.9%	84.1%	38.6%
22	23.1%	100.0%	100.0%	17.1%	6.8%	8.5%	13.6%	27.1%	96.6%	5.1%	4.9%
23	19.7%	100.0%	100.0%	100.0%	51.5%	93.9%	50.0%	75.8%	90.9%	100.0%	61.1%
24	0.0%	100.0%	100.0%	0.0%	0.0%	36.7%	6.7%	0.0%	37.9%	34.5%	63.4%
25	94.3%	100.0%	100.0%	91.1%	84.1%	71.1%	96.4%	83.1%	84.1%	100.0%	98.8%
26	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	76.3%	100.0%	97.6%
27	55.4%	100.0%	80.8%	100.0%	65.4%	83.3%	100.0%	56.4%	55.1%	80.8%	77.8%
28	96.6%	100.0%	100.0%	87.6%	99.0%	64.2%	97.1%	99.0%	94.8%	99.0%	82.6%
29	75.3%	100.0%	100.0%	99.0%	100.0%	63.4%	97.8%	97.0%	80.9%	95.9%	90.6%
30	34.1%	100.0%	100.0%	100.0%	15.2%	75.9%	97.6%	59.7%	100.0%	55.7%	53.8%
31	37.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	65.6%	100.0%	100.0%	100.0%
32	94.7%	100.0%	100.0%	61.0%	65.8%	37.5%	70.9%	58.2%	88.6%	72.2%	61.3%
33	60.0%	100.0%	55.6%	88.9%	82.2%	15.6%	97.8%	47.8%	46.7%	75.6%	14.6%
34	72.9%	100.0%	31.7%	77.2%	84.1%	39.7%	87.7%	60.0%	93.7%	42.9%	41.5%
35	71.1%	100.0%	100.0%	78.9%	55.0%	45.0%	100.0%	82.6%	70.0%	100.0%	45.0%
36	92.0%	100.0%	87.5%	38.5%	100.0%	31.3%	100.0%	43.8%	75.0%	37.5%	10.5%
37	98.1%	100.0%	22.5%	100.0%	95.8%	40.8%	100.0%	100.0%	94.4%	100.0%	93.0%
38	78.6%	100.0%	100.0%	79.7%	96.5%	49.6%	89.0%	89.0%	85.0%	100.0%	83.5%
39	30.4%	100.0%	100.0%	28.5%	69.5%	27.1%	52.9%	61.2%	85.4%	91.5%	81.2%
40	52.9%	100.0%	67.6%	48.1%	82.1%	36.9%	62.7%	63.0%	69.3%	98.3%	67.0%
41	100.0%	100.0%	100.0%	100.0%	70.3%	94.7%	100.0%	94.7%	67.6%	10.5%	89.2%
42	3.2%	100.0%	77.4%	70.8%	9.7%	6.5%	74.2%	74.2%	58.1%	93.5%	80.6%
43	100.0%	100.0%	56.3%	100.0%	93.8%	56.3%	100.0%	68.8%	100.0%	6.3%	100.0%
44	98.8%	100.0%	97.3%	100.0%	99.1%	75.9%	99.1%	100.0%	99.1%	3.5%	60.2%
45	100.0%	100.0%	100.0%	100.0%	100.0%	71.4%	100.0%	100.0%	100.0%	100.0%	100.0%
46	100.0%	100.0%	75.0%	100.0%	100.0%	0.0%	81.3%	100.0%	100.0%	0.0%	100.0%
47	100.0%	100.0%	100.0%	100.0%	100.0%	84.0%	100.0%	100.0%	100.0%	100.0%	100.0%
48	91.7%	100.0%	100.0%	99.3%	95.4%	67.6%	50.8%	63.8%	92.6%	94.3%	63.4%
49	79.4%	100.0%	100.0%	100.0%	100.0%	64.3%	78.6%	93.9%	78.6%	85.7%	86.2%

Source: author's calculation

Table A-4: Level of Liberalization by FTA (AIFTA Cont.)

