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New Global Realities



Edited by Stephen Tapp, Ari Van Assche and Robert Wolfe

## About this chapter

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*Redesigning Canadian Trade Policies for New Global Realities*, edited by Stephen Tapp, Ari Van Assche and Robert Wolfe, will be the sixth volume of *The Art of the State*. Thirty leading academics, government researchers, practitioners and stakeholders, from Canada and abroad, analyze how changes in global commerce, technology, and economic and geopolitical power are affecting Canada and its policy.

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## **Navigating the Maze: Canada, Rules of Origin and the Trans- Pacific Partnership (and Two Tales of Supply Chains)**

*Andrew (Sandy) Moroz*

PREFERENTIAL RULES OF ORIGIN PLAY AN ESSENTIAL ROLE IN REGIONAL TRADE AGREEMENTS (RTAs) because they are used to determine whether a good is “originating” and, hence, eligible for tariff preferences under such agreements.<sup>1</sup> Rules of origin define how much production of a good must occur in an RTA area, which inputs must also be made in that area (and how much production these inputs must undergo in the area) and which inputs can be imported from outside the area. Accordingly, producers, in complying with rules of origin — and customs officials, in verifying if the rules have been satisfied — face a technical minefield, particularly for products involving multiple stages of production.

These challenges have increased in recent years as result of two developments. The first has been the unbundling of production processes and the emergence of regional and global supply chains that can involve numerous countries along the production chain (see Van Assche, De Backer and Miroudot, and Koldyk, Quinn and Evans, in this volume). And determining whether a good is originating can be even more challenging when international supply chains include production from countries, such as China, that are outside many of these RTAs.

The second development is the proliferation of RTAs themselves. Regional and global supply chains have allowed for a more efficient allocation of resources and production, but the number of active RTAs — up from around 40 in the early 1990s to 267 as of June 2016 — has led to an increasingly splintered international trading system (Wolfe, in this volume; World Trade Organization 2015, 2016a,b). Many countries belong to many RTAs, each with its own set of rules of origin. Canada alone is a member of 11 active RTAs, with another 11 under negotiation or recently concluded but not yet implemented. The 12 parties to the Trans-Pacific

Partnership (TPP) are involved in 32 active RTAs that include at least two TPP signatories, each with its own set of rules of origin (see the appendix).

On the surface, having more RTAs seems to offer more economic opportunities, especially for a small, open economy such as Canada's. But the differing and sometimes conflicting provisions of RTAs confront firms with an "untamed tangle of multiple overlapping agreements" (Baldwin and Low 2009, 2). Given a "spaghetti bowl" of trade rules (Bhagwati 1995), firms can face major challenges and costs in trying to take advantage of all the opportunities RTAs offer. Nowhere is this problem more evident than in the complicated maze of rules of origin across RTAs. In trying to navigate this maze, firms can be discouraged from using the most competitive suppliers and supply chains, and may even find themselves having to choose between RTAs.

This chapter examines the challenges and opportunities of negotiating rules of origin in a world of proliferating RTAs and regional and global supply chains by looking at the TPP from two perspectives: first, the broader implications of the TPP weaving together the different sets of rules in the 32 RTAs involving TPP parties into a single, common set of rules with full cumulation; and second the resulting implications for Canada. It also illustrates how supply chains influence negotiations on rules of origin by focusing on two sectors: textiles and apparel, and automotive goods. Although the TPP's more liberal auto rules, compared with those under NAFTA, have sparked controversy in Canada, I argue that the Canadian auto sector faces much larger challenges that could be exacerbated if Canada were to stay out of the TPP.

## Rules of Origin

**P**REFERENTIAL RULES OF ORIGIN DEFINE HOW MUCH PRODUCTION MUST OCCUR IN, AND which inputs must be sourced from within, the territory of the parties to an RTA for a good to be considered as "originating" and, hence, eligible for tariff preferences. The three main ways of expressing the required amount of production and sourcing are: (1) a *tariff-shift rule* that requires a change in tariff classification of imported nonoriginating inputs; (2) a regional *value-content rule* that stipulates the percentage of value added that must occur within the territory of the RTA partners; and (3) a *processing requirement* that specifies which production processes must be undertaken within the RTA territory (Abreu 2013; Brenton 2010; and Moroz 2016).

