Chapter 3

Taking Stock of the ROOs in the ASEAN + 1 FTAs: Toward Deepening East Asian Integration

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CHAPTER 3

Taking Stock of the ROOs in the ASEAN + 1 FTAs: Toward Deepening East Asian Integration

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This study compiles a database on the Rules of Origin (ROOs) of the ASEAN plus 1 FTAs- namely ASEAN Trade in Goods Agreement, ASEAN-Korea FTA, ASEAN_China FTA, ASEAN-Japan Comprehensive Economic Partnership, ASEAN-Australia-New Zealand FTA. For further insights, database compilation is also done for the bilateral FTAs forged by Japan with individual ASEAN countries and India.

Multiple FTAs could create a complex web of rules. Using the database, this paper assesses the various ROO regimes of these FTAs, particularly with respect to their degree of commonality, convergence and relative restrictiveness. A methodology for measurement of the degree of restrictiveness is formulated and restrictiveness indices are computed. The paper then suggests recommendations for ROO reforms within the context of trade facilitation and deepening East Asian regional integration. The paper also suggests further methodologies for analysis, especially where the database from the ERIA FTA mapping project could be useful.

[1] The author acknowledges the patient and excellent support of Ms. Melalyn Mantaring in the compilation and cleaning of the database.

1. INTRODUCTION

Much has been said about the complex web created by the proliferation of FTAs that has been happening during the past decade. At the center of the problem is the resulting multiple Rules of Origin (ROOs) that necessarily accompany any preferential trading arrangement. ROOs are difficult enough to administer and comply with, even in the case of a single FTA. Having different ROOs across multiple FTAs makes it even more complicated. Take the case, for example, of an ASEAN producer exporting to another ASEAN country. Early on, there is just the AFTA-CEPT, and the only decision he has to make is whether the preferential margin of preference is worth complying with the ROO. Now he has multiple choices-- whether to use ATIGA, AKFTA, ACFTA, AJCEP, AANZFTA, etc. A lot more parameters enter into his decision making process, with as many ROOs, and even more applicable tariffs and margins of preference to take into account. The task of weighing preferential tariff benefits versus cost of ROO compliance becomes compounded. Hence, it is important to review the ROO systems across the multiple FTAs in the East Asia if one is to address regional integration and trade facilitation issues.

This component of the research project on comprehensive mapping of FTAs in East Asia aims to provide a useful base for addressing the ROO problem. To this end, this component has two major tasks. The first task is to build a database that compiles comprehensive and comparable information on the ROOs of the ASEAN plus 1 FTAs. The second is to perform an assessment of the various ROO regimes of these FTAs, particularly with regards to their degree of commonality and relative restrictiveness. The paper then suggests recommendations for ROO reforms and further methodologies for analysis, especially where the database from the ERIA FTA mapping project could be useful.

2. ROO Database Compilation

2.1 FTAs covered and the data-sources

The first task is data base compilation. The main output is the Matrix of ROOs. The 2002 Harmonized System (HS) Classification is generally used as base, but

concordance with the 2007 HS is also indicated. The first set of ROO Matrix contains the product specific rules (PSRs) for the different ASEAN plus 1 FTAs, building on an earlier compilation of PSRs by the ASEAN Secretariat. The Matrix was expanded to include all 6-digit HS lines, indicating the General Rule (GR) as applicable where no PSR is provided. This expansion will make it easier to link with other data and information sets (such as tariffs and trade data), aside from making readily available the information about what ROO is applicable for any specific product at the 6-digit level. A second set of ROO Matrix covers the different Japan bilateral FTAs with individual ASEAN countries.

This project compiles the ROO database for the following FTAs:

1. The ASEAN Trade in Goods (ATIGA);
2. The ASEAN plus 1 FTAs—
    a. ASEAN-China FTA (ACFTA),
    b. ASEAN-Korea FTA (AKFTA),
    c. ASEAN-Japan Comprehensive Economic Partnership (AJCEP), and
    d. ASEAN-Australia-New Zealand FTA (AANZFTA); and
3. The Japan bilateral FTAs—
    a. Japan-Brunei
    b. Japan-Indonesia
    c. Japan-Malaysia
    d. Japan-Philippines
    e. Japan-Singapore
    f. Japan-Thailand
    g. Japan-Vietnam,
    h. Japan-India

As the product specific ROOs (PSRs) are still under negotiations in the case of ASEAN-India, the ROO data set for the Japan-India Economic Partnership Agreement (EPA) could indicate the possible nature of PSRs for ASEAN-India FTA (AIFTA). Hopefully lessons will be learned from the earlier Japan bilateral FTAs and the ASEAN + 1 FTAs.

Accompanying the set of ROOs for these FTAs are additional provisions for the certification and verification process, and the agreed upon origin certification procedures. In terms of comparison of the main provisions regarding the ROOs and the origin certification procedures, the different ASEAN plus 1 FTAs, many similarities can be discerned at the outset. (A good comparison of the different operational certification procedures has been compiled in the AANZFTA primer.)

2.2 Originating Goods: Methods of Determination

There are four major methods of origin determination used in the various ASEAN plus one FTAs convered: Wholly obtained or produced (WO), Regional Value Content (RVC), Change in Tariff Classification (CTC) and Specific Process Rule (SPR). A general (basic) rule is provided in the main text of the agreement. Product specific rules (PSRs) are negotiated and attached as Annex. As such, the applicable ROO for a specific product is the General Rule unless specified in the Annex otherwise as subject to Product Specific Rule (PSR). The PSR could be a co-equal rule, combination, or variation of the different methods of determining origin. (Table 1)

Except for ACFTA and AIFTA, the basic rule used is a co-equal rule: RVC(40) or a change in tariff heading (CTH). RVC(40) requires a minimum 40 % regional value content (cumulated from parties of the agreement). CTH is equivalent to CTC at 4-digit level. For ACFTA, the general rule is RVC(40). As such, an exporter has a choice between the two 'co-equal' rules. In the case of ASEAN-India, the general rule is RVC(35) + CTSH, *i. e.*, two simultaneous rules to comply with. Hence, the required minimum regional value content is lower at 35 %, but it has an additional requirement of a change in tariff classification, albeit at a higher 6-digit level. At the time the project is undertaken, the PSRs for ASEAN-India FTA are still under negotiation.

Table 1 Originating Goods and Methods of Determination

Agreements	Methods of Determining Origin	General Rule
ASEAN Trade in Goods Agreement (ATIGA)	1. Wholly obtained or produced (WO)	RVC(40): RVC of at least 40 %, or
	2. Regional Value Content (RVC)	CTH: CTC at 4-digit
	3. Change in Tariff Classification (CTC)	
	4. Specific Process Rule (SPR)	
ASEAN-China Trade in Goods Agreement	1. WO	RVC(40)
	2. RVC	
	3. SPR	
ASEAN-Korea Trade in Goods Agreement (AKFTA)	1. WO	RVC(40) or CTH
	2. RVC	
	3. CTC	
	4. SPR	
ASEAN-Japan Comprehensive Economic Partnership	1. WO	RVC(40) or CTH
	2. RVC	
	3. CTC)	
	4. SPR	
ASEAN-Australia/New Zealand FTA (AANZFTA)	1. WO	RVC(40) or CTH
	2. RVC	
	3. CTC)	
	4. SPR	
ASEAN-India Trade in Goods	1. WO	35% RVC+ CTSH
	2. 35% RVC+ CTSH	

Notes:

1) Applicable ROO: General Rule or Product Specific Rule (PSR) where specified

2) PSR: co-equal, combination, or variation of the different methods of determining origin as agreed upon for certain products.

3) PSRs under negotiation for ASEAN-India

i. Minimal Operations and Processes

They have very similar provisions on what are considered minimal operations and processes (and as such would not be eligible to confer origin).

ii. Cumulation

All the ASEAN plus one FTAs allow for cumulation of inputs from parties provided inputs pass origin criteria. ATIGA further allows partial cumulation for products with less than 40 % but not lower than 20 % on a pro-rated basis.

iii. *De Minimis*

For the agreements using the CTC criterion, similar basic principles on *de minimis* are used, with slight variations across the various FTAs. (Table 2)

Table 2. Cumulation and De Minimis Rules

Agreements	Cumulation	De minimis
ASEAN Trade in Goods Agreement (ATIGA)	Cumulation permitted across ATIGA provided inputs each satisfy RVC or CTC rule Partial cumulation permitted in RVC calculation on pro rata basis where RVC is at least 20%	2 Rules: (1) For goods other than textiles and apparel in HS 50-63, non-CTC qualified inputs up to 10 percent of FOB value allowed (2) For textiles and apparel in HS 50-63, non-CTC qualified up to (a) 10 percent of value or (b) 10 percent of total weight allowed.
ASEAN-China Trade in Goods Agreement (ACFTA)	Cumulation permitted across all RTA parties provided inputseach satisfy RVC (40)	Not applicable
ASEAN-Korea Trade in Goods Agreement (AKFTA)	Cumulation permitted across participating countries provided inputs each satisfy RVC or CTC rule	2 Rules: (1) For goods other than textiles and apparel in HS 50-63, non-CTC qualified up to 10 % (2) For textiles and apparel in HS 50-63, non-CTC qualified up to 10% of value weight allowed.
ASEAN-Japan Comprehensive Economic Partnership (AJCEP)	Cumulation permitted across participating countries provided inputs each satisfy RVC or CTC rule	3 Rules: (1) For goods in HS 16, 19, 20, 22, 23, 28 through 49 and 64 through 97, non-CTC qualified inputs up to 10 percent of FOB value of final product allowed (2) For goods in HS 18, and 21, non-CTC qualified inputs allowed up to 10% or 7% of FOB value as per annex 2 (3) For textiles and apparel in HS 50-63, non-CTC qualified up to 10 percent of total weight allowed.
ASEAN-Australia/New Zealand FTA (AANZFTA)	Cumulation permitted across AANZFTA provided inputs each satisfy RVC or CTC rule	2 Rules: (1) For goods other than textiles and apparel in HS 50-63, non-CTC qualified inputs up to 10 percent of FOB value allowed (2) For textiles and apparel in HS 50-63, non-CTC qualified up to (a) 10 percent of value or (b) 10 percent of total weight allowed.
ASEAN-India Trade in Goods Agreement	Cumulation permitted across all RTA Parties provided inputs each satisfy RVC (35)+CTSH rule	Not applicable.