HS	IND	SGP	BRN	MLS	THA	IDN	PHI	VTN	CAM	LAO	MYA
50	100.0%	100.0%	100.0%	100.0%	0.0%	75.0%	100.0%	100.0%	77.8%	88.9%	88.9%
51	66.5%	100.0%	100.0%	100.0%	89.5%	71.1%	100.0%	100.0%	97.4%	100.0%	94.7%
52	27.9%	100.0%	100.0%	80.8%	82.3%	41.2%	93.5%	59.1%	75.8%	99.2%	88.7%
53	92.5%	100.0%	100.0%	100.0%	87.5%	76.7%	100.0%	95.8%	91.7%	100.0%	95.8%
54	70.0%	100.0%	100.0%	91.7%	86.7%	48.0%	92.7%	69.7%	89.3%	100.0%	94.6%
55	43.0%	100.0%	100.0%	79.3%	91.6%	45.4%	93.5%	67.9%	89.7%	100.0%	95.3%
56	100.0%	100.0%	100.0%	56.5%	97.4%	45.9%	79.5%	78.9%	100.0%	81.1%	97.3%
57	95.8%	100.0%	3.0%	48.8%	0.0%	3.0%	78.9%	100.0%	42.4%	100.0%	100.0%
58	100.0%	100.0%	100.0%	13.5%	100.0%	21.0%	96.5%	64.9%	91.1%	100.0%	78.6%
59	86.8%	100.0%	50.0%	56.8%	92.1%	44.7%	100.0%	79.1%	94.7%	100.0%	89.5%
60	100.0%	100.0%	100.0%	0.0%	100.0%	0.0%	100.0%	53.7%	100.0%	100.0%	100.0%
61	65.3%	100.0%	100.0%	9.3%	38.5%	0.0%	87.8%	99.2%	80.3%	100.0%	91.0%
62	64.3%	100.0%	100.0%	28.7%	34.8%	0.0%	92.5%	98.6%	69.7%	100.0%	93.9%
63	71.0%	100.0%	38.8%	5.4%	37.5%	2.2%	96.3%	89.3%	60.0%	83.8%	100.0%
64	4.2%	100.0%	11.4%	51.0%	34.3%	25.7%	16.2%	97.1%	80.0%	100.0%	65.7%
65	100.0%	100.0%	0.0%	100.0%	92.3%	15.4%	100.0%	92.3%	100.0%	53.8%	69.2%
66	100.0%	100.0%	28.6%	100.0%	100.0%	28.6%	100.0%	100.0%	100.0%	42.9%	85.7%
67	86.7%	100.0%	100.0%	100.0%	75.0%	0.0%	100.0%	87.5%	87.5%	12.5%	100.0%
68	97.8%	100.0%	100.0%	30.1%	87.5%	17.5%	65.5%	98.3%	87.5%	100.0%	92.9%
69	89.7%	100.0%	100.0%	25.6%	93.5%	25.8%	67.7%	29.0%	100.0%	93.5%	77.4%
70	84.0%	100.0%	99.0%	37.0%	71.4%	68.6%	79.2%	51.9%	93.9%	100.0%	85.8%
71	100.0%	100.0%	61.3%	100.0%	96.0%	52.0%	100.0%	74.7%	72.0%	100.0%	12.3%
72	100.0%	100.0%	100.0%	37.5%	41.7%	34.3%	55.1%	10.8%	96.5%	99.2%	72.2%
