

Study on the use of “Change of Tariff Classification-based rules” in Preferential Rules of Origin

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Abstract

As part of the World Customs Organization (WCO) Comparative Study on Preferential Rules of Origin, the WCO Secretariat has conducted a study on the use of “Change of Tariff Classification (CTC)-based rules” in Product Specific Rules (PSRs) of existing Free Trade Agreements (FTAs). In the 20 largest FTAs selected according to trade volume, the average proportion of “CTC-based rules” is 73.41% based on the number of HS subheadings. Moreover, in more than half of them, the proportion exceeds 95%. The study revealed that HS classification plays a pivotal role in determining the origin of goods. The study also showed that “CTC-based rules” are used in particularly high proportions with respect to chemical products, leather products, wood products, metal products, miscellaneous goods and so on (i.e. Sections V to X, XII to XV, XX and XXI of the HS). Furthermore in PSRs, subheadings (6 digits) which are split by reason of having more than one rule are commonly found in Chapters 29 (Organic chemicals), 61 to 63 (Textile articles) and 84 to 85 (Machinery and mechanical appliances; electrical equipment, etc.).

1. Introduction

Considering the growing number of preferential trade agreements around the world and the important role played by Customs in the administration of such agreements, the WCO adopted an Action Plan to Improve the Understanding and Application of Preferential Rules of Origin at its 2007 Council Sessions. Among other things, the Action Plan called for a Study of existing preferential agreements and this Study is now available on the WCO Public Web site¹.

The current document is a new module of the WCO Comparative Study on Preferential Rules of Origin and is intended to complement and further develop it. While the existing modules focus mainly on explaining the rules of origin provisions, the focus in this particular study module is on the use of the “CTC-based rules” in PSRs of existing FTAs. Thus, goods to which “substantial transformation requirements/sufficient working or

¹ WCO Comparative Study on Preferential Rules of Origin: <http://www.wcoomd.org/en/topics/origin/instrument-and-tools/comparative-study-on-preferential-rules-of-origin.aspx>

processing criteria² are applied are the subject of this study. The results of this study module reveal how the HS is used in origin determination, the relationship between the HS and rules of origin, and trends in rules by product category.

This module is value neutral and does not intend to challenge the existing origin legislation of any WCO Members. For interpretation of specific origin provisions, it may be necessary to seek legal assistance from the competent authorities. The WCO assumes no liability or responsibility for any errors, omissions or inaccuracies in the content of this module.

2. Methods used for this study module

FTAs covered by this study module

The rules of origin of selected FTAs around the world were studied. The FTAs were selected based on trade volumes for 2013³. The study module initially identified the top 20 exporting countries and territories, followed by the top 20 importing countries and territories of all products⁴. They are as follows in descending order of trade volume:

Top 20 exporting countries and territories: China, United States, Germany, Japan, Netherlands, France, Republic of Korea, United Kingdom, Russia, Italy, Belgium, Canada, Singapore, Mexico, Saudi Arabia, India, Spain, Chinese Taipei, Australia, Brazil.

Top 20 importing countries and territories: United States, China, Germany, Japan, Hong Kong, China, France, United Kingdom, Netherlands, Republic of Korea, Belgium, Italy, India, Canada, Mexico, Singapore, Spain, Russia, Chinese Taipei, Turkey, Thailand.

Of the FTAs in application around the world, the study module selected those agreements that include two or more of the above countries or territories as Contracting Parties and which were reported to the World Trade Organization (WTO) according to the provisions of Article 24 of the General Agreement on Tariffs and Trade (GATT). Some 20 agreements, listed below, meet these conditions:

ASEAN-Japan, Australia-Singapore, Australia-Thailand, Australia-United States, China-Hong Kong, China, China-Singapore, European Union (EU)-Mexico,

² For a definition of this term, see the WCO Comparative Study at: <http://www.wcoomd.org/en/topics/origin/instrument-and-tools/comparative-study-on-preferential-rules-of-origin/specific-topics/general-topics/specific-topic.aspx>

³ The selection was made based on the data available from the Trade Map, International Trade Centre: <http://www.intracen.org/trade-support/trade-statistics/>

⁴ Export and import trade volumes are shown in Annex 1 to this document.

EU-Republic of Korea, EU-Turkey, India-Japan, India-Singapore, Japan-Mexico, Japan-Singapore, Japan-Thailand, Republic of Korea-Singapore, Republic of Korea-Turkey, Republic of Korea-United States, North American Free Trade Agreement (NAFTA), Singapore-Chinese Taipei, United States-Singapore.