Source: Table 5 (Appendiz 3) of AANZFTA Primer on Rules of Origin

iv. Origin Certification Procedures (Tables 3-4)

a. Authorized bodies

For ASEAN, their corresponding Trade (Commerce) Ministry or Customs authorities are the authorized bodies for the ATIGA as well as the various ASEAN plus 1. For the Dialogue partners, the similar agencies would also be responsible, but in most cases, except for India, a private organization, usually their respective Industry Chambers, are also authorized bodies.

b. Treatment of intermediary trade: Back-to-back certificate and third party invoicing

Except for ACFTA, the OCPs for ATIGA and all the five ASEAN+1 FTAs allow back-to-back certificate and third party invoicing. However, for ACFTA, an agreement was reached in October 2010 to amend the OCP to accommodate intermediary trade using these instruments. By January 2011, except for Indonesia, Myanmar and Cambodia, member countries have signed the revised OCP.

v. Other ROO provisions

Similar provisions across these FTAs are also found in: Treatment of Accessories, Spare Parts and Tools; Treatment of Packing Materials and Containers; Determination of identical or interchangeable materials; Direct Consignment.

vi. Documents required

They have similar documents required. The Certificate of Origin (CO) forms have similar contents with a few variations.

Table 3. Certificate of Origin (CO) Issuing Authorities

ASEAN Partner(s)	Issuing Authority
Australia	Australian Chamber of Commerce and Industry
	Australian Industry Group
New Zealand	Auckland Regional Chamber of Commerce and Industry
	Canterbury Employers Chamber of Commerce
	Otago Chamber of Commerce
	Independent Verification Services Ltd
	Wellington Employers' Chamber of Commerce
China	China Customs (General Administration)
	China Council for the Promotion of International Trade (CCPIT)/
	China Chamber of International Commerce (CCOIC)
India	Export Inspection Council of India or any other agency authorized by the Government of India in accordance with laws and regulations
Japan	The Ministry of Economy, Trade and Industry
	* Designated Body: Japan Chambers of Commerce and Industry
Korea	Korea Customs Service, Korea Chamber of Commerce and
	Industry (KCCI) or any other agency authorized by the Government of Korea

ASEAN Member	Issuing Authority
Brunei	Ministry of Foreign Affairs and Trade
Cambodia	Ministry of Commerce
Indonesia	Ministry of Trade (Directorate General of International Trade)
Laos	Ministry of Commerce (Directorate of Import and Export (Office No. 1)
Malaysia	Ministry of International Trade and Industry (Trade Services Division)
Myanmar	Ministry of Commerce (Directorate of Trade)
Philippines	Bureau of Customs (Export Coordination Division)
Singapore	Singapore Customs (Documentation Specialist Branch)
Thailand	Ministry of Commerce (Department of Foreign Trade, Bureau of Trade
	Preference Development)
Vietnam	Ministry of International Trade (Management Office of Import-Export Administration Office)
Self Certification	All members by 2012
accepted	Started Nov 2010: Brunei, Malaysia and Singapore

Source: various FTA documents

Table 4. Comparison of Provisions in Operational Certification Procedures (OCPs) across Selected ASEAN Agreements

Agreement	ATIGA	ACFTA	AJCEP	AKFTA	AANZFTA	AIFTA
A. Similar provisions across all (text may vary)						
CO Form*	D	E	AJ	AK	AANZ	AI
Provision of specimen signatures and official seals of the issuing authorities	same					
Presentation of CO	Submit original CO at time of import declaration	Submit original CO & triplicate copy at time of import decalration; send back triplicate to issuing authority	Submit original CO at time of import declaration	Submit original CO at time of import declaration	Submit original CO at time of import declaration	Submit original CO & triplicate copy at time of import decalration; send back tripliate to issuing authority
Back-to-Back CO	Allowed as specified in OCP	Provision in the revised OCP, October 2010	Allowed	Allowed as specfied in Appendix 1 under Rule 7	Allowed as specified in OCP	allows for the issuance of back-to-back CO Form AI subject to conditions laid down in Article 11 of Appendix D
Third country invoicing *	Allowed as specified in OCP	Provision in the revised OCP, October 2010	Acceptable under certain conditions	Allowed	Allowed as specified in OCP	allows for third party invoicing as provided under Article 22 of Appendix D.
Record keepng requirement	Issuing body, exporter, importer to keep record for 3 years	Issuing body to keep record for at least 3 years, exporter to retain	Issuing body, exporter, importer to keep record for 3 years	Issuing body, exporter, importer to keep record for 3 years	Issuing body, exporter, importer to keep record for 3 years	Issuing body to keep record for at least 3 years, exporter to retain quadruplicate
Period of Validity	12 months	Normally 4 months	12 months	6 months	12 months	12 months
Waiver of CO	No CO required for goods valued at US $200 FOB					no exemption
Verification *	yes, where necessary					
Pre-export examination	Similar in substance but sometimes varies with regard to					
Confidentiality	Similar, e.g. Confidentiality of business information					
Treatment of erroneous declaration in the CO	Similar, e.g. Erasures are not allowed and CO to be replaced					
Action against fraudulent acts	Similar, eg. Parties should cooperate in such cases and member country shall provide legal sanctions					
Denial of preferential tariff treatment	Similar, eg. Authorities can deny preference with findings of non-compliance					
Documentation for implementing Direct	Similar provisions on treatment of goods passing through one or more non-member party					
B. Provisions with some variation across FTAs						
Treatment of minor discrepancies*	This is with regards to differences in HS classification and multiple goods declared in one CO but some similarity in substance across FTAs					
Special cases	Except for ATIGA and AJCEP, FTAs have provisions about cases where there is change in destination					
Minimum data requirements*	This is with regards to company details, product information and others, there is a little variation in details required					

Under AP-WGROO discussion for possible scope forimprovement to facilitate trade in the region and to enhance utilization of the various ASEAN Plus FTAs.

Source: Table 6 from AANZFTA Primer on Rules of Origin, revised by author based on Interview with Philppine BOC Official and new information

3. Comparison and analyses using the databese

3.1. Comparison of ROOs in ASEAN and ASEAN+1 FTAs

In general, there are four basic rules used to determine origin in preferential trading agreements. First and most obvious criterion is where the good is wholly-obtained (WO) or produced. Prime examples are in the early chapters of the HS code, *e. g*. covering plants and animals. Second is regional value content (RVC), that is, how much of the value-added comes from member parties. In ATIGA and the various ASEAN plus 1 FTAs, the usual norm is a regional value content of not less than 40 percent of value-added, or RVC(40), for the good to be considered originating. The third is a change in tariff classification (CTC), that is, the inputs from non-member parties have been 'sufficiently transformed' in production thereby acquiring a change in classification in the output according to the HS code. The usual requirement is for a change in classification at the 4-digit level, but chapter and tariff sub-heading levels (6-digit) are also sometimes used. The fourth is on the basis of specific process requirement (SPR), that is, a certain process is required for the good to be considered originating. These basic rules could be used singly, or in combination whether as alternative or plus condition, and with some variation regarding cut-off and disaggregation levels, or process type. Agreements would provide a general ROO, and some variations of the basic rules could be adopted across products, according to negotiation outcomes.

At the early stage of AFTA, the RVC rule was almost uniformly adopted, intended to be liberal enough, as the rule is theoretically straightforward and seemingly fair, compared for instance to the SPR, which could be very limiting. However, overtime, practical problems about utilizing RVC became apparent. The CTC has become a viable alternative. Increasingly, in more recent FTAs and in ROO reforms, the use of co-equal rules is becoming applicable. Exporters are given a choice of what rule to use. Indeed, reforms and improvements towards simplification have been introduced but judging from surveys on FTA utilization, more needs to be done.

Table 5 summarizes the frequency use of the different ROO types for ATIGA and the ASEAN+1 FTAs. ATIGA, ASEAN-Korea (AKFTA), ASEAN-Japan (AJCEP), and ASEAN-Australia-New Zealand(AANZFTA) use the same General Rule (GR) – a co-

equal rule of RVC(40) or CTH. ASEAN-China (ACFTA) uses RVC(40) as the general rule, patterned after the early version AFTA ROO. ASEAN-India FTA (AIFTA), uses the dual rule, RVC(35) + CTSH as its general rule. ACFTA stays closest to its GR of RVC(40). It concedes only around 565 out of 5224 HS lines outside RVC(40). AKFTA is next, in terms of deviating from its GR. It applies the GR of RVC(40) or CTH for around 80 % of the total number of (6-digit) HS lines. AJCEP keeps the general co-equal rule for around 3000 HS lines but relies more on CTC outside the general rule. ATIGA has been undertaking ROO reforms, coming up with product specific rules (PSRs) that are generally intended to encourage better utilization of the FTA. As of the writing of this paper, PSRs for India are still under negotiation, such that only the general rule is currently applicable.

Table 5. Frequency by type of ROOs Used in ASEAN +1 FTAs; # of 6-digit HS lines

ROO type	ATIGA	AKFTA	ACFTA	AJCEP	AANZFTA
Single Rule					
WO	185	458	8	3	294
CC		61	1	735	248
CTH		4		137	107
CTSH				8	
RVC(<40)		36			
RVC(40)	147	22	4659	219	68
RVC(>40)		6			
CC with exception*				258	3
CTH with exception*				20	10
Various**		3			43
Co-equal Rule					
RVC(40) or CTH	2782	4076	122	3057	2204
RVC(40) or CTH or SPR					24
RCV(40) or CTSH	706	61		33	1072
RVC(40) or CTH or RVC(35) + CTSH	125				195
RVC(40) or CTH or Textile Rule	340				6
Sub-total	3953	4137	122	3090	3501
% share in total	75.7%	79.2%	2.3%	59.2%	67.0%
RVC(40) or CC or Textile Rule	453				
RVC(40) or CC	437	487	7	126	583
Various**	49	10	427	628	367
Total # of 6-digit HS(2002) Lines	5224	5224	5224	5224	5224

WO- wholly obtained; CC- change in commodity classification; CTH- change in tariff heading; CTSH- change in tariff subheading; RVC- regional value content; GR-General ROO rule
* excludes specific HS lines where CTC cannot come from a/ in lieu of ASEAN-India FTA (PSR)\
**Other various rules include *e. g.* : for Dual Rules-- CTH + RVC(40), CC + RVC(40), CC + Textile Rule; for Co-equal Rules-- RVC(40)+Textile Rule or CC, RVC(>40) or CTH
Source of basic data: ASEAN Secretariat; encoded Annex2 PSR for AANZFTA and Japan-India CEP from agreements.