Ostensibly, rules of origin exist to ensure that the tariff preferences in an RTA are accorded only to goods made in the participating countries (they benefit only producers in these countries and prevent free riders). They also prevent the trans-shipment of goods from nonsignatory countries through lower-tariff RTA countries while the goods are en route to a higher-tariff country. Often, however, rules of origin are used as a protective device, intended to stifle the use of tariff preferences or to divert input trade by reshaping sourcing patterns and supply chains for the firms that wish to use these preferences. In other words, rules of origin can introduce their own distortions that reduce the economic gains from RTAs. How, and to what extent, preferential trade is affected and economic decisions are distorted relate to three critical aspects of rules of origin.

### **Restrictive versus liberal**

The first critical aspect of rules of origin is their degree of restrictiveness. A liberal rule may require only that final processing or assembly occur within the RTA territory. For example, a washing machine might need only to be assembled within the RTA, while all subassemblies and parts can be imported from outside the region. In contrast, a restrictive rule of origin might require not only that the final production be done in the RTA territory, but also that many, if not all, of the key parts (and even the inputs going into these parts) must originate within the RTA.<sup>2</sup> A well-known restrictive rule is the yarn-forward, or triple transformation, rule for apparel found in the North American Free Trade Agreement (NAFTA): to qualify for tariff preferences, not only must the apparel item be cut, sewn and finished within the NAFTA zone, but both the yarn and the fabric made from that yarn must also originate within that zone.

The degree of restrictiveness can vary significantly, and often reflects the size and structure of the RTA parties. In general, larger economies, such as the United States or the European Union, prefer more restrictive rules of origin. The input producers in these vertically integrated economies often exert political pressure for restrictive rules, either to capture the benefits under the RTA by requiring their inputs be used if producers in the RTA area want to enjoy the tariff preferences, or to preclude preferential access for final goods made from inputs sourced from competitors in third countries (Chase 2008; Duttagupta and Panagariya 2007). Smaller economies, in contrast, generally prefer more liberal rules since many of their industries rely more heavily on imports of key inputs. One consequence is

that smaller economies like Canada can face major challenges when negotiating RTAs with large economies, as the latter can leverage the offer of preferential access to their markets in order to impose more restrictive rules of origin.

### **Cumulation**

A second critical aspect of rules of origin is the concept of cumulation, whereby an input produced in the territory of one member of an RTA (that meets that RTA's rules of origin) can not only be exported under tariff preferences to another member, but it can also be used as an originating input to produce another originating good in that member's territory. If that second good meets its own rules of origin (including as a result of using the imported originating input), then it is also eligible both for tariff preferences and, if it is also an input, to be used as an originating input in the production of a third good. For example, under NAFTA, if yarn made in the United States meets its rule of origin, it can be exported duty-free to Mexico to be used to produce originating fabric. That fabric then can be shipped duty-free to Canada to be cut, sewn and finished into an originating apparel item that can be exported duty-free to Mexico or the United States. This concept of cumulation might seem to be obvious, but, as discussed below, it is crucial for Canada's economic interests and for the "weaving together" role played by the TPP.

A related concept is cross-cumulation, or diagonal cumulation, between separate RTAs. For example, Canada has included in its post-NAFTA trade agreements a provision whereby, if Canada and an RTA partner each has a separate RTA with the same third party, and if all three parties agree, inputs from any of the three parties can be treated as originating materials under the three agreements. Cross-cumulation can be sector-specific — for example, Canada has been able to incorporate cross-cumulation in a few sectors, such as motor vehicles, in some of its RTAs — or comprehensive in being applicable to all goods covered by an RTA. Comprehensive cross-cumulation, however, raises significant administrative and verification challenges, and some trading partners could be reluctant to share the three-way economic space. To date, the comprehensive cross-cumulation provision has not been activated in any of Canada's RTAs. The European Union, however, is using its economic influence to push for diagonal cumulation, which involves harmonizing rules of origin across agreements, with its RTA partners in Europe, the Middle East and North Africa under its Regional Convention on pan-Euro-Mediterranean preferential rules of origin (European Commission, n.d., World Customs Organization, n.d.).

## Compliance costs

Firms face two sets of costs to comply with rules of origin: administrative costs and distortionary costs, both of which can involve fixed and variable components.