Types of PSRs

The type of rules applied to goods of each subheading differs depending on the agreement⁵. Each agreement can be classified in one of the following categories:

- (1) **General rule only type**: rules to be applied to all items are defined solely by the agreement text, with no PSRs in existence.
- (2) **General rule + PSR type**: rules to be applied to all items are defined by the agreement text, and PSRs are set up for some of the items. In some agreements, PSRs take precedence over general rules, while in other agreements, fulfilment of either PSRs or general rules confers origin.
- (3) **PSR only type**: rules to be applied to all items are defined solely by the PSRs, with no general rules in existence.

For the purpose of calculating the proportion of “CTC-based rules”, the total number of HS subheadings is used as a denominator for all the rules described above. This produces a denominator of 5,113 for the HS 1996, 5,224 for the HS 2002, and 5,052 for the HS 2007.

Definition and proportion of “CTC-based rules”

In this study, the proportion of “CTC-based rules” is calculated on the basis of the number of subheadings.

When a rule or rules set for a certain subheading include(s) CTC rules⁶ (i.e. Change of Chapter (CC), Change of Heading (CTH) and Change of Subheading (CTSH)), such a subheading is considered as a subheading with “CTC-based rules”. Thus, not only simple CTC rules but also those combined with other types of rules such as value added rules, specific manufacturing or processing operation rules and/or other requirements (e.g. exclusion of materials of a specific chapter, heading or subheading)

⁵ For the purposes of this categorization, regime-wide rules of origin such as accumulation/cumulation, insufficient transformation/minimal operation have not been taken into consideration.

⁶ For a definition of this term, see the WCO Comparative Study at:
<http://www.wcoomd.org/en/topics/origin/instrument-and-tools/comparative-study-on-preferential-rules-of-origin/specific-topics/general-annex/cth.aspx>

are counted as subheadings with “CTC-based rules”. Therefore, the proportion of “CTC-based rules” is calculated by means of the following equation.

$$\text{Proportion of “CTC-based rules”} = \frac{(\text{Number of subheadings with “CTC-based rules”})}{(\text{Total number of HS subheadings})}$$

Where a subheading is split in order to create more than one rule, the whole rule for that subheading is counted as a “CTC-based rule” if at least one of the divided rules is a “CTC-based rule”.

3. Findings

(A) Proportion of “CTC-based rules”

The number and proportion of “CTC-based rules” in each FTA are shown in Table 1 below.

Table 1: Number and percentage of “CTC-based rules”

Agreement Name	Percentage of CTC-based rules	Number of CTC-based rules	HS version used	Type
ASEAN-Japan	95.73%	5,001	HS 2002	General rule + PSR
Australia-Singapore	0.00%	0	-	General rule
Australia-Thailand	97.78%	5,108	HS 2002	PSR
Australia-United States	99.79%	5,213	HS 2002	PSR
China-Hong Kong, China	0.53%	27	HS 1996	PSR
China-Singapore	2.45%	124	HS 2007	General rule + PSR
EU-Mexico	56.07%	2,867	HS 1996	PSR
EU-Korea (Republic of)	59.26%	2,994	HS 2007	PSR
EU-Turkey	52.47%	2,741	HS 2002	PSR
India-Japan	70.07%	3,540	HS 2007	General rule + PSR
India-Singapore	100.00%	5,224	HS 2002	General rule + PSR
Japan-Mexico	99.52%	5,199	HS 2002	PSR
Japan-Singapore	99.18%	1,385	HS 2002	PSR
Japan-Thailand	98.32%	5,136	HS 2002	PSR
Korea (Republic of)-Singapore	99.41%	5,022	HS 2007	PSR
Korea (Republic of)-Turkey	59.26%	2,994	HS 2007	PSR
Korea (Republic of)-United States	99.35%	5,190	HS 2002	PSR
North American Free Trade Agreement (NAFTA)	99.51%	5,027	HS 2007	PSR
Singapore-Chinese Taipei	83.17%	4,202	HS 2007	PSR
United States-Singapore	96.25%	5,028	HS 2002	PSR

The average proportion of “CTC-based rules” in all 20 FTAs is 73.41%, of which almost all subheadings (over 95%) are found to be “CTC-based rules” in the top 11 FTAs. This

is a useful reminder that HS classification plays a vital role in determining the origin of goods.

