

## Key Issues:

- *Rules of Origin (ROO) stand in between rapid rise of PTAs and specialization in GVCs*
- *ASEAN's ROO have moderate trade inhibiting effect*

**Olivier Cadot**  
University of Lausanne, CEPR  
and FERDI

**Lili Yan Ing**  
Economic Research Institute  
for ASEAN and East Asia (ERIA)

## How Restrictive Are ASEAN's Rules of Origins?\*

By OLIVIER CADOT and LILIYAN ING

ASEAN's rules of origin (ROO) have a simple and transparent structure, with a large chunk of trade flows subject to a 40% regional value content or a change of tariff classification. The econometric analysis of trade flows discovers that the average ad-valorem equivalent (AVE) of ASEAN's ROO is 3.40% across all instruments and sectors. The trade-weighted average is 2.09%. This moderate estimate is in line with the existing literature. However, we also find fairly high AVEs for some sectors including leather, textile and apparel, footwear, and automobiles. We also find that some rules appear more restrictive than others; in this regard, the Textile Rule seems to stand out as a relatively more trade-inhibiting rule than others.

Today two trends dominate the world trade system. On one hand, trade agreements proliferate rapidly of which there is a new one almost every month. On the other hand, international trade increasingly entails 'trade in tasks' where countries specialize in segments of the global value chains (GVCs). What connects the two is the existence of rules of origin (ROO), which as conditions of preferential trade agreements, may work against optimization of GVCs by limiting sourcing choices of exporting firms (Calvo-Pardo, et al. 2009).

These issues are prominent in East Asia and the Pacific (EAP), where regionalism is spreading rapidly and ROO take an unprecedented political economy nature. One of the challenges of 'multilateralizing regionalism' – an expression coined by Baldwin (2006) – has been said to prevent ROO from working at cross-purposes with the rise of GVCs. In principle, ROO are created with two positive objectives. First, it is to prevent arbitraging of external tariff differences in free trade agreements (FTAs). Second, it is to prevent superficial assembly operations with little or no value added that would extend the benefit of preferential access to non-eligible intermediate producers. However, on the negative side, ROO can have the potential power to depress preference uptake by forcing inefficient sourcing, and imposing compliance cost such as paperwork and bureaucratic hassle. This explains the low utilization rates in spite of high tariff-preference margins for textiles in the North American Free Trade Agreement (NAFTA).

The views expressed in this publication are those of the author(s).  
Publication does not imply endorsement by ERIA of any of the views expressed herein.

\* The authors thank Gracia Hadiwijaya for her excellent assistance in writing a summary of the research papers. The paper is published as 'How Restrictive are ASEAN's Rules of Origin?', *Asian Economic Papers*, 2016, Vol. 15(3), pp.115–134.

ROO can also be highly political. In North–South agreements, ROO are said to be a way of ‘denying preferences’ from southern producers and hence relieving competition within the bloc generated by tariff phase-outs. (Medalla and Balboa, 2009).

There are reasons to believe that ROO in the Asia-Pacific region are less susceptible to being distorted by special-interest in comparison to its equivalent in NAFTA or PANEURO. First, unlike NAFTA or European Union (EU) partnerships, East Asian and/or Pacific regionalism does not have one dominating power and instead brings together a multipolar region with several economic and political heavyweights, including Japan, China, and the United States (US) as well as the Republic of Korea, Australia, and New Zealand. Second, while the US and EU partnerships were characterized by strong hub-and-spoke trade structures. The EAP has different trade structures and political motivations. US and EU partners with southern countries with the aim of creating a ‘mini-world’ so they can reap gains from vertical specialization and to maintain some degree of trade protection against Asian competition. By contrast, such motivations were much weaker, though not necessarily absent, from both Japan and China, the EAP region’s heavyweights. The reason is because a large chunk of EAP’s trade is in manufactured products characterized by economies of scale. Large firms dominate production and internalize all complementarities along it. In that situation, throwing in ROO to hurt the competitiveness of some of the downstream assemblers to favour others, makes little sense. Nonetheless, ROO could still be trade-restricting because they are unnecessarily complex or cumbersome to satisfy.