Starting with administrative costs, firms must first learn the rules of each RTA. They then need to comply with the certification, recordkeeping and other administrative requirements to demonstrate that their goods meet these rules (should they be audited by customs authorities). Estimates of these administrative compliance costs range from 1 to 8 percent of the value of the shipments (Abreu 2013; Brenton 2010; Cadot and de Melo 2008; Kunimoto and Sawchuk 2005).<sup>3</sup> Importers also face the risk of having to pay duties, and potentially fines, if their goods are later found by customs authorities not to comply with the rules.

The second set of costs is incurred because of the distortions that can result from trade diversion of inputs in favour of the RTA partners, which in turn reduces the welfare gains of an RTA. These distortionary costs arise because firms might need to change their production structures or switch to higher-cost suppliers inside the RTA territory from lower-cost suppliers outside that territory in order to comply with the rules of origin.

At the end of the day, firms likely will choose to forgo taking advantage of RTA tariff preferences if compliance costs outweigh the benefits of tariff savings. For example, small and medium-sized enterprises are less likely than larger firms to take advantage of tariff preferences because they might lack the resources necessary to demonstrate compliance or to bear the additional costs of switching suppliers to satisfy the rules. Given the fixed costs associated with complying with rules of origin, such firms also face disproportionately higher costs per shipment due to their lower export values or volumes (Keck and Lendle 2012). Factors other than firm size that affect the use of tariff preferences include the level of the tariff (and hence the margin of the preference), the value or volume of shipments and the restrictiveness or complexity of the rules (Abreu 2013; Brenton 2010; Estevadeordal and Suominen 2008; Keck and Lendle 2012; World Trade Organization 2011).

Furthermore, in a world of multiple, overlapping RTAs, firms might need to choose between RTAs for two reasons. First, firms face the additional administrative costs associated with complying with more than one set of rules of origin. Second, firms might incur significant additional production costs, such as those related to shorter production runs and separate input inventories, if they try to satisfy simultaneously the input-sourcing requirements of different RTAs. If these

additional administrative and production costs of complying with multiple rules are greater than the combined benefits of capturing the multiple tariff preferences on offer, firms will choose which RTAs to take advantage of and which to ignore. This issue is a particular challenge for smaller countries such as Canada in negotiating rules of origin with several larger countries.

## The TPP Rules of Origin

### Implications of weaving rules together

THE TPP RULES OF ORIGIN WOULD PLAY THE SAME ROLE AND BE LARGELY ADMINISTERED AND enforced the same way as the rules in most other RTAs (including existing RTAs involving TPP parties). As is often the case, reaching agreement on the TPP rules involved difficult negotiations in certain sectors, such as textiles and apparel and — especially controversial in Canada and its NAFTA partners — automotive goods.

But the TPP rules of origin would also play a more modern and crucial role. Not only would the TPP create a much larger combined goods market for producers in the 12 signatory countries; it would also allow these producers to use one common set of rules of origin, with full (or 100 percent) cumulation. In the absence of the TPP, these producers would continue to face a disjointed web of rules in the 32 RTAs involving at least two TPP parties. For example, Canada has RTAs with Chile and Peru, and belongs to NAFTA with Mexico and the United States. The United States is in NAFTA and has separate RTAs with Australia, Chile, Peru and Singapore. The second largest TPP member, Japan, has RTAs with all TPP parties, except Canada, New Zealand and the United States, and so on.

Since each TPP party entered the negotiations with its own existing sets of rules of origin with various other TPP countries, and hence its interests and preferences regarding the rules, the TPP rules negotiation involved, in effect, the weaving together of 32 different sets of rules into one common set with full cumulation. What this weaving together means, to use Canada as an example, is that, instead of dealing with the different rules in three separate RTAs when exporting to four of its current RTA partners, an implemented TPP would allow Canadian producers to use just one set of rules when exporting to any of the 11 other TPP partners. Consequently, producers in TPP member countries could achieve significant compliance savings in two ways. First, they would have to deal with only one common



set of administrative requirements. Second, since all firms would face the same rule for each product, and since the TPP provides full cumulation, firms would be able to source originating inputs from any of the other TPP parties, thereby offering potential savings from lower-priced or higher-quality inputs.