73	94.2%	100.0%	98.6%	67.5%	22.3%	9.8%	55.7%	56.4%	78.2%	97.6%	70.6%
74	80.0%	100.0%	100.0%	100.0%	90.3%	48.5%	87.3%	90.9%	79.0%	100.0%	77.4%
75	100.0%	100.0%	100.0%	100.0%	100.0%	81.0%	100.0%	100.0%	100.0%	100.0%	100.0%
76	92.7%	100.0%	100.0%	12.8%	100.0%	30.4%	73.1%	81.9%	95.4%	96.9%	70.8%
78	100.0%	100.0%	100.0%	100.0%	100.0%	69.2%	100.0%	100.0%	100.0%	100.0%	72.7%
79	100.0%	100.0%	100.0%	100.0%	100.0%	35.3%	100.0%	100.0%	100.0%	83.3%	91.7%
80	100.0%	100.0%	100.0%	100.0%	100.0%	88.9%	100.0%	100.0%	100.0%	0.0%	100.0%
81	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	96.0%
82	100.0%	100.0%	100.0%	90.2%	94.4%	31.2%	100.0%	75.0%	94.4%	95.8%	50.7%
83	95.2%	100.0%	100.0%	100.0%	92.9%	8.8%	98.2%	43.1%	67.9%	83.9%	64.3%
84	92.5%	100.0%	83.0%	96.4%	92.5%	77.7%	88.3%	71.5%	83.2%	94.0%	59.9%
85	86.3%	100.0%	14.3%	90.9%	89.4%	50.1%	86.1%	57.4%	79.6%	85.7%	59.1%
86	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	69.2%
87	38.8%	100.0%	100.0%	31.7%	12.7%	7.8%	25.0%	8.4%	59.8%	16.0%	55.0%
88	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	95.2%	0.0%	100.0%
89	100.0%	100.0%	100.0%	100.0%	100.0%	98.0%	100.0%	77.8%	100.0%	0.0%	61.2%
90	95.1%	100.0%	51.1%	100.0%	94.7%	69.4%	97.5%	100.0%	93.6%	83.7%	89.4%
91	100.0%	100.0%	3.6%	100.0%	100.0%	64.4%	94.6%	100.0%	100.0%	3.6%	100.0%
92	100.0%	100.0%	10.0%	100.0%	100.0%	30.0%	100.0%	100.0%	100.0%	0.0%	92.0%
93	100.0%	100.0%	100.0%	7.7%	100.0%	89.3%	100.0%	0.0%	100.0%	0.0%	7.1%
94	94.1%	100.0%	29.2%	96.4%	100.0%	25.0%	71.4%	57.0%	93.1%	44.4%	100.0%
95	83.9%	100.0%	78.2%	100.0%	56.4%	5.4%	100.0%	94.5%	70.9%	36.4%	100.0%
96	97.8%	100.0%	78.8%	95.2%	83.5%	15.3%	95.3%	63.5%	94.1%	28.2%	77.3%
97	100.0%	100.0%	100.0%	100.0%	100.0%	58.3%	100.0%	100.0%	100.0%	80.0%	40.0%