Exceptionally low proportions are found in the Australia-Singapore, China-Hong Kong, China and China-Singapore FTAs. This is due to the fact that general rules do not include CTC-based rules in the Australia-Singapore and China-Singapore FTAs, and that the total number of subheadings which have rules of origin is very small in the China-Hong Kong, China FTA.

(B) Proportion by product area

The proportions of “CTC-based rules” by Chapter in each of the FTAs are shown in Annex 2 hereto.

According to the information provided in Annex 2, the average proportion of “CTC-based rules” is particularly high, equating to approximately 80% with respect to chemical products, leather products, wood products, metal products, miscellaneous goods and so on (i.e. Sections V to X, XII to XV, XX and XXI).

In contrast, the proportion is somewhat lower, approximately 50 to 60%, with respect to agricultural and food products (Sections I to IV) and textile and textile articles (Section XI). This is considered as being due to the fact that the “wholly obtained”⁷ criterion is widely used in the agricultural and food products sector, and that specific manufacturing or processing operation rules are used in certain FTAs in the textile and textile articles sector.

(C) Split subheadings

Where there is a need to have a separate rule for only part of the goods of a subheading or for other reasons, the subheading may be split into more than one subdivision in PSRs. Such subheadings are hereinafter called “split subheading(s)”.

(Hypothetical example)

Subheading	Goods covered	Rules of origin
7701.10	XXX	CTSH
	Goods other than XXX	CTH

⁷ For a definition of this term, see the WCO Comparative Study at: <http://www.wcoomd.org/en/topics/origin/instrument-and-tools/comparative-study-on-preferential-rules-of-origin/specific-topics/study-topics/who.aspx>

The numbers of split subheadings by Chapter are shown in Annex 3 hereto.

Split subheadings are widely present in PSRs. In particular, they are commonly found in Chapters 29 (average number of split subheadings: 8.4; number of FTAs: 9), 61 to 63 (average number of split subheadings: 8.15 – 12.6; number of FTAs: 7 – 9) and 84 to 85 (average number of split subheadings: 6.15 – 8.5; number of FTAs: 9). Most of them are established in order to have a different rule for a part of the goods of a subheading, while some are designed to provide different rules depending on how many years have passed since the agreement came into effect.

Regarding the number of subdivisions under a subheading, there is a wide range of variations from two to a few dozen.

4. Conclusion

As part of the WCO Comparative Study on Preferential Rules of Origin, a study on the use of “CTC-based rules” in PSRs has been conducted. The results, showing extremely high proportions of “CTC-based rules”, serve to remind us that HS classification plays an essential role in origin determination. The study also shows that “CTC-based rules” are used in particularly high proportions with respect to chemical products, leather products, wood products, metal products, miscellaneous goods and so on (Sections V to X, XII to XV, XX and XXI).

In cases where different versions of the HS are used, respectively, for HS classification and for origin determination, operations to determine the origin become complicated and time-consuming, especially in the case of “CTC-based rules”. For example, if the latest version of the HS is applied for HS classification while an older version is used for origin determination, the goods need to be classified twice: once using the latest version of the HS for classification purposes and the other using the older version for origin determination. In order to avoid misapplication and to facilitate origin determination, it is critically important to keep updating the rules of origin (i.e. PSRs) to ensure consistency between HS classification and origin determination.

Regarding “split subheadings”, they are widely present in PSRs, especially in Chapters 29 (Organic chemicals), 61 to 63 (Textile articles) and 84 to 85 (Machinery and mechanical appliances; electrical equipment, etc.).

In general, the presence of more than one rule under a subheading causes complexity and confusion when applying the rules and may lead to problems such as misapplication of the said rules. To enhance the user-friendliness of the rules of origin, it may be desirable to identify separate items related to origin determination (such as

split subheading items) in the HS Nomenclature. This approach would also contribute to trade facilitation.

Annex 1: Export and import trade volumes

1. Top 20 exporting countries and territories

Unit: thousand US dollar:

	Country/territory	Value of exports in 2013
1	China	2,210,522,658
2	United States	1,578,001,362
3	Germany	1,458,646,978
4	Japan	715,097,244
5	Netherlands	664,177,528
6	France	566,879,047
7	Korea (Republic of)	559,618,559
8	United Kingdom	548,967,453
9	Russian Federation	526,392,353
10	Italy	517,658,861
11	Belgium	511,492,495
12	Canada	456,395,278
13	Singapore	410,466,111
14	Mexico	380,095,885
15	Saudi Arabia	356,394,522
16	India	336,611,389
17	Spain	310,963,648
18	Chinese Taipei	305,137,251
19	Australia	252,155,105
20	Brazil	242,178,054