Without further analysis, it is not clear which FTA has more or less restrictive ROO regime on the whole, since restrictiveness would differ depending on the type of ROO used. For example, in general, a change in tariff classification at the 6-digit level (CTSH- a change in tariff subheading) is more liberal compared to CTH, a change at four-digit level. (This is further discussed below.) As with AFTA, ACFTA started using 'RVC (40) only' for almost all lines but has made a few reforms in recent years to introduce more flexibility, especially in textile products. In general, there appears a trend towards a more liberal ROO regime in recent years, with reforms in AFTA, and

more liberal ROOs in the more recent agreement between ASEAN and Australia-New Zealand.

Further analysis is done below to assess the ROO regimes of these FTAs with regards to their degree of commonality and relative restrictiveness.

3.2 Assessing Commonality and Convergence of ROOs in the ASEAN and ASEAN plus 1 FTAs

To extend the analysis, we assess how much commonality and divergence exist in the ROOs of the different ASEAN + 1 FTAs. This could help evaluate how much harmonization effort is necessary to bring about consistency if not consolidation of the different ASEAN + 1 FTAs.

We went over the ROOs of the five different FTAs (ASEAN India FTA was excluded as the PSR are still under negotiations at the time of the data gathering) by 6-digit HS lines and counted how many HS lines there are where all 5 FTAs share at least one rule. This is an indication of degree of commonality. We then counted the frequency of HS lines where only 4 FTAs share at least one common ROO (for the particular HS line, etc), and so on down the line. When down to 1, the frequency indicates how many HS lines have no common ROO used at all. Table 6 provides a summary.

Table 6. Commonality of ROOs across FTAs

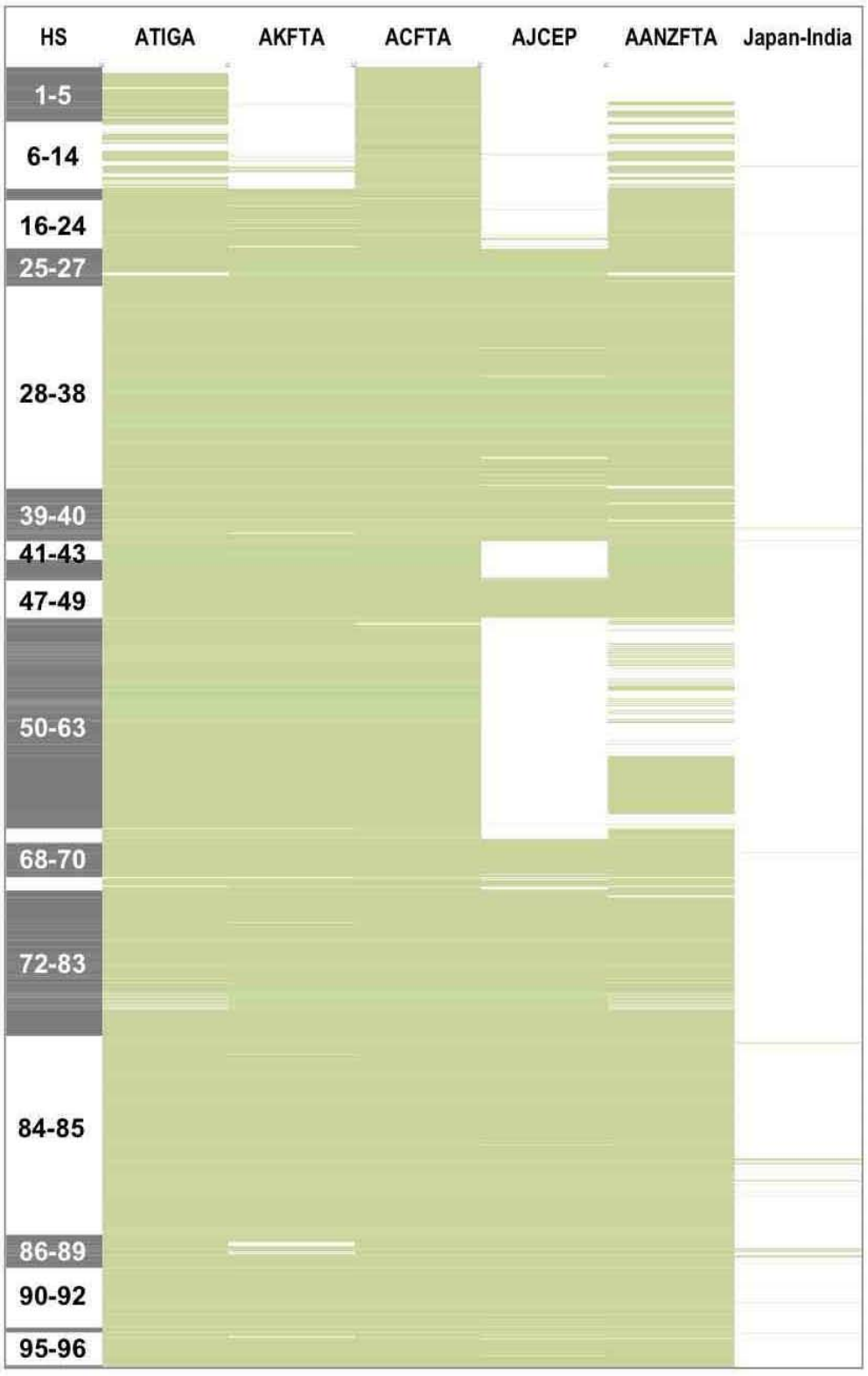
	distribution of HS lines (6-digit HS2002)	
Degree of commonality	No.	%
t one common ROO In all 5 FTAs	3318	64.00%
In only 4 FTAs	766	14.80%
In only 3 FTAs	825	15.90%
In only 2 FTAs	255	4.90%
No common ROO	23	0.40%

We find that in 64 percent of all tariff lines, all five FTAs have at least one ROO in common.[2] However, most of the commonality is in the use of the RVC(40). If we count only those with almost the same ROO (treating a co-equal rule as just one rule), the frequency count of lines with common ROO is more than halved. Nonetheless, it is encouraging to note that in 90 percent of the time, three or more FTAs (out of the five covered) share a common ROO. In most cases, the ASEAN China FTA would be the odd FTA out. This excludes the ASEAN-India Trade in Good Agreement, for which, at the time of this project completion, only a general rule of 'CTSH or RVC(35)' applies for all, while PSRs are still being negotiated.

Figure 1 provides a graphical representation showing this more clearly by product groups. It shows how RVC(40) is used in ATIGA and the ASEAN+1 FTAs. CTH is also widely used in these FTAs except for ACFTA. This is graphically represented in Figure 2.

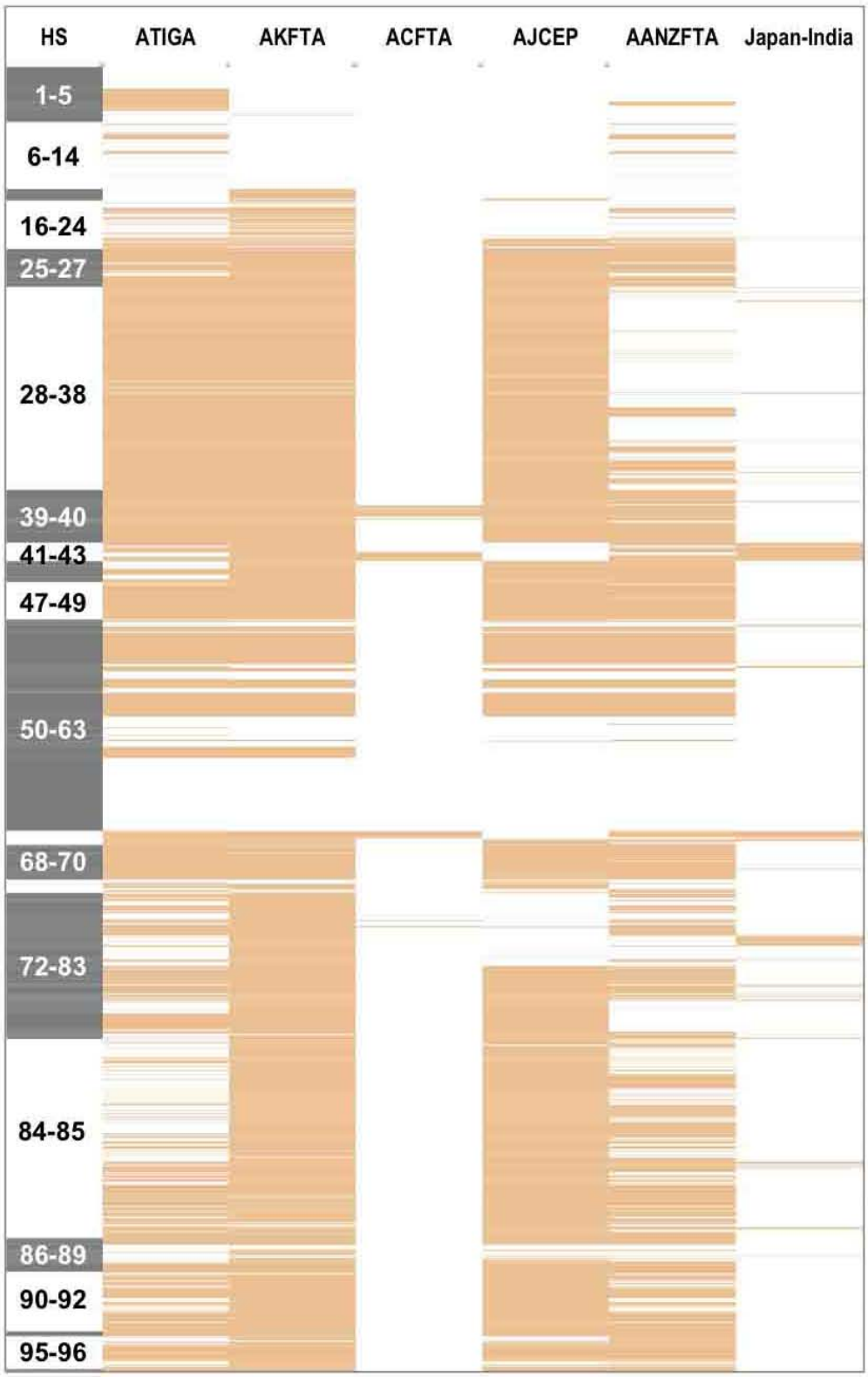
[2] Where the ROO provision of the FTA uses a 'plus' rule is used, the dual rule is treated as one ROO. When co-equal rule is used, they are treated as separate rules.