As a general matter, the TPP could be expected to reduce any diversion of trade in final goods between TPP signatories arising from the existing fragmented web of RTAs involving the 12 TPP parties by merging these individual markets into one large free trade area. The TPP should also help reduce any trade diversion in inputs that results from firms switching to less competitive suppliers in order to comply with various sets of rules of origin within this fragmented web of RTAs. By establishing a common set of rules of origin with full cumulation, the TPP would allow producers to source from the most competitive suppliers within the free trade area that can satisfy the TPP rules, thereby allowing a relatively more efficient allocation of resources within the combined territory of the 12 members. Moreover, trade diversion of inputs produced outside the TPP region, at least in the case of secondary inputs, could also be reduced if the TPP rules prove to be more liberal than those found in existing RTAs involving TPP signatories.

The TPP outcome, however, is mixed.<sup>4</sup> For the vast majority of agricultural products, the TPP rules of origin are either as restrictive as, or more restrictive than, the rules found in most of the RTAs between TPP signatories, including NAFTA. In particular, the TPP rules for many processed fruit, vegetable, meat and fish products are more restrictive than the rules found in many of RTAs involving the TPP parties. They either do not allow for these products the use of any fish, cattle, poultry, fruit or vegetables harvested, slaughtered or grown outside the TPP territory, or limit the use of such inputs from non-TPP sources.<sup>5</sup> It appears that TPP negotiators chose to resolve difficulties by accommodating the parties' agricultural sensitivities by going with the most restrictive rule found in any of the RTAs involving TPP signatories.

Turning to nonagricultural goods, other than automotive goods and textiles and apparel (discussed below), the TPP rules of origin are generally more liberal than those in NAFTA and either similar to or more liberal than those in most of the other RTAs involving TPP signatories in the western hemisphere (including many of their agreements with Asian TPP parties). The TPP rules for nonagricultural goods are similar to the rules found in the RTAs solely between Asian TPP signatories and a few of their agreements with TPP members in the western hemisphere

(such as the Chile-Malaysia Free Trade Agreement), with the exception of various mineral, chemical, plastic, rubber and footwear products where the TPP rules are somewhat more restrictive.<sup>6</sup>

What are the implications of these differences between the rules of origin in the TPP and the existing RTAs involving TPP signatories? Where the TPP rules of origin are more restrictive, producers that wish to enjoy the TPP's tariff preferences might need to divert their sourcing of inputs from non-TPP countries, including from existing RTA partners outside the TPP, to suppliers in TPP countries. This, however, could raise their costs and erode the overall benefits of the TPP. Moreover, producers that cannot comply simultaneously with two sets of rules might have to forgo the tariff preferences available under other RTAs if they want to take advantage of the TPP preferences. One factor that might mitigate this erosion of TPP benefits to some extent is that firms would be able to source their inputs from the TPP's wider group of countries. In the case of the tighter agricultural rules of origin, for example, a number of TPP signatories are globally competitive producers of key inputs for processed fruit, vegetable, fish and meat products. At the same time, on the expectation that the existing RTAs between TPP signatories would continue to function alongside the TPP, producers could, for the affected goods, continue to use the more liberal rules under these RTAs for their existing preferential trade with other TPP parties (although this might require them to dual-source certain inputs if they also want to exploit the new market opportunities offered by the TPP).

For goods subject to more liberal rules of origin under the TPP — as is the case for many nonagricultural goods — the TPP offers producers wider scope to reduce their costs. Although the TPP rules would still require many major components and subassemblies to be made in the TPP region, producers in TPP countries would have greater opportunities to source inputs used to make these components and sub-assemblies from competitive suppliers from outside the TPP zone, including regional or global value chains involving countries outside the TPP area. This opportunity could result in less trade diversion in inputs from outside the TPP area for inputs used in the earlier stages of production, thereby contributing to the TPP's economic efficiency gains.