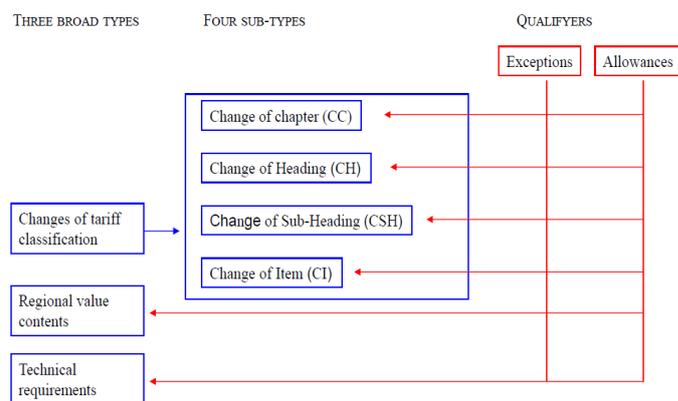
### Rules of Origin: How Do They Work?

Among their many forms, ROO are local-content requirements imposed on exporters of final goods who want to claim the benefit of preferential tariffs within a trade bloc. There are two broad types of ROO: product-specific rules and regime-wide rules.

Product-specific rules specify the minimum degree of local transformation needed to qualify for preferential treatment. This includes changes in tariff classification, regional value contents, or technical requirements. Changes in tariff classification impose that when a final good is produced using intermediates imported from outside the bloc, it ought not to belong to the same category as those intermediates. Regional value content (RVC) requires that a product includes a certain percentage of originating content. It can take various forms, including a maximum share of imported intermediates in total intermediates or a minimum share

of local value added in the product’s price. The definition of local value added itself varies across agreements and is typically a subject of bargaining. Meanwhile technical requirements can take as many forms as imagination allows, being sometimes tailor-made to benefit narrow interests. For instance, one of NAFTA’s rules for certain textile products used to specify that intermediates had to be woven with a loom width of less than 76cm, woven in the United Kingdom in accordance with the rules and regulations of the Harris Tweed Association, Ltd, and certified by the association.

**Figure 1. Types of Product-Specific Rules of Origin**



Source: Author’s construction.

Meanwhile, the most important regime-wide rule is the cumulation rule that specifies rules for products of one country of a free trade area to be further processed or added to products in another country of that free trade area as if they had originated in the latter country. In this way, production may be aggregated with other countries’ inputs, thus, offering additional opportunities to source input materials. In principle three types of cumulation can be distinguished: bilateral, diagonal, and full cumulation. Bilateral cumulation operates between two countries while diagonal cumulation operates between more than two countries, both require that only originating goods can be considered as input for cumulation purposes in another partner country. Full cumulation, on the other hand, considers all participating countries as one area for origin determination, thus the rule simply demands that the origin requirements are fulfilled within the preferential trade zone as a whole. In other words, full accumulation/cumulation allows for greater fragmentation of the production process than the more commonly used bilateral and diagonal accumulation/cumulation and hence is less restrictive.

### ASEAN ROO

ROO will only apply when exporters want to make use of preferential tariffs. The alternative of not using