Source: International Trade Centre

2. Top 20 importing countries and territories

Unit: thousand US dollar

	Country/territory	Value of imports in 2013
1	United States	2,328,328,633
2	China	1,949,934,687
3	Germany	1,194,482,625
4	Japan	833,166,061
5	Hong Kong, China	703,871,670
6	France	668,658,053
7	United Kingdom	655,698,173
8	Netherlands	590,843,609
9	Korea (Republic of)	515,572,970
10	Belgium	488,442,091
11	Italy	477,348,840
12	India	466,045,567
13	Canada	461,799,509
14	Mexico	381,210,169
15	Singapore	373,212,237
16	Spain	332,266,846
17	Russian Federation	317,805,605
18	Chinese Taipei	270,688,956
19	Turkey	251,650,560
20	Thailand	250,708,238

Source: International Trade Centre

Annex 2: Proportion of “CTC-based rules” by Chapter

Section	Chapter	ASEAN-Japan	Australia-Singapore	Australia-Thailand	Australia-US	China-Hong Kong,China	China-Singapore	EU-Mexico	EU-Rep. of Korea	EU-Turkey	India-Japan	India-Singapore	Japan-Mexico	Japan-Singapore	Japan-Thailand	Rep. of Korea-Singapore	Rep. of Korea-Turkey	Rep. of Korea-US	NAFTA	Singapore-Taipei	US-Singapore	Average (%)	
I	1	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	60.0%
	2	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	100.0%	100.0%	0.0%	100.0%	100.0%	55.0%
	3	100.0%	0.0%	92.6%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	0.0%	100.0%	100.0%	100.0%	100.0%	95.7%	59.4%
	4	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	60.0%
	5	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	60.0%
II	6	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	60.0%
	7	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	60.0%
	8	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	0.0%	100.0%	100.0%	100.0%	98.2%	100.0%	59.9%
	9	93.8%	0.0%	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.5%	100.0%	100.0%	100.0%	100.0%	93.5%	0.0%	100.0%	100.0%	100.0%	93.5%	100.0%	59.4%
	10	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	60.0%
	11	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.6%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	100.0%	100.0%	100.0%	92.9%	100.0%	59.8%
	12	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	0.0%	100.0%	100.0%	100.0%	94.6%	100.0%	59.7%
	13	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	60.0%
	14	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	60.0%
III	15	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	78.3%	66.7%	78.3%	0.0%	100.0%	100.0%	100.0%	100.0%	95.6%	66.7%	100.0%	100.0%	42.2%	100.0%	71.4%	
IV	16	100.0%	0.0%	100.0%	100.0%	0.0%	26.9%	0.0%	0.0%	0.0%	11.5%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	100.0%	100.0%	100.0%	42.3%	100.0%	59.0%
	17	93.8%	0.0%	100.0%	100.0%	0.0%	0.0%	43.8%	43.8%	43.8%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	43.8%	100.0%	100.0%	100.0%	100.0%	100.0%	68.4%
	18	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	100.0%	100.0%	100.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	80.0%
	19	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	17.6%	31.6%	15.8%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	31.6%	100.0%	100.0%	100.0%	100.0%	100.0%	64.8%
	20	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	63.6%	45.1%	68.0%	0.0%	100.0%	100.0%	100.0%	100.0%	98.0%	45.1%	100.0%	100.0%	100.0%	100.0%	100.0%	71.0%
	21	93.8%	0.0%	100.0%	100.0%	0.0%	6.3%	87.5%	75.0%	87.5%	25.0%	100.0%	100.0%	100.0%	93.8%	87.5%	75.0%	100.0%	100.0%	100.0%	100.0%	93.8%	76.3%
	22	95.5%	0.0%	90.9%	100.0%	0.0%	0.0%	100.0%	100.0%	100.0%	9.1%	100.0%	100.0%	95.5%	95.5%	100.0%	100.0%	100.0%	77.3%	100.0%	100.0%	100.0%	78.2%
	23	92.0%	0.0%	100.0%	100.0%	0.0%	0.0%	88.0%	78.3%	88.0%	0.0%	100.0%	100.0%	92.0%	92.0%	91.3%	78.3%	100.0%	100.0%	100.0%	17.4%	100.0%	70.9%
	24	100.0%	0.0%	66.7%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	58.3%
V	25	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	97.3%	92.8%	98.6%	98.6%	100.0%	100.0%	100.0%	100.0%	100.0%	92.8%	100.0%	100.0%	100.0%	100.0%	100.0%	84.0%
	26	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	64.9%	100.0%	100.0%	100.0%	100.0%	67.6%	100.0%	100.0%	81.6%
	27	100.0%	0.0%	97.7%	100.0%	0.0%	0.0%	100.0%	0.0%	100.0%	100.0%	100.0%	100.0%	95.3%	93.0%	100.0%	0.0%	100.0%	88.1%	95.2%	100.0%	100.0%	73.5%
VI	28	100.0%	0.0%	100.0%	100.0%	0.5%	0.0%	99.5%	100.0%	99.5%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	99.5%	84.9%
	29	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	88.0%	87.3%	86.5%	98.8%	100.0%	100.0%	100.0%	100.0%	100.0%	87.3%	100.0%	100.0%	100.0%	100.0%	99.7%	82.4%
	30	100.0%	0.0%	100.0%	100.0%	0.0%	3.2%	86.2%	77.4%	83.9%	100.0%	100.0%	96.8%	96.8%	96.8%	100.0%	77.4%	100.0%	100.0%	100.0%	96.8%	93.5%	80.4%
	31	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	95.7%	100.0%	84.8%
	32	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	100.0%	61.4%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	61.4%	100.0%	100.0%	100.0%	100.0%	100.0%	81.1%
	33	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	60.0%	72.4%	60.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	72.4%	100.0%	100.0%	100.0%	100.0%	100.0%	78.2%