### **Implications for Canada**

With its parties accounting for nearly 40 percent of global GDP, the TPP offers Canada both challenges and opportunities. In the case of goods, if the TPP is implemented,

the phaseout of tariffs on the vast majority of products traded among the 12 TPP members would further erode Canada's existing preferential access to the United States — the largest TPP member and by far Canada's largest trading partner. But this erosion would be tempered by the fact that the United States already has RTAs with five other TPP members — namely Australia, Chile, Mexico, Peru and Singapore. Consequently, Canada would face new preferential competition in the US market only from Japan, Malaysia, New Zealand, Vietnam and Brunei Darussalam. On the other hand, Canadian producers would gain new preferential access to those TPP countries with which it currently does not have an RTA — namely, Japan (the largest prize for Canada), Australia, New Zealand, Vietnam, Malaysia, Singapore and Brunei Darussalam. Canadian producers would, of course, face competition under the same preferences in these seven markets from other TPP countries. But a number of TPP countries already have RTAs with these seven Asian countries, so the TPP, in effect, would level the playing field for Canadian producers in these markets. Canadian consumers would also stand to benefit from lower prices and increased choice.

As a result of NAFTA and its predecessor, the Canada-US FTA — and in the case of the auto sector, the 1965 Canada-US Auto Pact — many Canadian firms and industries rely heavily on the United States both as a source of their key inputs and a market for their outputs (including goods supplied as inputs to US producers). This dual dependence on the United States has clearly influenced Canada's approach to negotiating rules of origin in its subsequent RTAs (Moroz 2016). Canada entered the TPP negotiations on rules of origin in a relatively strong position, since many of its producers are already integrated into North American supply chains under NAFTA.

With the implementation of the TPP, Canadian producers could gain in three ways: (1) from preferential access to the seven Asian TPP signatories; (2) from new opportunities to supply TPP-originating inputs to firms in other TPP member countries — particularly the United States — that, in turn, export to other TPP members;<sup>7</sup> and (3) from the ability to source duty-free originating inputs from a broader range of countries to produce goods for duty-free export to Canada's existing RTA partners in the TPP (the United States, Mexico, Chile and Peru), as well as to the other TPP members.<sup>8</sup>

In short, the TPP could allow Canadian producers to build on their North American supply chains established under NAFTA, while offering them access to both a larger, combined preferential market and more options to source originat-

ing inputs (and for many nonagricultural goods, wider scope to source secondary inputs from more competitive suppliers outside the TPP zone).

## TPP Rules of Origin in a Supply Chain World

**I**F THE RESTRICTIVE RULES OF ORIGIN FOR MANY NONAGRICULTURAL GOODS IN NAFTA were included at the behest of the United States, then why did that country accept significantly more liberal rules for most of these goods over two decades later in the TPP? The reason is that many US companies are at the vanguard of forging and using regional and global supply chains. The influence of such supply chains on the TPP rules of origin, however, was a two-way street, as demonstrated by the difficult and controversial negotiations on the rules for automotive goods and textiles and apparel, which pitted supply chains in North America and Asia against one another.

### **Textiles and apparel: Vietnam versus the United States, Mexico and Peru**

Sourcing of inputs for apparel and other textile items has been controversial for more than two centuries (Beckert 2014). So it was no surprise that textiles and apparel were one of the most controversial areas in the TPP rules of origin negotiations.

Apparel is one of Vietnam's main exports, accounting for about 30 percent of its exports to the United States, making preferential access to the US market a Vietnamese priority. Vietnam's main source of fabrics is China, followed by South Korea and Taiwan. These fabrics, in turn, are made primarily from yarns sourced largely from various Asian countries. The US negotiators, however, faced considerable domestic pressure, as in previous RTA negotiations, from the US textiles industry to maintain the yarn-forward rule that was first introduced in NAFTA. The US industry's goal was twofold: to maintain its central role in the supply chain established under existing RTAs with various Central and South American countries; and to prevent apparel and other final textile items made in TPP countries from yarns and fabrics produced outside the TPP region from enjoying US tariff preferences under the TPP — which would be significant given the high US most-favoured-nation tariffs on many of these items. Mexico and Peru supported the US position because their industries have become integrated with the US industry under their respective RTAs with the United States, creating a supply chain where yarns and fabrics are sourced from the United States to produce final items

that subsequently are shipped back under tariff preferences to the United States. An additional, longer-term motive of the US industry might also have been a desire to play a larger role in investment in yarn and fabric production capacity in Vietnam and other Asian TPP countries.