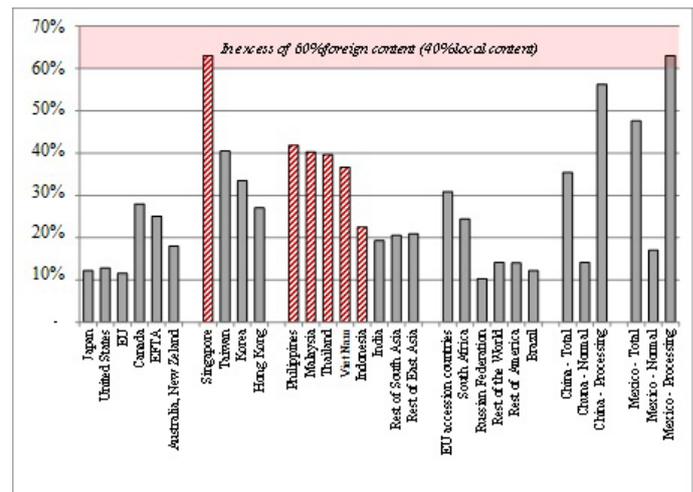
preferential tariffs is to use the most-favoured nation (MFN) status, which in all ASEAN countries is substantially higher. Hence, the sensible choice for exporters is still to use preferential tariffs even though they incur compliance costs. Moreover, the possibility of using preferential tariffs will be higher in sectors where MFN is higher. In comparison to NAFTA or (system of rules of origin in the European Union (PANEURO), ASEAN's ROO have a simple structure. Importers can usually choose between a regional value content at 40% and a change of tariff classification which makes the system less penalizing.

ROO, however, vary substantially for each individual agreement. The ASEAN–China FTA is one of the simplest agreement, making use essentially of regional value content. Moreover, a large chunk of the trade is in the electronics sector where MFN tariffs are low. The ASEAN–ANZ (Australia and New Zealand) FTA has the most complex structure, with a large number of instruments used in combination with each other. This complicated structure that smacks of special interest interference resembles that of NAFTA's ROO or of PANEURO. ASEAN member states have substantial MFN tariffs in particular on sensitive sectors like food & beverages (section 4), textiles & apparel (Section 11), footwear (section 12), and vehicles (section 17). These are all sensitive sectors in terms of employment but also sectors where cross-border GVCs are most prevalent, and hence where ROO can substantially constrain firms. Prima facie evidence suggests that ROO should be only moderately constraining to ASEAN's trade.

Figure 2, constructed using the data of Koopman et al. (2011), gives prima facie evidence of how constraining ASEAN's RVC could be by plotting the average foreign content of exports for countries in Koopman et al.'s sample. With a 40% RVC, the foreign content of exports should be no more than 60%. Koopman et al. did not calculate the regional value added in gross exports, but only the domestic vs. foreign (all origins including both regional and non-regional). Therefore, only foreign content widely in excess of 60% would put a country's exports at risk of violating the 40% RVC. Figure 2 shows that for most of ASEAN's Member States for which data are available, the foreign content of exports is less than 60%, suggesting that prima facie ASEAN's ROO should not be overly constraining.

But the prima facie evidence can hide substantial effects once the sectoral composition of trade is considered. Moreover, the bureaucratic hassle of proving compliance may be perceived by companies to be a burden. Only econometric analysis, controlling for various possible confounding influences, can give a response.

**Figure 2. Foreign Content of Exports by Exporting Country**



EFTA = European Free Trade Association; EU = European Union.

Source: Adapted from Koopman et al. (2011).

## Measuring Trade-inhibiting Effect of ROO

Assessing the impact of ROO means establishing a causal relationship between a measure of ROO and a measure of trade performance. All three (measuring ROO, measuring trade performance, and establishing causation) involve difficult issues. A recent study by Ing reviewed the evidence on the effect of ASEAN's ROO on preferential trade. In an econometric analysis, the first-best approach to measure the effect of ROO would be to use preference utilization rates as the dependent variable. However, in the absence of utilization-rate data, the study looks at variation in trade flows across country pairs and across products as the identification mechanism to detect any trade-inhibiting effect of ROO. As trade flows also depend on product, country, and previous export–import trend, the study controls all of those confounding factors.