Source: author's calculation

Table A-5: Level of Liberalization by FTA (AJCEP)

HS	JPN	SGP	BRN	MLS	THA	IDN	PHI	VTN	CAM	LAO	MYA
1	84.6%	100.0%	100.0%	100.0%	100.0%	65.1%	77.3%	100.0%	95.5%	31.8%	100.0%
2	42.5%	100.0%	100.0%	100.0%	100.0%	51.4%	56.7%	100.0%	81.7%	0.0%	100.0%
3	40.9%	100.0%	100.0%	100.0%	86.3%	97.3%	100.0%	98.5%	97.8%	4.4%	67.3%
4	9.7%	100.0%	100.0%	94.7%	75.8%	57.4%	100.0%	98.1%	100.0%	66.7%	80.0%
5	100.0%	100.0%	100.0%	100.0%	100.0%	97.0%	100.0%	100.0%	100.0%	81.8%	85.3%
6	100.0%	100.0%	100.0%	100.0%	91.7%	100.0%	100.0%	100.0%	69.6%	73.9%	73.9%
7	81.8%	100.0%	100.0%	99.0%	90.5%	100.0%	97.0%	100.0%	89.0%	1.1%	90.4%
8	81.8%	100.0%	100.0%	78.9%	94.5%	85.3%	100.0%	100.0%	93.1%	0.0%	100.0%
9	91.7%	100.0%	100.0%	100.0%	65.6%	100.0%	100.0%	100.0%	100.0%	29.8%	80.9%
10	68.9%	100.0%	100.0%	45.7%	70.6%	45.7%	70.0%	100.0%	94.3%	40.0%	25.4%
11	28.0%	100.0%	100.0%	100.0%	100.0%	76.9%	100.0%	100.0%	97.4%	92.3%	95.5%
12	82.4%	100.0%	100.0%	100.0%	92.5%	98.5%	100.0%	98.5%	100.0%	55.4%	73.2%
13	90.5%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	89.5%	100.0%	84.2%	36.8%
14	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	81.8%	92.9%
15	57.0%	100.0%	100.0%	100.0%	88.7%	99.4%	100.0%	100.0%	72.2%	53.0%	46.0%
16	25.0%	100.0%	100.0%	100.0%	100.0%	78.8%	100.0%	100.0%	96.2%	7.7%	23.9%
17	28.0%	100.0%	100.0%	100.0%	81.0%	74.1%	61.9%	76.9%	100.0%	61.5%	78.8%
18	23.3%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	35.3%
19	0.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	80.7%	64.9%	65.6%
20	51.6%	100.0%	100.0%	100.0%	100.0%	94.4%	100.0%	100.0%	95.5%	0.0%	9.1%
21	34.0%	100.0%	84.9%	100.0%	88.2%	80.0%	100.0%	98.1%	24.5%	66.0%	71.7%
22	52.7%	100.0%	21.7%	15.2%	95.7%	16.7%	100.0%	26.7%	96.7%	6.7%	11.3%
23	95.2%	100.0%	100.0%	100.0%	92.0%	94.3%	100.0%	100.0%	100.0%	97.1%	75.7%
24	54.5%	100.0%	13.8%	0.0%	0.0%	100.0%	100.0%	0.0%	93.1%	0.0%	0.0%
25	98.7%	100.0%	100.0%	95.6%	95.9%	100.0%	98.7%	94.6%	100.0%	92.2%	91.8%
26	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
27	100.0%	100.0%	100.0%	93.6%	100.0%	95.2%	100.0%	66.3%	77.1%	100.0%	100.0%
28	100.0%	100.0%	100.0%	88.8%	100.0%	100.0%	94.8%	100.0%	96.2%	100.0%	98.6%
29	99.3%	100.0%	100.0%	99.5%	100.0%	97.9%	99.7%	99.8%	91.7%	98.8%	96.6%
30	100.0%	100.0%	100.0%	100.0%	100.0%	91.2%	100.0%	98.4%	100.0%	100.0%	25.6%
31	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	90.6%	100.0%	100.0%	100.0%
32	100.0%	100.0%	100.0%	47.2%	100.0%	100.0%	100.0%	100.0%	72.4%	100.0%	83.7%
33	100.0%	100.0%	92.1%	87.3%	100.0%	50.8%	100.0%	98.4%	95.2%	98.4%	48.5%
34	100.0%	100.0%	98.4%	85.2%	100.0%	100.0%	100.0%	98.4%	63.5%	57.1%	72.3%
35	77.3%	100.0%	100.0%	71.4%	87.5%	100.0%	93.8%	90.5%	78.9%	100.0%	94.7%
36	100.0%	100.0%	89.5%	33.3%	100.0%	100.0%	100.0%	78.9%	100.0%	52.6%	0.0%
37	100.0%	100.0%	100.0%	95.7%	100.0%	100.0%	100.0%	100.0%	83.5%	100.0%	96.3%
38	100.0%	100.0%	100.0%	94.8%	100.0%	98.3%	97.4%	92.3%	91.3%	100.0%	100.0%
39	100.0%	100.0%	100.0%	93.4%	100.0%	95.3%	93.6%	99.2%	79.0%	98.2%	59.8%
40	100.0%	100.0%	95.7%	72.0%	100.0%	100.0%	97.2%	62.8%	74.4%	100.0%	67.1%
41	69.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	92.7%	100.0%	78.2%
42	87.5%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	86.5%	97.3%	94.6%
43	33.3%	100.0%	100.0%	100.0%	100.0%	85.0%	100.0%	100.0%	100.0%	100.0%	80.0%
44	78.8%	100.0%	99.1%	100.0%	100.0%	100.0%	100.0%	100.0%	99.1%	100.0%	80.4%
45	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
46	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	100.0%
47	100.0%	100.0%	100.0%	100.0%	100.0%	96.0%	100.0%	100.0%	90.5%	100.0%	90.9%
48	100.0%	100.0%	100.0%	99.7%	100.0%	100.0%	100.0%	100.0%	81.4%	88.1%	83.3%
49	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	62.5%	100.0%	85.4%

Source: author's calculation

Table A-5: Level of Liberalization by FTA (AJCEP Cont.)