Figure 1. RVC(40) in ATIGA and ASEAN+1 Ftas



Source: Provided by Ukumo Isono, Eonomist, Economic Research Institute for ASEAN and East Asia, based on ROO database

Figure 2. CTH in ATIGA and ASEAN+1 FTAs



Source: Provided by Ikumo Isono, Economist, Economic Research Institute for ASEAN and East Asia (ERIA)

The next step is to assess how much convergence exists among these FTAs in terms of product lines. That is, looking at each 6-digit HS lines (the most disaggregated level of classification usually used for ROOs), how many of these FTAs share exact (or nearly the same) ROO. RVC(40) maybe applicable for more than half of the total (6-digit) HS lines, but the applicable rules may still differ in that for some, there be other co-equal ROO options. This is important because it may matter to exporters if they have other ROO options they could use. As such, closer examination of the ROOs by product across FTAs is done to assess the prevalence of ROO convergence.

A summary is presented in Table 7. There are only a few cases of convergence (only 44 HS lines, or out of 5224) for all the 5 FTAs covered (ATIGA, AKFTA, ACFTA, AJCEP an AANZFTA, arising from the different general rule (RVC-40) used by ACFTA. Counting cases where ROOs are almost the same except for more liberal options in some, the number of lines we can consider as near convergence rises to 181 HS lines, but this is still a small percentage of total. However, the degree of convergence becomes very significant for 4 FTAs[3]-- 1464 (6-digit) HS lines out of 5224. There is near convergence for 1407 more lines. Together, this represents around 55 % of the total number of tariff lines.

[3] In almost all cases, the 4 FTAs are ATIGA, AKFTA, AJCEP and AANZFTA.

Table 7. Summary:ROO Convergence Incidence in ATIGA, AKFTA, ACFTA, AJCEP & AANZFTA

	# of HS lines (6-digit)	% of Total	Cumulative % share
For all 5 FTAs	181	3.5%	3.5%
Near Convergence (with more liberal options in some cases)	137		
Convergent for 5 FTAs	44		
For 4 FTAs	2871	55.0%	58.4%
Near Convergence (with more liberal options in some cases)	1407		
Convergent for 4 FTAs	1464		
For 3 FTAs	630	12.1%	70.5%
Near Convergence (with more liberal options in some cases)	312		
Convergent for 3 FTAs	318		
For 2 FTAs	1027	19.7%	90.1%
Near Convergence (with more liberal options in some cases)	728		
Convergent for 2 FTAs	299		
Different ROOs across FTAs	515	9.9%	
Total # of HS Lines (6-digit)	5224	100.0%	

Tables 8 and 9 provide more details. Convergence for the 4 FTAs are found most predominantly in the latter chapters (around 77 % of the total HS lines in Chapters 66 and upwards). This includes the automotive and electronic sectors) and in some chemical products for the earlier chapters. The divergence, with so many process specific rules, is evident in the middle chapters, especially in the textile and garments sectors.

Harmonization of ROOs could be a goal that we can set. There are likely to be other issues and impediments, but identifying sectors where there is near convergence, or where there is convergence for the majority of the FTAs, would suggest cases where reforms could perhaps be more easily done.

Table 8. Degree of ROO Convergence: Chapters1-65

Chapters 1-27	# of HS Lines
Convergent for 4 FTAs	
Convergent at GR for ATIGA, AANZFTA, AKFTA and AJCEP	132
Near convergence at GR for the 4 FTAs, with ATIGA more liberal co-equal CTSH	5
Convergent for 3 FTAs	
Convergence at GR for ATIGA, AKFTA, AANZFTA, AJCEP	3
Convergence at WO for ATIGA, AKFTA and AANZFTA, CC for AJCEP	145
Convergent for 2 FTAs	
Convergence at GR for ATIGA and AANZFTA	4
Convergent at RVC or CC for ATIGA and ANZFTA	210
Different ROOs across FTAs	382
Chapters 28-65	
Convergent for 5 FTAS	
Convergent at RVC(40) or CTH for ATIGA, AKFTA, ACFTA, AJCEP & AANZFTA	44
Convergent for 4 FTAs	
Convergent at GR for ATIGA, AKFTA, AJCEP & AANZFTA with more liberal co-equal CTSH for AANZFTA	618
Convergent at RVC(40) or CTSH for ATIGA, AANZFTA, AKFTA & GR for AJCEP	7
Convergent at RVC(40) or CTH fpr ATIGA, AKFTA, AJCEP & AANZFTA	472
Convergent at RVC(40) or CTH for ATGA, AKFTA, ACFTA & AANZFTA	10
Convergence for 3 FTAs	
Near Convergence at RVC(40) or CTH for ATIGA, AKFTA & AANZFTA, with additional co-equal Textile Rule option for ATIGA	95
Convergent at GR for ATIGA, AKFTA, AANZFTA, with more liberla co-equal CTSH for ATIGA	45
Convergent at RVC(40) or CTSH for ATIGA & AANZFTA, and RVC(40) or CTH for AKFTA	8
Convergent at RVC(40) or CTH for ATIGA, AKFTA & AANZFTA	113
Convergent at RVC(40) or CTH for ATIGA, AKFTA & AJCEP	19
Convergent at RVC(40) or CTH for ATIGA, AKFTA & ACFTA	4
Convergent at RVC(40) or CTH for ATIGA, AJCEP & AANZFTA	3
Convergent at WO for ATIGA, AKFTA & AJCEP	3
Convergent for 2 FTAs	
Convergent at RVC(40) or CTSH for ATIGA/AANZFTA, & GR for AKFTA/AJCEP	6
Convergent at RVC or Textile Rule For ATIGA & ACFTA (in some with additional option for ATIGA)	290
Near Convergence at RVC or CTH for ATIGA & AKFTA, with additional co-equal Textile Rule option for ATIGA	240
Near Convergence at RVC or CC for ATIGA & AKFTA, with additional co-equal Textile Rule option for ATIGA	183
Convergent at RVC(40) or CC for AKFTA & AANZFTA	15
Convergent for 2 FTAs (various)	22
Different ROOs across FTAs	22
Total # of (6-digit) HS Lines	3100

Table 9. Degree of ROO Convergence: Chapters 66 Upwards

	# of HS Lines (6-digit)
Convergent for 5 FTAs	
Near Convergence at RVC(40) for the 5 FTAs (in some cases with co-equal CTH rule for AKFTA)	137
Coonvergent for 4 FTAs	**1632**
Convergent at RVC(40) or CTH for ATIGA, AKFTA, AJCEP & AANZFTA	853
Convergent to at least RVC(40) or CTH for ATIGA, AKFTA, AJCEP & AANZFTA, with more liberal option for ATIGA & AANZFTA	508
Convergent to at least RVC(40) or CTH for ATIGA, AKFTA, AJCEP & AANZFTA, with more liberal option for ATIGA	197
Convergent to at least RVC(40) or CTH for ATIGA, AKFTA, AJCEP & AANZFTA, with more liberal option for AANZFTA	70
Convergent to at least RVC(40) or CTH for ATIGA, AKFTA, AJCEP & AANZFTA, with more liberal co-equal CTSH for AKFTA	2
Convergent at WO for ATIGA, AKFTA, AJCEP & AANZFTA	2
Convergent for 3 FTAs	
Convergent at RVC(40) or CTH For AKFTA, AJCEP & AANZFTA	15
Convergent at RVC(40) or CTH For ATIGA, AKFTA & AJCEP	163
Convergent at GR For ATIGA, AKFTA & AJCEP, in some cases with liberal co-equal CTSH for ATIGA	6
Convergent at GR For ATIGA, AKFTA & AANZFTA, in some cases with liberal co-equal CTSH for ATIGA & AANZFTA	11
Convergent for 2 FTAs	
Convergent at GR for AKFTA & AJCEP and at RVC(40) for ATIGA & ACFTA	39
Convergent for 2 FTAs- various	26
Different ROOs across FTAs	92
Total # of HS lines (6-digit)	2121

3.3 Assessing the ROO Restrictiveness in ASEAN and ASEAN + 1 FTAs

ROOs are, by nature, restrictions. However, the degree of restrictiveness varies by type of rules used. While some commonality can be discerned from the FTAs covered, considerable variation still exists across products, across FTAs. As such, at the outset, it is difficult to make an assessment of the relative overall ROO restrictiveness of these FTAs.

For a more objective comparison, we device an index/point system by type of ROO and then compute a weighted average using frequency of tariff lines as weights. A systematic way is to first assign points to the four basic methods of origin determination listed above (that is, make some arbitrary assumption about their relative restrictiveness). Then, we adjust the points according to how these basic rules are used (what variations are made, and how these might differ according to products).

The first pass point assignments are as follows. We start with the most basic rule, RVC(40), and assign it a score of 4 (another number could be used, but this just sets some sort of a numeraire). We assign the same score of 4 for CTH, for now. This pointing system is more of an illustration, but it should already provide a more objective comparison and insights about how the FTAs compare with each other on the whole. A sectoral analysis (computation) could also be made to make comparisons across products, both within or across FTAs. In the future, perhaps a survey of exporters, or those who administer and issue Certificates of Origin, could be done to make a more accurate assessment or scoring of the restrictiveness of particular ROOs.