The study combines three data: ROO data in the form of precise requirements at the Harmonized System (HS) 6-digit level of product classification were provided by the ASEAN Secretariat, trade data in US dollars are from the French Centre d'Etudes Propectives et d'Informations Internationales-International Trade Database at the Product-Level (CEPII's BACI database), and gravity variables are from the CEPII's free-access online database. The effect of tariff preference margins was captured through the Road and Traffic Authority (RTA) dummy and its interaction with the MFN, while ROO dummies were added to capture specifically the effect of ROO. All estimates were converted into ad valorem equivalents of ROO, a measure that is more familiar for most trade effects.

Despite the relatively simple, flexible, and transparent structure of ASEAN ROO, the econometric analysis of trade flows show that ASEAN's ROO have significant and quantitatively substantial trade-inhibiting effects. The simple average of the ad valorem equivalent of ASEAN's ROO, across instruments and HS sections is 3.40%, in line with estimates in the literature. This means that ROO inhibit ASEAN's trade by an amount roughly equivalent to one quarter of its MFN tariffs. Put differently, ROO seem to 'nullify' one quarter of the effect of tariff preference margins. Although moderate, this may contribute to low take-up rates that have been observed on the basis of fragmentary evidence.

However, the effect is heterogeneous. While it is small in sectors like electronics or capital equipment, where MFN tariffs are low so trade is only weakly affected by preferences, it peaks in sectors that matter for the development of ASEAN's poorest member states like fats (6.7%), leather products (9%), textile and apparel (8.3%), footwear (12.7%), or automobiles (6.9%).

Overall, ASEAN's relatively restrictive ROO may not have a huge impact on trade flows as a large proportion of international trade in the Asia-Pacific area is in the electronics and capital equipment sector where MFN tariffs are low and the attractiveness of preferences is (with or without ROO) limited anyway. Thus, the low take-up rates may simply reflect the fact that most trade is in product lines that do not stand to benefit very much from tariff reductions.

However, there may be gains to reap from the simplification of ROO in sectors like textile & apparel or

footwear, which currently represent a low proportion of Asia-Pacific trade but may represent substantial opportunities for export-led growth and thus poverty reduction in some of the region's poorest countries. The same applies to prepared foods. Automobiles also stand out as a sector where the relaxation of ROO might be considered, or at least carefully coordinated with plans to build up 'deep' value chains within the region.

Thus, the simplification and streamlining of ROO should prioritize light industries like textile and apparel, footwear, and prepared foods (in particular fats) and this should be seen as part of ASEAN's internal development and poverty reduction strategy. Future research should be carried out to assess the specific gains that ASEAN's poorer member states would reap from less stringent ROO.

## References

- Baldwin, R. (2006), 'Multilateralising Regionalism: Spaghetti Bowls as Building Blocs on the Path to Global Free Trade', NBER Working Paper, No. 12545.
- Calvo-Pardo, H., C. Freund, and E. Ornelas (2009), 'The ASEAN Free Trade Agreement: Impact on Trade Flows and External Trade Barriers', World Bank Policy Research Working Paper 4960, Washington, DC: World Bank.
- Koopman, R., W. Powers, Z. Wang, and S. J. Wei (2011), 'Give Credit Where Credit Is Due: Tracing Value Added in Global Production Chains', NBER Working Paper, No. 16426.
- Medalla, E. and J. Balboa (2009), 'ASEAN Rules of Origin: Lessons and Recommendations for Best Practice', ERIA Discussion Paper, No. 2009-17, Jakarta: ERIA.



**Headquarters:**  
The ASEAN Secretariat  
Mezzanine Floor  
70A Jalan Sisingamangaraja  
Jakarta 12110,  
Indonesia

**Annex Office** (mailing address):  
Sentral Senayan II 5th & 6th Floors  
Jalan Asia Afrika No. 8,  
Gelora Bung Karno, Senayan,  
Jakarta Pusat 10270,  
Indonesia

Tel: (62-21) 5797-4460  
Fax: (62-21) 5797-4464  
E-mail: [contactus@eria.org](mailto:contactus@eria.org)

ERIA Policy Brief  
can be downloaded at [www.eria.org](http://www.eria.org)