Section	Chapter	ASEAN-Japan	Australia-Singapore	Australia-Thailand	Australia-US	China- Hong Kong,China	China-Singapore	EU-Mexico	EU-Rep. of Korea	EU-Turkey	India-Japan	India-Singapore	Japan-Mexico	Japan-Singapore	Japan-Thailand	Rep. of Korea-Singapore	Rep. of Korea-Turkey	Rep. of Korea-US	NAFTA	Singapore-Taipei	US-Singapore	Average (%)		
	34	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	85.0%	
	35	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	86.7%	86.7%	86.7%	73.3%	100.0%	100.0%	100.0%	100.0%	100.0%	86.7%	100.0%	100.0%	100.0%	100.0%	100.0%	81.0%	
	36	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	85.0%
	37	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	85.0%
	38	100.0%	0.0%	100.0%	100.0%	16%	0.0%	49.2%	91.3%	54.9%	97.5%	100.0%	85.9%	87.3%	87.3%	100.0%	91.3%	100.0%	100.0%	100.0%	88.8%	100.0%	76.8%	
VII	39	100.0%	0.0%	100.0%	100.0%	0.0%	37.3%	78.6%	80.2%	16%	100.0%	100.0%	100.0%	100.0%	96.8%	100.0%	80.2%	100.0%	100.0%	100.0%	96.8%	100.0%	78.6%	
	40	100.0%	0.0%	94.2%	100.0%	0.0%	0.0%	91.7%	95.3%	90.7%	100.0%	100.0%	100.0%	98.8%	98.8%	100.0%	95.3%	100.0%	100.0%	100.0%	98.8%	100.0%	83.2%	
VIII	41	100.0%	0.0%	100.0%	100.0%	0.0%	2.7%	91.2%	100.0%	92.1%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	84.3%	
	42	100.0%	0.0%	100.0%	100.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	95.5%	89.8%	
	43	100.0%	0.0%	100.0%	100.0%	0.0%	100.0%	83.3%	83.3%	78.6%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	83.3%	100.0%	100.0%	100.0%	100.0%	100.0%	86.4%	
IX	44	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	100.0%	86.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	86.7%	100.0%	100.0%	100.0%	100.0%	100.0%	83.7%	
	45	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	85.7%	71.4%	71.4%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	71.4%	100.0%	100.0%	100.0%	100.0%	100.0%	80.0%	
	46	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	85.0%	
X	47	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	80.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	84.0%	
	48	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	87.2%	97.1%	95.5%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	97.1%	100.0%	100.0%	100.0%	100.0%	100.0%	83.8%	
	49	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	94.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	84.7%	
XI	50	100.0%	0.0%	50.0%	100.0%	0.0%	0.0%	40.0%	44.4%	40.0%	11.1%	100.0%	100.0%	100.0%	100.0%	100.0%	44.4%	100.0%	100.0%	100.0%	100.0%	100.0%	66.5%	
	51	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	44.4%	47.4%	47.4%	18.4%	100.0%	100.0%	100.0%	100.0%	100.0%	47.4%	100.0%	100.0%	100.0%	65.8%	100.0%	68.5%	
	52	100.0%	0.0%	41.2%	100.0%	0.0%	0.0%	3.8%	4.0%	3.8%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	4.0%	100.0%	100.0%	100.0%	58.9%	41.2%	52.9%	
	53	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	74.2%	39.1%	51.7%	13.0%	100.0%	100.0%	100.0%	100.0%	100.0%	39.1%	100.0%	100.0%	100.0%	26.1%	100.0%	67.2%	
	54	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	0.0%	100.0%	100.0%	100.0%	0.0%	100.0%	55.0%	
	55	100.0%	0.0%	98.3%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	0.0%	100.0%	100.0%	100.0%	0.0%	100.0%	54.9%	
	56	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	0.0%	100.0%	100.0%	100.0%	74.2%	100.0%	58.7%	
	57	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	0.0%	100.0%	100.0%	100.0%	0.0%	100.0%	55.0%	
	58	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	12.2%	12.5%	12.2%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	12.5%	100.0%	100.0%	100.0%	0.0%	100.0%	57.5%	
	59	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	4.0%	4.2%	4.2%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	4.2%	100.0%	100.0%	100.0%	0.0%	100.0%	55.8%	
	60	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	0.0%	100.0%	100.0%	100.0%	0.0%	100.0%	55.0%	
	61	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	0.0%	100.0%	100.0%	100.0%	0.0%	100.0%	55.0%	
	62	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	46.2%	1.8%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	1.8%	100.0%	100.0%	100.0%	0.0%	100.0%	57.5%	
	63	94.9%	0.0%	94.9%	100.0%	0.0%	0.0%	1.7%	5.8%	0.0%	0.0%	0.0%	100.0%	100.0%	94.9%	100.0%	5.8%	100.0%	100.0%	100.0%	0.0%	100.0%	54.9%	
XII	64	100.0%	0.0%	100.0%	100.0%	3.4%	100.0%	75.9%	15.4%	13.8%	100.0%	100.0%	100.0%	100.0%	100.0%	15.4%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	76.2%	
	65	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	72.7%	77.8%	72.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	77.8%	100.0%	100.0%	100.0%	100.0%	100.0%	80.1%	
	66	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	57.1%	50.0%	57.1%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	50.0%	100.0%	100.0%	100.0%	100.0%	100.0%	75.7%	