The points are higher the more restrictive the ROO. We move up and down the scale for level of classification for CTC and for cut-off rate for RVC. As such, we have the initial points system as follows:

CTSH === 3

RVC(40), CTH === 4

CC === 5

WO === 6

For the second pass, we use the following observations.

a. In general, it is expected that an ROO regime that allows alternative rules would be preferable to exporters and would be more liberal. At the other extreme, most restrictive would be a requirement to comply with more than one rule (plus rather than either/or), for example, both a CTC and VA rule. Of course, within these two types of hybrid rules, the degree of restrictiveness could vary depending on the restrictiveness of the individual rules included. The 'plus'' test with the most restrictive individual rules is the most restrictive, and the alternative test with the most liberal options would be the most liberal.

This suggests the following. In the case of alternative rules, we take the score of the less restrictive ROO (the lower score) and deduct 10 %, as bonus for having a choice, then add 10 % of the difference between the scores of the alternate rules.[4] For the restrictive plus rule, we take the lower value plus half of the score of the other additional rule. (The assumption is that likely, there is "economies of scale" in obtaining additional information and complying with additional requirement).

b. Primary production would generally entail one major production stage, with value-added coming mainly from primary factors, such as land, labor and capital. However, production in most other manufactured goods, is usually multi-stage, multi-input, and even multi-country.

This poses problems with using CTC to determine 'substantial transformation' occurring within country/region. The different product categories in the HS code, even within the same level of classification, could represent different stages or intermediate inputs in production. Thus, while in general, the more disaggregated the level of

[4] For three or more co-equal rules, we use the scoring in the case of 2 co-equal rules and make further deduction of .1.

classification required for CTC is, the more liberal the ROO, the degree of restrictiveness of CTC, could be different for different product groups or classification. Indeed, CTH in one sector could be more restrictive compared to that in another sector. This is more likely to happen the more stages of production and more number of intermediate inputs are involved.

For similar reasons, while in general, the value content requirement is more restrictive the higher the cut-off rate, the same RVC cut-off level could be more restrictive for certain product groups than others. For instance, arguably, the most restrictive ROO criterion is 100 % RVC, which is basically the WO criterion. However, for primary products, the requirement might not be as restrictive as it seems, since many of these products appear to be "naturally" wholly-obtained. In any case, products in these primary group usually have higher value-added, and fewer (even single) stages of production.

With these in mind, we suggest to at least differentiate between primary products and secondary products. The primary products would generally be in the earlier Chapters 1-24 (agriculture) and Chapters 25-27 (mineral products). The general rule (again for now) we suggest is to adjust the first pass points generated above in the case of Chapters 1-27 by deducting 1 point from the initial score of whatever is the applicable ROO in the particular FTA. Hence CC would be assigned 4 points instead of 5. Some refinement from this general adjustment might be needed. For example, for primary agriculture, fishery and mining products, WO is considered to be no more restrictive than either RVC(40) or CTH, and is assigned an index point of 4. In the case of RVC, the adjustment will be lower, at only half a point deduction for RVC (40), tapering to zero adjustment as the cut-off level goes down. This is because the value-added rule is similar in terms of documentary requirements regardless of chapter.[5]

The result of the point system described above is given in Table 10. For sure, there are questions about arbitrariness of points assigned and the use of the weighting system. Nonetheless, this would provide one measure of relative restrictiveness, as they are applied consistently across FTAs. Changes in the index used and using other weights such as trade weights could be done in the future, where more information and analysis would so permit or require.

[5] Similar documentary requirements account for similar restrictiveness.

Table 10. Restrictiveness Index by ROO Type

	Index Points	
	Higher Chapters	Chapters 1-27
WO	6	4
CC	5	4
CTH	4	3
CTSH	3	2
RVC(<40)*	3.75	3.25
RVC(40)	4	3.5
RVC(>40)**	5	4
CC with exception***	5.1	4.1
CTH with exception***	4.1	3.1
SPR (Textile Rule)	4	4
CC + RVC(40)	6.5	6
CTH + RVC(<40)	5.75	4.75
CTH + RVC(40)	6	5
CTH + RVC(>40) **	6.5	5.5
CTSH + RVC(<40)	4.875	3.875
CTSH + RVC(40)	5	4
CTSH + RVC(>40)	5.5	4.5
RVC(40) or CC	3.7	3.2
RVC(40) or CC or SPR	3.5	3.1
RVC(>40)** or CTH	3.7	2.8
RVC(40) or CTH	3.6	2.75
RVC(40) or CTH or SPR	3.5	2.65
RCV(40) or CTSH	2.8	1.95
RVC(>40)** or CTSH	2.9	2
CC or SPR	3.7	3.6
CTH or SPR	3.6	2.8
RVC(40) or SPR	3.6	3.2
RVC(40) or CC or SPR	3.5	3.1
RVC(40) or CTH or SPR	3.4	2.5
RVC(40) or CTH or [RVC(35) + CTSH]	3.5	2.5
WO or CTSH	3	2
WO or RVC(>40)**	4.6	3.6

* RVC cut-off level mostly at 35%
** RVC cut-off level ranges from 45-70%
*** Usually by excluding specific HS lines (or adding stipulations) where CTC cannot come from
Author's computation based on method and assumptions outlined. See text. Additional note: WO for primary sectors are considered to be not more restrictive than the norm (CTH, RVC40)

Applying the resulting point system and using the frequency use by tariff line as weights, we come up with a rough index of restrictiveness of the ROO regime by FTA. The results are provided below in Table 11.

Table 11. ROO Restrictiveness Index: ASEAN +1 FTAs

FTA	Overall ROO Restrictiveness Index
ATIGA	3.416
AKFTA	3.595
ACFTA	3.876
AJCEP	3.726
AANZFTA	3.510
Japan-India	4.339

The results show small differences across the ASEAN FTAs mainly because of the unitary interval used in the scoring among the basic rules and the large number of products. The differences are more apparent in terms of percentage difference. In terms of percentage, the difference between the highest and the lowest is around 13.5 percent, which is not insignificant, considering that the indices are weighted averages for more than 5000 HS lines. The results are also not very surprising, as reforms are sought and implemented. The ATIGA ROO regime appears the most liberal, indicative of the continued reforms it is undertaking. This is followed by AANZFTA, considered to have a relatively liberal ROO regime. The ACFTA appears to be the most restrictive. The main reason is that it followed the original ASEAN ROO, with only a few changes.

The discussion above does not include the ASEAN-India FTA. AIFTA appears to have an even more different ROO regime than the rest, with its general rule of RVC(35)+CTSH. This has the advantage of being uniform, and requiring less value added content, but having a combination of two rules makes it more stringent as well. How much of an advantage the lower cut off rate offers is an empirical question and the practical difficulties related to the RVC ROO regime remain an issue. Indeed, in combining the RVC requirement with the CTSH, it is unclear how many products would become eligible. In other words, the combined rules could be very restrictive. We could apply the same methodology suggested above on restrictiveness measurement to gauge the relative restrictiveness of AIFTA compared with the others. Scoring RVA with 3.5 (this is 4 which is the index for RVC40 less 0.5 as bonus for lower cut-off) and CTSH with a score of 3, would yield an overall restrictiveness index of 4.75 (=3+1.75). Hence, AIFTA, would be the most restrictive among the ASEAN+1 FTAs. Hopefully, the negotiated PSRs will be a substantial improvement over the ROOs under the Japan-

India EPA, which liberalized this strict rule only for a few products. The ROO restrictiveness index for the Japan-India EPA is not much lower than the general ROO regime, at 4.48.

3.4. Sectoral Analysis

It will also be interesting to find out how the different sectors fare in terms of ROO restrictiveness across FTAs. The table below presents results for the primary sector HS Chapters 01-27 covering agriculture and the mining sector. The results show the relative restrictiveness of the primary sectors to be very close to average. Except for ATIGA and AJCEP, the sector's relative restrictiveness varies across FTAs. Except for ACFTA and AKFTA the restrictiveness index for the primary sector is slightly higher than overall restrictiveness. ATIGA ROO remains the most liberal, followed by AJCEP. See Table 12. There is also a relatively wider variety of type of ROO used, both within and across FTAs for this sector. For agriculture chapters alone, the restrictiveness is higher than the overall index for all the FTAs, especially in the case of AKFTA, where the ROO for the sector is most restrictive across FTAs.

Table 12. Primary Sectors (Chapters 1- 27): ROO used and Restrictiveness Index

ROO type	ATIGA	AKFTA	ACFTA	AJCEP	AANZFTA	Japan-India [a/]
WO	157	452	1		240	717
CC		4	1	667	75	
CTH		1		40		2
CTSH				8		5
RVC(<40)*		2				
RVC(40)	3	22	872	7		
RVC(>40)**		6				
CC + RVC(40)		2				
CTH + RVC(<40)						
CTH + RVC(40)						
CTH + RVC(>40) **		1				
CTSH + RVC(<40)*						151
CTSH + RVC(40)						3
CTSH + RVC(>40)						
RVC(40) or CC	284	41	7		214	
RVC(40) or CC or SPR	33				33	
RVC(>40)** or CTH		3				
RVC(40) or CTH	345	341		159	261	
RVC(40) or CTH or SPR						
RCV(40) or CTSH	59				58	
RVC(>40)** or CTSH						2
CC or Textile Rule						
CTH or Textile Rule						
RVC(40) or Textile Rule						
RVC(40) or CC or Textile Rule						
RVC(40) or CTH or Textile Rule						
RVC(40) or CTH or RVC(35) + CTSH						
WO or CTSH						1
WO or RVC(>40)**		6				
Total # of HS lines	881	881	881	881	881	881
Sector (Agriculture and Mining) Restrictiveness	3.080	3.463	3.499	3.707	3.267	3.958
Overall Restrictiveness Index	3.416	3.595	3.876	3.726	3.510	4.339

In the case of the automotive sector (HS 87), in all the FTAs, the sector's restrictiveness index is higher than overall restrictiveness index. At first glance, this appears surprising, given that the automotive industry relies heavily on the global production network. However, this is probably to be expected, even for ATIGA, since almost all of the

ASEAN countries have very high protection for the sector. In the case of AJCEP and AKFTA, Japan and Korea are leading car manufacturers, mindful of their own rivalry. Comparing across FTAs, the ROO restrictiveness index is lowest for AJCEP while AKFTA has considerable number of lines requiring higher value content ranging from 45-70 percent. This is also one sector where at least 4 of the FTAs would have at least one applicable ROO in common, specifically RVC (40). Indeed, a single rule of RVC is predominantly used in all the 5 ASEAN FTAs. See Tables 13.)