HS	JPN	SGP	BRN	MLS	THA	IDN	PHI	VTN	CAM	LAO	MYA
50	73.2%	100.0%	100.0%	100.0%	90.9%	100.0%	100.0%	92.3%	100.0%	53.8%	69.2%
51	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	97.9%	100.0%	100.0%	87.5%
52	100.0%	100.0%	100.0%	98.5%	100.0%	100.0%	100.0%	94.7%	100.0%	94.7%	94.0%
53	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	96.6%
54	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	96.2%	100.0%	100.0%	86.1%
55	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	91.3%	100.0%	100.0%	95.2%
56	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	96.0%	100.0%	100.0%	86.0%
57	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	88.5%	98.0%	100.0%	100.0%	100.0%
58	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	86.9%	100.0%	100.0%	96.7%
59	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	95.8%	100.0%	100.0%	85.1%
60	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	96.6%	100.0%	100.0%	94.9%
61	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	99.5%	100.0%	100.0%	97.9%
62	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	98.5%
63	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	94.8%	100.0%	83.5%	87.6%
64	37.2%	100.0%	100.0%	100.0%	100.0%	97.4%	100.0%	100.0%	100.0%	100.0%	73.7%
65	100.0%	100.0%	100.0%	100.0%	100.0%	66.7%	100.0%	100.0%	100.0%	100.0%	77.8%
66	100.0%	100.0%	100.0%	100.0%	100.0%	55.6%	100.0%	100.0%	100.0%	100.0%	100.0%
67	100.0%	100.0%	100.0%	100.0%	100.0%	44.4%	100.0%	100.0%	100.0%	100.0%	100.0%
68	100.0%	100.0%	100.0%	100.0%	81.6%	100.0%	100.0%	100.0%	89.7%	100.0%	94.4%
69	100.0%	100.0%	100.0%	77.5%	100.0%	100.0%	100.0%	100.0%	84.6%	100.0%	100.0%
70	100.0%	100.0%	100.0%	94.0%	100.0%	99.2%	100.0%	76.3%	81.6%	100.0%	100.0%
71	100.0%	100.0%	100.0%	100.0%	100.0%	55.8%	100.0%	100.0%	92.2%	100.0%	9.4%
72	100.0%	100.0%	100.0%	95.4%	100.0%	23.0%	83.2%	89.8%	82.7%	100.0%	94.6%
73	100.0%	100.0%	100.0%	100.0%	100.0%	24.5%	99.4%	93.9%	60.6%	99.6%	90.9%
74	100.0%	100.0%	100.0%	100.0%	94.8%	98.9%	100.0%	100.0%	91.5%	100.0%	78.7%
75	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	95.2%	100.0%	100.0%
76	100.0%	100.0%	100.0%	100.0%	100.0%	96.6%	100.0%	100.0%	83.5%	100.0%	98.8%
78	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
79	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	93.3%	100.0%	93.3%
80	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	75.0%
81	100.0%	100.0%	100.0%	100.0%	100.0%	68.3%	100.0%	100.0%	98.3%	100.0%	100.0%
82	100.0%	100.0%	100.0%	100.0%	100.0%	90.9%	100.0%	100.0%	79.2%	100.0%	95.0%
83	100.0%	100.0%	100.0%	100.0%	94.6%	100.0%	100.0%	90.9%	83.6%	100.0%	98.2%
84	100.0%	100.0%	96.8%	97.2%	97.9%	100.0%	99.2%	92.8%	55.0%	98.5%	94.5%
85	100.0%	100.0%	88.0%	75.1%	98.4%	97.0%	98.1%	94.9%	42.3%	100.0%	74.1%
86	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	83.9%	100.0%	100.0%
87	100.0%	100.0%	86.1%	58.7%	36.2%	85.0%	53.6%	14.2%	47.0%	36.0%	45.1%
88	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	96.2%	7.7%	100.0%
89	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	90.6%	71.9%	100.0%	100.0%
90	100.0%	100.0%	96.5%	100.0%	100.0%	100.0%	99.5%	100.0%	62.7%	100.0%	93.9%
91	100.0%	100.0%	98.4%	100.0%	100.0%	100.0%	98.1%	100.0%	95.2%	100.0%	100.0%
92	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	88.0%	100.0%	90.9%
93	100.0%	100.0%	100.0%	12.1%	100.0%	89.3%	100.0%	75.0%	100.0%	0.0%	0.0%
94	100.0%	100.0%	90.6%	96.6%	100.0%	91.5%	97.6%	100.0%	70.1%	58.1%	92.7%
95	100.0%	100.0%	100.0%	100.0%	100.0%	24.4%	100.0%	100.0%	82.1%	85.9%	90.3%
96	100.0%	100.0%	100.0%	100.0%	100.0%	82.6%	100.0%	95.7%	77.2%	95.7%	68.3%
97	100.0%	100.0%	100.0%	100.0%	100.0%	91.7%	100.0%	100.0%	100.0%	66.7%	16.7%

Source: author's calculation