Section	Chapter	ASEAN-Japan	Australia-Singapore	Australia-Thailand	Australia-US	China-Hong Kong,China	China-Singapore	EU-Mexico	EU-Rep. of Korea	EU-Turkey	India-Japan	India-Singapore	Japan-Mexico	Japan-Singapore	Japan-Thailand	Rep. of Korea-Singapore	Rep. of Korea-Turkey	Rep. of Korea-US	NAFTA	Singapore-Taipei	US-Singapore	Average (%)	
	67	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	85.0%
XIII	68	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	78.8%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	83.9%
	69	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	85.0%
	70	100.0%	0.0%	100.0%	100.0%	15%	0.0%	86.4%	85.9%	85.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	85.9%	100.0%	100.0%	100.0%	100.0%	100.0%	82.3%
XIV	71	100.0%	0.0%	84.9%	100.0%	0.0%	0.0%	78.8%	73.6%	79.2%	100.0%	100.0%	100.0%	92.5%	92.5%	100.0%	73.6%	100.0%	100.0%	92.5%	100.0%	100.0%	78.4%
XV	72	71.9%	0.0%	100.0%	100.0%	0.0%	5.4%	19.9%	20.4%	19.9%	100.0%	100.0%	100.0%	100.0%	95.9%	100.0%	20.4%	100.0%	100.0%	95.8%	100.0%	100.0%	67.5%
	73	8.3%	0.0%	100.0%	100.0%	0.0%	0.0%	74.6%	68.0%	75.2%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	68.0%	100.0%	100.0%	100.0%	100.0%	100.0%	74.7%
	74	100.0%	0.0%	98.3%	98.3%	1.7%	0.0%	100.0%	94.1%	100.0%	100.0%	100.0%	98.3%	98.3%	98.3%	100.0%	94.1%	100.0%	98.0%	98.0%	96.6%	100.0%	83.7%
	75	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	94.1%	94.1%	100.0%	100.0%	100.0%	100.0%	94.1%	100.0%	100.0%	84.1%
	76	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	94.4%	97.2%	100.0%	100.0%	100.0%	100.0%	97.2%	97.2%	100.0%	97.2%	100.0%	100.0%	97.2%	100.0%	100.0%	84.0%
	78	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	90.0%	100.0%	90.0%	100.0%	100.0%	100.0%	90.0%	90.0%	100.0%	100.0%	100.0%	100.0%	100.0%	87.5%	100.0%	82.4%
	79	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	90.0%	90.0%	100.0%	100.0%	100.0%	100.0%	88.9%	100.0%	83.4%
	80	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	87.5%	87.5%	100.0%	100.0%	100.0%	100.0%	80.0%	100.0%	82.8%
	81	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	72.2%	0.0%	66.7%	100.0%	100.0%	100.0%	74.5%	74.5%	100.0%	0.0%	100.0%	100.0%	100.0%	75.0%	100.0%	68.1%
	82	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	98.5%	98.5%	98.5%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	98.5%	100.0%	100.0%	100.0%	100.0%	100.0%
83	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	85.0%
XVI	84	98.8%	0.0%	100.0%	99.0%	0.2%	0.0%	55.4%	94.7%	57.0%	100.0%	100.0%	97.7%	100.0%	100.0%	95.8%	94.7%	99.0%	99.8%	100.0%	96.3%	100.0%	79.4%
	85	99.7%	0.0%	100.0%	99.7%	5.1%	0.0%	55.3%	70.0%	50.5%	100.0%	100.0%	100.0%	99.7%	99.7%	100.0%	70.0%	100.0%	95.1%	99.6%	85.0%	100.0%	76.5%
XVII	86	100.0%	0.0%	95.8%	95.8%	0.0%	0.0%	4.2%	13.0%	4.2%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	13.0%	100.0%	100.0%	100.0%	95.8%	100.0%	66.1%
	87	38.2%	0.0%	98.7%	96.1%	0.0%	0.0%	35.5%	58.7%	15.8%	100.0%	100.0%	100.0%	100.0%	76.3%	100.0%	58.7%	63.2%	100.0%	100.0%	100.0%	100.0%	67.1%
	88	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	85.0%
	89	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
XVIII	90	100.0%	0.0%	100.0%	100.0%	3.8%	0.0%	57.5%	97.3%	55.2%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	97.3%	100.0%	100.0%	100.0%	73.6%	100.0%	79.2%
	91	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	12.7%	11.8%	20.8%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	11.8%	98.1%	100.0%	100.0%	98.1%	100.0%	67.7%
	92	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	65.0%
XIX	93	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	65.0%
XX	94	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	73.0%	74.4%	73.0%	97.4%	100.0%	100.0%	100.0%	100.0%	100.0%	74.4%	100.0%	100.0%	100.0%	100.0%	100.0%	79.6%
	95	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	85.0%
	96	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	96.0%	89.6%	95.9%	100.0%	100.0%	98.0%	100.0%	100.0%	100.0%	89.6%	100.0%	100.0%	100.0%	100.0%	100.0%	83.5%
XXI	97	100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	85.0%
Overall(%)		95.7%	0.0%	97.8%	99.8%	0.5%	2.5%	56.1%	59.3%	52.5%	70.1%	100.0%	99.5%	99.2%	98.3%	99.4%	59.3%	99.3%	99.5%	83.2%	96.2%	100.0%	73.4%