Table 13. Automotive Products (covering Chapter 87)- ROO frequency and Restrictiveness Index

ROO type	**ATIGA**	**AKFTA**	**ACFTA**	**AJCEP**	**AANZFTA**
RVC(40)	66		76	47	50
RVC(>40)**		25			
CTSH + RVC(40)					3
RVC(40) or CC					1
RVC(40) or CTH	10	51		29	22
Total # of Tariff Lines (HS 2002)	76	76	76	76	76
Sector ROO Restrictiveness Index	3.934	3.993	4.000	3.809	3.889
Overall Restrictiveness Index	3.416	3.595	3.876	3.726	3.510

WO- wholly obtained; CC- change in chapter (2 digit); CTH- change in tariff heading (4-digit) ; CTSH- change in tariff subheading (6 digit); RVC- regional value content, SPR-specific process requirement.

* RVC is usually 35%.

** RVC range from 45-70%.

Source of basic data: ASEAN Secretariat, encoded Annex2 PSR of AANZFTA taken from http://www.dfat.gov.au/fta/aanzfta/annexes/annex2_psr.html (accessed September 2, 2010)

In the case of the Chemical Sector, the relative restrictiveness is higher for all FTAs except in the case of AANZFTA where it is substantially lower which uses the co-equal rule of CTSH or RVC(40) for most HS lines in this sector. This suggests potential areas for ROO reforms in the other FTAs, following the example from AANZFTA. ATIGA and AKFTA both rely most heavily on CTH or RVC(40), while ACFTA and AJCEP rely more heavily on just RVC(40). See Table 14.

Table 14. Chemicals (covering Chapters 28-40)- ROO frequency and Restrictiveness Index

ROO type	ATIGA	AKFTA	ACFTA	AJCEP	AANZFTA
WO					20
CTH				5	
RVC(40)			977	1011	
CC with exception in product coverage				5	
CTH with exception in product coverage				4	
CTH + RVC(>40) **		3			
RVC(40) or CC					1
RVC(40) or CTH	1017	1015	48		379
RCV(40) or CTSH	7	7			625
RVC(40) or CTH or Textile Rule	1				
Total # of Tariff Lines (HS 2002)	1025	1025	1025	1025	1025
Sector ROO Restrictiveness Index	3.593	3.600	3.981	4.005	3.037
Overall Restrictiveness Index	3.416	3.595	3.876	3.726	3.510

WO- wholly obtained; CC- change in chapter (2 digit); CTH- change in tariff heading (4-digit) ; CTSH- change in tariff subheading (6 digit); RVC- regional value content, SPR-specific process requirement.
* RVC is usually 35%.
** RVC range from 45-70%.
Source of basic data: ASEAN Secretariat , encoded Annex2 PSR of AANZFTA taken from http://www.dfat.gov.au/fta/aanzfta/annexes/annex2_psr.html (accessed September 2, 2010)

In the case of textiles in terms of the Restrictiveness index, standing out is AANZFTA, although ROO is generally restrictive for all. Across FTA, the AJCEP is most restrictive for this sector. See Table 15. This arise mainly from heavier use of CC, which, in practice might not be as difficult to comply with compared to other sectors (Note the number of chapters covering textile and garments. A change in the Chapter heading is thus more possible.) The garment and textile sector also has substantial variation in the types of ROO used across FTAs and across sectors. ATIGA is the most liberal with majority allowing three co-equal rules, followed by AKFTA with majority allowing two co-equal rules. This is also where ACFTA relaxed its ROO rules most.

Table 15. Textile and Garments (covering Chapters 50-83)- ROO frequency and Restrictiveness Index

Textiles & Garments Products (covering Chapter 50-63)					
ROO type	**ATIGA**	**AKFTA**	**ACFTA**	**AJCEP**	**AANZFTA**
WO	3	3	6	3	10
CC				71	213
CTH				21	105
RVC(40)			415		218
CC with exception in product coverage				120	3
CTH with exception in product coverage				5	10
RVC(40) or CC	26	500			79
RVC(40) or CTH	28	345			104
CC or Textile Rule				350	15
CTH or Textile Rule				277	91
RVC(40) or Textile Rule			427	1	
RVC(40) or CC or Textile Rule	453				
RVC(40) or CTH or Textile Rule	338				
Total# of Tariff Lines (HS 2002)	848	848	848	848	848
Sector ROO restrictiveness Index	3.472	3.568	3.762	3.903	4.119
Overall Restrictiveness Index	3.416	3.595	3.876	3.726	3.510

WO- wholly obtained; CC- change in chapter (2 digit); CTH- change in tariff heading (4-digit) ; CTSH- change in tariff subheading (6 digit); RVC- regional value content, SPR-specific process requirement.
* RVC is usually 35%.
** RVC range from 45-70%.
Source of basic data: ASEAN Secretariat , encoded Annex2 PSR of AANZFTA taken from http://www.dfat.gov.au/fta/aanzfta/annexes/annex2_psr.html (accessed September 2, 2010)

In sum, there is substantial commonality in ROOs across the 5 FTAs including ATIGA, ACFTA, AKFA and AANZFTA although considerable variation still exists. ASEAN-India is still to come up with PSRs, which should benefit from experiences of the earlier agreements. Needless to say, convergence should be towards best practice. Reforms during the past decade have been made to simplify and liberalize the ROO regimes. More can still be done in terms of convergence and easing of rules.

4. ROOs of the Japan Bilateral FTAs with individual ASEAN countries

ROO database compilation is also done for the bilateral FTAs forged by Japan with individual ASEAN countries to provide further insights. Similar analysis is performed, especially with regards to measuring relative restrictiveness.

Unlike the other dialogue partners, Japan has bilateral FTAs with the majority of the ASEAN countries, most formed ahead of AJCEP. Mindful of the two-track approach, the resulting bilateral ROO regimes have broad commonality, but still contain many variations depending on some factors particular to the ASEAN partner. Table 16 presents a summary table showing the frequency (in terms of the number of 6-digit HS lines) by type of ROOs used in Japan Bilateral FTA.

Table 16. Frequency by type of ROOs used in Japan Bilateral FTAs with ATIGA and AJCEP; # of HS lines (6-digit)

			Japan Bilateral EPA with						
ROO type	**ATIGA**	**AJCEP**	**Philippines (JPEPA)**	**Singapore (JSEPA)**	**Thailand (JTEPA)**	**Malaysia (JMEPA)**	**Indonesia (JIEPA)**	**Brunei (JBEPA)**	**Vietnam (JVEPA)**
WO	185	3	77	40	70	9	9	67	74
CC		735	768	685	765	598	723	710	792
CTH		137	145	164	242	165	125	162	130
CTSH		8	13	10	65	9	4	17	16
QVC(40)*	147	219	30	3	17	7	3	4	35
QVC(>40)**						24	1		
CC with exception wher		258	216	177	254	190	278	155	181
CTH with exception whe		20	91	27	186	95	34	16	44
CC with additional re			16	24	37	25		48	
CC with exception and a			433	389	294	374	392	233	391
CTH with additional reqt where change is comi			1	8	4			9	
CTH with additional r				1	10	20			
CTH with exception and			81	81		290	81	81	77
CTH with additional r			6		1	8	1		
QVC(40) or CC	437	126	476	55	257	111	55	43	150
QVC(40) or CTH	2782	3057	1590	33	1206	593	20	19	2218
QVC(>40)** or CTH with exception where change is coming from						1			
QVC(40) or CTSH	706	33	1074	2317	604	2659	2288	2284	868
CC; CTH			6		1				
CC; QVC(40) or SPR	33			5	10		63		
CTH; QVC(40) or SPR	16		1	576	595		517	34	
CTSH; QVC(40) or SPR				385	332		386	941	
CTH or SPR					30	1		1	
CC with exception and additional re		350		44	44	44	44	200	44
CTH with additional reqt where char		277	200	200	200		200	200	204
QVC(40) or Textile Rule		1							
QVC(40) or CC or Textil	453								
QVC(40) or CTH or Text	340								
QVC(40) or CTH or QV(	125								
CTH; CTSH or QVC(40)						1			
Total Tariff Lines (HS	**5224**	**5224**	**5224**	**5224**	**5224**	**5224**	**5224**	**5224**	**5224**

WO- wholly obtained; CC- change in chapter (2 digit); CTH- change in tariff heading (4-digit) ; CTSH- change in tariff subheading (6 digit); RVC- regional value content, QVC-qualifying value content , LVC-local value content, SPR-specific process requirement

WO- wholly obtained; CC- change in chapter (2 digit); CTH- change in tariff heading (4-digit) ; CTSH- change in tariff subheading (6 digit); RVC- regional value content, QVC-qualifying value content , LVC-local value content, SPR-specific process requirement

* RVC; QVC or LVC is usually 35%

** RVC; QVC or LVC range from 45-70%

Source of basic data: Relevant Annexes on Product Specific Rules (PSRs) of the respective Japan Bilateral EPAs.

The main difference in comparison with AJCEP (and ATIGA) is the use of regional value content (RVC) versus Qualified value content (QVC) or local value content (LVC) for the bilateral FTAs. Otherwise, the general rules are similar, with co-equal rule of QVC or CTH. Nonetheless, there are still many specific deviations from the general rule found. The most common deviations of the bilateral FTAs from AJCEP are usually in the form of exceptions, found especially in the textile and garments sector. However, for the rest of the sectors, the deviations from the general rule and from the AJCEP, tended to be more liberal (if one assumes that the QVC is not more restrictive than the RVC). This can be discerned in the lower half of Table 17.

The next question is how do they compare in terms of relative restrictiveness? The same methodology is used as in the case of the ASEAN + 1 FTAs covered earlier. The results are presented in Table 17. The relative restrictiveness indices are very close. There appears some clustering with Thailand, the Philippines and Vietnam close together (more restrictive) at one end and Brunei, Malaysia and Singapore at the other (less restrictive).

Table 17. ROO Retrictiveness Index: Japan Bilateral FTAs

FTA Partner	Overall ROO Restrictiveness Index
Brunei	**3.396**
Indonesia	**3.475**
Malaysia	**3.345**
Philippines	**3.684**
Singapore	**3.436**
Thailand	**3.777**
Vietnam	**3.697**
AJCEP	3.726

The restrictiveness used for RVC and QVC are the same in computation, which is a generous assumption for the bilateral FTAs. This yields generally lower restrictiveness indices for bilateral FTAs viz-a-vis AJCEP (except marginally for Thailand). If the QVC is at least 10 % more restrictive than RVC, then, the bilateral FTA ROOs are more restrictive than the AJCEP.

To take the example of the Philippines, the bilateral Japan FTAs appear to be prefered by exporters,[6] indicating either that the margin of preference is higher for the bilateral (deeper tariff cuts conceded by Japan) and/or QVC of 40 percent or is not difficult to comply with. Indeed, the former argument is more likely the case, as tariffs have been intensively negotiated bilaterally. (Arata's paper will shed more light on this).

The Japan-Vietnam Economic Partnership Agreement (JVEPA) forged and ratified later appears to be the most harmonized with AJCEP

There is broader commonality, among the Japan bilateral FTAs. Nonetheless, even just considering the bilateral FTA and AJCEP, the noodle bowl syndrome is still very apparent. Consider for example an ASEAN countriy exporting to Japan, or another ASEAN country. What should the exporter use? – AJCEP or JBFTA (Japan bilateral FTA)? The decision will generally depend on 2 main factors:

- Difference in the margin of preference (MOP)
- Ease/cost of ROO compliance

The (rational) exporter would balance the benefits from MOP with the difference in ROO compliance costs. Everything being equal for one, the advantage in the other will determine the decision.

Eventually, however, the FTAs will all be completed and there will be zero difference in MOP. Hence, eventually the only consideration is how costly is the ROO. In other words, eventually, the best ROO will prevail.

This suggests a strong case, not only for ROO harmonization , but harmonization at the least restrictive ROO. In the case of bilateral FTAs and ASEAN + 1 FTAs, this may initially, in many cases mean simply translating QVC = RVC, i..e., alllowing diagonal cumulation for the bilateral FTAs, or the interchangeable use of the CO for the bilateral and the CO for the related ASEAN+1 FTA. Another suggested reforms that should be considered sooner than later is the use of co-equal rule at RVC(40) or CTSH as the General Rule.

[6] Forthcoming paper by the author included in the ERIA project on FTAs and Global value chain.

5. Conclusion and Future Direction of this study

5.1 Summary and Conclusion

The main objective of reforms in the ROO regimes governing the East Asia FTAs is to facilitate trade and promote regional integration. To this end, this study first compiles a database of comprehensive and comparable information on the ROOs of the ASEAN plus 1 FTAs. For further insights, database compilation is also done for the bilateral FTAs forged by Japan with individual ASEAN countries.

Using the database, this study first assesses how much commonality (or divergence) exists across these FTAs. Finding commonalities or divergence is the first step in identifying areas where reforms are needed. As expected, we find numerous types of ROOs used. This is even after grouping together similar types under one category. A lot more variations exist within each grouping. The variations come from the following:

- Combining different rules, as co-equal or joint rules
- For SPR, requiring different specific processes
- For RVC, using different cut-off levels
- For CTC, using different levels of classification where change is required, *e.g.*, change in chapter (CC), change in tariff heading (CTH), change in tariff subheading (CTSH)
- Adding specific requirements, *e. g,* CTSH 'except change coming from some classification, or provided the materials are sourced' accordingly, et al.

Nonetheless, there is still a substantial degree of commonality in the ROOs across FTAs. In the first place, except for ACFTA and AIFTA, the basic rule used is the same-- a co-equal rule of RVC(40) or a change in tariff heading (CTH). In addition, it appears that in 64 percent of all tariff lines, all five FTAs have at least one ROO in common. However, most of the commonality is in the use of the RVC(40). In terms of ROO convergence of the product lines across the ASEAN and ASEAN+1 FTAs, we find exact convergence in AFTA, AKFTA, AJCEP and AANZFTA, for 1464 out of 5224 (6-digit) HS lines. If we consider the cases where ROOs are almost the same except for more liberal options, in addition there are 1407 more lines with near convergence. The convergence is more predominant in the latter chapters (which

includes the automotive and electronic sectors) and in some chemical products for the earlier chapters. The divergence, with so many process specific rules, is more evident in the middle chapters, especially in the textile and garments sectors.

The study also provides a measure of the relative restrictiveness of the various ROO regimes of these FTAs. Which country is more restrictive, for what products? This is important to do if only to promote transparency in the ROO policy of the FTA trading partners. The results are also not very surprising. The ATIGA ROO regime appears the most liberal, indicative of the continued reforms it has been undertaking. This is followed by AANZFTA, considered to have a relatively liberal ROO regime. The ACFTA appears to be the most restrictive. The main reason is that it followed the original ASEAN ROO, with only a few changes. This does not include the ASEAN-India FTA. Applying the same methodology and parameters, AIFTA would be the most restrictive. Hopefully, the negotiated PSRs will be a substantial improvement over the ROOs under the Japan-India EPA, which liberalized the dual rule only for a few products.

How the ROO provisions are implemented -- the rules, guidelines, process and procedures -- is a key factor in how much the ROO system could become a trade barrier. The first task is to simplify the procedure. Towards this end, ASEAN working groups are seeking ways to make this happen.

In looking at the various ROO administration procedures (particularly the certification process) we find convergence in substance for many provisions in the OCP across these FTAs. In addition, most countries would generally have only one set of procedures in the ROO administration of all their FTAs. This is not surprising since the same competencies are needed to perform the required tasks. Hence, the noodle bowl of FTAs might not be as messy as it may seem. However, it would still be cumbersome for Customs authorities to be processing different Certificate of Origin (CO) forms. Further convergence in the OCP would simplify not just administration but compliance of exporters dealing with multiple markets.

Self-certification would avoid much of the compliance and administration costs of ROOs. With proper provisions regarding verification and data and information systems, this could be a viable option. Indeed, there is a positive development in the case of

ATIGA. All member countries will be using self-certification by 2012. Brunei Darussalam, Malaysia and Singapore have started ahead of the others, beginning November 2010. A hybrid form is already effectively utilized by Australia and New Zealand.

If moving toward East Asian integration is the end scenario, the ultimate direction in ROO reforms should be toward ROO harmonization. This will also greatly simplify the process aside from encouraging greater cumulation in the region. However, harmonization should not lead to adopting the least common denominator. Rather, there should be harmonization upwards, toward best practice, in line with the goal of deepened regional integration. In the interim, practical steps should already be sought towards convergence.

With regards to OCP, further streamlining could focus on facilitating the use of cumulation. One possibility is the inter-FTA use of COs among these East Asian FTAs (some form of mutual recognition of ROOs). It is true that the ROOs are not completely harmonized. However, (excluding ASEAN-India FTA) substantial commonality already exists. Indeed the ASEAN + 1 FTAs (again excluding AIFTA) have the same basic (General) rule. In addition, if adopted, this would actually be a very concrete step to ROO harmonization. The MRA, could be done in stages, by product, and/or by FTA.

For example, MRA by FTA could possibly already be done between ASEAN + 1 FTA and bilateral FTA involving the same countries, for example between AJCEP and PJEPA (Forms AJ and JP used interchangeably for originating inputs). In the end, only the ‘best’ FTA will be used by exporters (the one with easiest and highest margin of preference). This is already being allowed in the case of New Zealand and Singapore (AANZFTA and Singapore-New Zealand FTA).

The compilation of the database, assessment of commonalities, and measurement of restrictiveness are just the initial steps towards creating a regime of ROOs that would be most favorable to deepening regional integration. ROO reforms, not unlike other trade liberalization measures, are often difficult to undertake. More needs to be done to help

clarify the issues, buttress arguments for reforms, and guide policy makers about what type of reforms are needed.

5.2 Suggested methodologies/indicators to aid decisions on ROO reforms

The main purpose of the ROOs in FTAs is to avoid trade deflection and to ensure that preferential treatment is mainly enjoyed by member parties.[7] But some ROOs are more restrictive than others, and could go beyond the purposes of avoiding trade deflection, into 'avoiding competition' from preferential imports from member countries (protection purposes). Indeed, in the ROO negotiation process, the latter appears to be an important consideration for most governments, at least for some key sectors considered crucial domestically. Nonetheless, liberalizing ROOs have become increasingly important with the growing interdependence among economies, along with the need for trade facilitation.

A first step is to delineate between these two purposes- trade deflection and protection. Strictly speaking, avoiding trade deflection is the primary rationale, with the decision to enter into FTA with partner countries and hence opening up the domestic economy to increased competition. Nonetheless, the policy space for strategic use of ROO as protection could not realistically be removed. In practice, governments would likely continue to at least include this among its concerns, although more selectively.

The next step is to look for methodologies and indicators that could shed light on first, the possible impact on trade deflection, and second, on the impact on very selective strategic industries. Considering the thousands of products involved, it will be difficult

[7] Trade deflection occurs when imports into the free trade area from a third party, could in effect also enjoy duty-free or preferential treatment by entering first the member country with lowest MFN tariff rate, which then goes around and this member country export it to other member countries duty free.

to have precise indicators. However, at least as a first cut, there are indicators that could be useful.

One is the application of principal supplier approach (argument). This entails looking at trade data and determining where the region is a principal supplier. Where the region is a major supplier, the risk of trade deflection would be low. The implication is that for all the commodities passing the criteria, a liberal ROO should be used. This means the use of co-equal rules, lower RVC requirement, CTSH (and liberal *de minimis*).