Annex 3: Number of split subheadings by Chapter

Section	FTAs		ASEAN-Japan	Australia-Singapore	Australia-Thailand	Australia-US	China-Hong Kong, China	China-Singapore	EU-Mexico	EU-Rep. of Korea	EU-Turkey	India-Japan	India-Singapore	Japan-Mexico	Japan-Singapore	Japan-Thailand	Rep. of Korea-Singapore	Korea-Turkey	Rep. of Korea-US	NAFTA	Singapore-Taipei	US-Singapore	Average	Number of FTAs	
	Chapter	HS2002																							
I	1																						0	0	
	2																							0	0
	3														1									0.05	1
	4																							0	0
	5								2		1													0.15	2
II	6																							0	0
	7																			1				0.05	1
	8																							0	0
	9								7										20	2				1.45	3
	10																							0	0
	11																							0	0
	12																				1			0.05	1
	13								3											1	1			0.25	3
14																							0	0	
III	15							36		36				4		1							3.85	4	
IV	16										1			1										0.1	2
	17							10	10	10								10						2	4
	18																			1				0.05	1
	19							8	1	8				1	1			1		3				1.15	7
	20							25		15									1	2				2.15	4
	21				1							1	1	1	1				1	4			1	0.55	8
	22	1			1								1	1	1				3	1			1	0.5	8
	23							3	1	3								1		1				0.45	5
	24																			1				0.05	1
V	25							14	4	12								4						1.7	4
	26																							0	0
	27					1		9		9														0.95	3
VI	28			1	2			8		7			6				1			18		1		2.2	8
	29				1			49	13	52		7	8				1	13		24				8.4	9
	30			1		2		18		18										2		1		2.1	6
	31							8	8	8								8		3				1.75	5
	32				1	1		4	3	3								3		2				0.85	7
	33																			2				0.1	1
	34							7	2	3				1				2		2				0.85	6