For this, one could use simple indicators like export and import shares. In terms of exports, the share of the region's exports of product X to total world exports could easily be computed, *e. g*. as follows:

$X_R = \sum X_i$(where *i* belongs to countries in the region R) /$\sum X$ (total world export)

Where X_i is country *i*'s export of commodity X.

A ranking of commodities can then be made according to this share index. Decision would then have to be made about the cut-off level to use.

Another would be the share of intraregional export, X_{RR}

$X_{RR} = \sum X_{ij}$(where *i, j* belong to countries in the region R) /$\sum X_i$

Where X_{ij} is country *i*'s export of commodity X to country *j*.

This means that most of the member trade is also with other members, and the benefits of trade facilitation, including ROO facilitation are expected to be high. This implies a strong case for more liberal ROO for these goods.

Alternatively, the share of imports of the region of commodity, M_R, from the Region to the total imports of the region of commodity, M, from the world could also be computed. The same decision making process applies. The larger the region sources from itself, the lower the risk of trade deflection.

Another indicator that can be used, which also provide an indicator of ability to compete is the Revealed Comparative Advantage (RCA) index. This is the ratio of the export share of the commodity in the total regional export to the export share of commodity in world export. This is the more tedious to compute, but still methodologically simple. Where the ratio is greater than one, the implication is that there is revealed comparative advantage as the region is able to export more compared to the rest of the world. Hence, the ROO can be more liberal

Finally, where the MFN tariffs are already very low, restrictive ROOs are superfluous. In such cases, importers would usually not bother to avail of the FTA preference because of the higher cost of ROO compliance than the MOP. Member countries should seriously consider to automatically grant an ROO waiver for products with very low tariffs, *e. g.,* less than 5 percent. As the tariff protection is already low, local producers are already likely able to compete. At the same time, bringing down the duties effectively to zero could be a big incentive for intraregional trade. To provide a better picture about what this could mean in terms of the breadth of product coverage (and potential revenue impact), Table 18 shows the frequency distribution of tariff lines by duty range. For the majority of countries in East Asia, more than 70 percent of tariff lines for non-agricultural products fall below 5 percent (either by tariff lines or by import share). Extreme cases are Cambodia, with only 5.6 percent of tariff lines and China, with only 28 percent of tariff lines within the range of less than 5 percent. Even in these cases, more than 80 percent would have less than 15 percent duties.

Table 18. Simple average MFN tariffs and Frequency distribution over duty ranges, agriculture and non-agriculture,for East Asian countries

			Simple average (	Frequency Distribution (in %)				
				Duty-free	0 <= 5	5 <= 10	10 <= 15	> 15
A. ASEAN Countries:								
1) *Brunei Darussalem (2008)*								
	Agricultural products							
	MFN applied	2008	0.1	98.4	1.3	0.3	0	0
	Imports							
	Non-agricultural products							
	MFN applied	2008	2.9	78.4	8.7	1.5	0.7	10.6
	Imports							
	Total (all range)		2.5					
2) *Cambodia (2008)*								
	Agricultural products							
	MFN applied	2008	18.1	5.1	0	39.5	20.3	35.1
	Imports							
	Non-agricultural products							
	MFN applied	2008	13.6	5.6	0	48.3	29.5	16.6
	Imports							
	Total (all range)		14.2					
3) *Indonesia (2009)*								
	Agricultural products							
	MFN applied	2009	8.4	13.5	71.6	7.3	3.0	3.3
	Imports	2008		57.5	32.6	2.7	2.0	0.7
	Non-agricultural products							
	MFN applied	2009	6.6	23.7	41.6	17.0	15.7	2
	Imports	2008		61.2	20.0	8.7	8.3	1.6
	Total (all range)		6.8					
4) ***Lao People's Democratic Republic (2008)***								
	Agricultural products							
	MFN applied	2008	19.5	0	27.3	20.8	0	51.9
	Imports							
	Non-agricultural products							
	MFN applied	2008	8.2	0	59.0	33.2	0.1	7.7
	Imports							
	Total (all range)		9.7					
5) *Malaysia (2009)*								
	Agricultural products							
	MFN applied	2009	13.5	74.6	10.4	4.7	1.7	3.6
	Imports	2008		75.1	8.2	2.6	1.6	6.4
	Non-agricultural products							
	MFN applied	2009	7.6	56.9	7.7	8.5	3.6	23.2
	Imports	2008		64.6	14.6	2.1	5.0	13.7
	Total (all range)		8.4					

Table 18 (Continued). Simple average MFN tariffs and Frequency distribution over duty ranges, agriculture and non-agriculture,for East Asian countries

			Simple average (	Frequency Distribution (in %)				
				Duty-free	0 <= 5	5 <= 10	10 <= 15	> 15
6) *Myanmar (2008)*								
	Agricultural products							
	MFN applied	2008	8.7	7.6	46.2	2.1	40.2	3.9
	Imports							
	Non-agricultural products							
	MFN applied	2008	5.1	2.8	67.0	15.0	9.5	5.7
	Imports							
	Total (all range)		5.6					
7) *Philippines (2009)*								
	Agricultural products							
	MFN applied	2009	9.8	0.1	49.3	28.0	9.5	13.1
	Imports	2008		0.0	44.1	20.7	2.4	32.8
	Non-agricultural products		5.8					
	MFN applied	2009		2.6	59.9	22.7	13.2	1.6
	Imports	2008		22.2	60.8	9.1	4.5	3.4
	Total (all range)		6.3					
8) *Singapore (2009)*								
	Agricultural products							
	MFN applied	2009	0.2	99.8	0	0	0	0
	Imports	2008		98.6	0	0	0	0
	Non-agricultural products							
	MFN applied	2009	0.0	100.0	0	0	0	0
	Imports	2008		100.0	0	0	0	0
	Total (all range)		0.0					
9) *Thailand (2009)*								
	Agricultural products							
	MFN applied	2009	22.6	5.4	21.3	11.7	2.6	28
	Imports	2008		15.5	37.6	22.4	0.6	0
	Non-agricultural products							
	MFN applied	2009	8.0	24.2	43.0	15.2	0.2	10.5
	Imports	2008		50.8	29.6	14.7	0.0	1.9
	Total (all range)		9.9					
10) *Vietnam (2009)*								
	Agricultural products							
	MFN applied	2009	18.9	13.5	18.0	12.0	7.7	48.6
	Imports	2008		36.4	27.1	5.8	2.8	27.9
	Non-agricultural products							
	MFN applied	2009	9.7	37.8	19.6	7.3	9.3	25.4
	Imports	2008		44.6	23.5	10.8	10.2	10.9
	Total (all range)		10.9					

Table 18 (Continued). Simple average MFN tariffs and Frequency distribution over duty ranges, agriculture and non-agriculture,for East Asian countries

			Simple average (	Frequency Distribution (in %)				
				Duty-free	0 <= 5	5 <= 10	10 <= 15	> 15
B. Other ASIAN countries								
1) *Australia (2009)*								
	Agricultural products							
	MFN applied	2009	1.3	74.9	24.5	0	0.1	0
	Imports	2008		48.1	47.8	0	0	0
	Non-agricultural products							
	MFN applied	2009	3.8	44.9	40.5	9.9	0	4.7
	Imports	2008		52.2	36.0	9.3	0	2.4
	Total (all range)		3.5					
2) *China (2009)*								
	Agricultural products							
	MFN applied	2009	15.6	5.9	8.1	26.3	24.6	34.6
	Imports	2008		0.7	46.1	31.2	6.7	13.3
	Non-agricultural products							
	MFN applied	2009	8.7	7.8	19.9	46.5	14.3	11
	Imports	2008		48.4	18.2	27.8	2.9	2.6
	Total (all range)		9.6					
3) *Korea (2009)*								
	Agricultural products							
	MFN applied	2009	48.6	6.2	14.5	26.6	1.2	48.8
	Imports	2008		4.8	27.0	14.8	1.2	46.1
	Non-agricultural products							
	MFN applied	2009	6.6	17.3	10.3	63.6	6.9	1.8
	Imports	2008		38.8	33.8	25.5	1.5	0.3
	Total (all range)		12.1					
4) *Japan (2009)*								
	Agricultural products							
	MFN applied	2009	21.0	35.1	17.5	16.2	8.1	8.5
	Imports	2008		50.7	12.5	12.0	8.9	9.2
	Non-agricultural products							
	MFN applied	2009	2.5	56.5	25.8	15.0	2.0	0
	Imports	2008		84.0	9.0	5.6	1.2	0
	Total (all range)		4.9					
5) *New Zealand* (2009)								
	Agricultural products							
	MFN applied	2009	1.4	71.0	28.9	0.0	0	0
	Imports	2008		53.3	46.7	0	0	0
	Non-agricultural products							
	MFN applied	2009	2.2	61.9	31.8	5.8	0.0	0
	Imports	2008		67.6	28.6	0	3.7	0
	Total (all range)		2.1					

Source: World Trade Organization, Statistics Database, Tariff Profiles (http://stat.wto.org)

Where MFN tariffs are not minimal, a strong argument for easing ROOs could still be made, by simply looking at the MFN tariff pattern by HS line across countries. The more uniform the MFN tariffs are across member countries, the lower the risk of trade deflection.

For these indicators (regional export or import share, intraregional trade, et al), a ranking of the products according to the shares as index could readily be made. This could be linked with the ROO or tariff data sets to draw some patterns. For example, with the ROO data set (and tariff schedule), a descriptive analysis could then be made about how the share corresponds to restrictiveness of ROO used and the MFN and preferential tariff schedule. Are there overly restrictive ROOs remaining in the top (high share)? Are there high tariffs standing out? This would indicate a need to look further into the possibility of relaxing (if not waiving) the ROO requirements for these cases.

These approaches offer only a first cut in the decision-making process, especially in terms of broad identification of trade deflection risks and fast track areas, but they could already yield clear areas for reforms. In many other cases, they would need to be supplemented by more focused studies for more particular concerns of an industry. Nonetheless this highlights the potential usefulness of a comprehensive data set which is readily available.

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