Section	FTAs	ASEAN-Japan	Australia-Singapore	Australia-Thailand	Australia-US	China-Hong Kong, China	China-Singapore	EU-Mexico	EU-Rep. of Korea	EU-Turkey	India-Japan	India-Singapore	Japan-Mexico	Japan-Singapore	Japan-Thailand	Rep. of Korea-Singapore	Korea-Turkey	Rep. of Korea-US	NAFTA	Singapore-Taipei	US-Singapore	Average	Number of FTAs
	Chapter	HS2002	-	HS2002	HS2002	HS1996	HS2007	HS1996	HS2007	HS2002	HS2007	HS2002	HS2002	HS2002	HS2002	HS2007	HS2007	HS2002	HS2007	HS2007	HS2007	HS2002	
VI	35							4	4	4							4					0.8	4
	36																					0	0
	37							1	5	1							5					0.6	4
	38			2	1	1		9	3	9		1	1			1	3		9		1	2.05	12
VII	39					3		77		99												8.95	3
	40							7	5	6							5		6			1.45	5
VIII	41				10	1													10	9		1.5	4
	42															1		4				0.25	2
	43							1	1	1							1					0.2	4
IX	44							51	47	55							47					10	4
	45																					0	0
	46										3		3	2	2							0.5	4
X	47																					0	0
	48			1		1		17	1	21						6	1		34		1	4.15	9
	49					1		1		1		1										0.2	4
XI	50					1		4	5	4							5					0.95	5
	51							11	11	11							11					2.2	4
	52							77	70	77							70					14.7	4
	53							7	7	7							7					1.4	4
	54				1	1		35	34	34							34	1	1		1	7.1	9
	55							68	58	68							58					12.6	4
	56							1	4	1							4		4			0.7	5
	57							23	21	23							21					4.4	4
	58							36	35	36							35					7.1	4
	59					3		11	16	13							16					2.95	5
	60					1																0.05	1
	XII	64				7													7				0.7
65																1						0.05	1
66																						0	0
67				1	1													1	1		1	0.25	5
	68							8	7								8		2			1.25	4

Section	Chapter	FTAs																			Average	Number of FTAs	
		ASEAN-Japan	Australia-Singapore	Australia-Thailand	Australia-US	China-Hong Kong, China	China-Singapore	EU-Mexico	EU-Rep. of Korea	EU-Turkey	India-Japan	India-Singapore	Japan-Mexico	Japan-Singapore	Japan-Thailand	Rep. of Korea-Singapore	Korea-Turkey	Rep. of Korea-US	NAFTA	Singapore-Taipei			US-Singapore
XIII	69																				0	0	
	70					1		21	12	22						1	12				3.45	6	
XIV	71					3		21	4	21						4					2.65	5	
XV	72																				0	0	
	73				1	1		10		10								1	3		1.3	6	
	74							8		8				1	2				2		1.05	5	
	75			2	2													2	2		2	0.5	5
	76					2		1		1											0.2	3	
	78															1				2		0.15	2
	79															1				3		0.2	2
	80															1				2		0.15	2
	81								26		5									4		1.75	3
	82										4											0.2	1
	83								8													0.4	1
XVI	84				2	4		36		24		4	2			10		1	40		6.15	9	
	85				15	22		37		21		4	6			19		14	32		8.5	9	
XVII	86			1	1							1						1	1		1	0.3	6
	87							1		1									11			0.65	3
	88							1	1	1						1	1			1		0.3	6
	89																					0	0
XVIII	90				1	5		18		7		10				7		1	9		2.9	8	
	91							1	2	1								2				0.3	4
	92																					0	0
XIX	93																				0	0	
XX	94	1						20		14				1	1						1.85	5	
	95							1	1	1						1	1				0.25	5	
	96							12	8	11									1		2	5	
XXI	97																				0	0	
		2	0	9	59	61	0	1103	446	1046	8	31	27	8	8	55	446	69	261	9	22		