Despite opposition from the US retail sector and from Vietnam and a number of other TPP countries, the TPP incorporates the US yarn-forward rule of origin for textiles and apparel, with two elements of limited flexibility. First, a “short supply list” identifies those fibres, yarns and fabrics that were considered not to be commercially available within the TPP region, and hence would not have to be originating when used in the production of apparel and other textile items by producers seeking TPP tariff preferences for these items. In many cases, the ability to use these nonoriginating textiles would be restricted to the production of certain products. Second, a special *derogation* for Vietnam would allow it to use nonoriginating cotton fabrics to produce cotton pants eligible for US tariff preferences, but the annual allowable volume under this derogation would be capped and linked to Vietnam’s purchases of US-originating cotton fabrics.

Most of the RTAs involving the western hemispheric TPP countries, including those with Asian TPP signatories, also have the yarn-forward rule of origin. But three of these agreements — namely the NAFTA, the Canada-Chile FTA and the Chile-US FTA — also provide derogations that allow a limited quantity of fabric or apparel made from nonoriginating yarns or fabrics to benefit each year from tariff preferences if it meets a processing requirement.<sup>9</sup> Unlike the US derogation for Vietnam in the TPP, these annual quantities are not linked to offsetting purchases from the importing country offering the preferences. Since the TPP does not include such derogations, its rules on textiles and apparel are effectively more restrictive than those found in these three agreements for those products not made from fibres, yarns and fabrics on the TPP’s “short supply list.” However, producers in these countries should be able to continue to use the textile and apparel derogations provided under their existing RTAs with the United States. At the same time, the TPP textile and apparel rules of origin are significantly more restrictive than those found in RTAs solely between the Asian TPP parties.

Since Vietnam and the other Asian TPP countries currently have limited yarn and fabric production, they will need to rely largely on US sources and the limited TPP flexibilities, at least in the short to medium term, to take advantage of TPP tariff preferences, particularly into the large US market. Whether the TPP

will encourage investment in yarn and fabric facilities in these countries is an open question, although there is some evidence that firms are starting to do so in Vietnam in anticipation of the implementation of the TPP (Cory 2015). That the United States' intent was to preserve its existing textile supply chain is evident from the US Trade Representative's summary of the TPP textiles and apparel chapter, which states: "The yarn-forward approach also will help to develop a regionally-integrated supply chain that will promote long-term growth and investment in this sector in the United States" (United States 2016b).

### **Automotive goods: Canada and Mexico versus the United States and Japan**

The controversial TPP negotiations on automotive rules of origin pitted the North American supply chain established under NAFTA against the Asian supply chain established by Japanese companies, which includes parts suppliers in China and Thailand. The result of these negotiations is TPP auto rules that are more liberal than those in NAFTA and that effectively would allow Japanese auto producers to maintain their existing Asian-based supply chains. That the United States was prepared to accommodate Japan's interests likely reflects both the US desire to advance its own export interests in the Japanese market in other sectors — such as agriculture — and the interests of the increasing globalized US-owned vehicle and major parts companies. Only after Canada and Mexico raised major concerns over this last-minute proposal by Japan and the United States were the TPP auto rules tightened by increasing the regional value-content thresholds for various automotive products and placing more limits on additional flexibilities sought by Japan. But the result is still controversial in Canada.

### ***Automobile rules of origin in the TPP***

As Canada's largest manufacturing sector, the auto industry has always posed a special challenge for Canada in rules-of-origin negotiations. As a result of the 1965 Auto Pact and the two free trade agreements (FTAs) with the United States, the Canadian auto sector is heavily integrated with that of the United States. Approximately 85 percent of motor vehicles and 50 percent of the value of parts produced in Canada are exported, overwhelmingly to the United States. Meanwhile, most cars sold in Canada are imported, mainly from the United States, but also from Europe, Japan and South Korea. At the same time, a major portion of the parts — ranging from small parts to major vehicle subassemblies — used in the assembly of vehicles in Canada come from the United States.

This heavy dependence on the United States as both its main market and its major supplier has required Canada to be creative and adaptive in negotiating auto rules of origin. A number of Canada's post-NAFTA RTAs, such as those with Chile and Costa Rica, include very liberal rules of origin for motor vehicles compared with those in NAFTA. Canada's agreements with Peru, Colombia, Panama and South Korea allow auto parts made in the United States to count as originating content if they meet a certain requirement, even though the United States is not a member of these RTAs.<sup>10</sup> In the negotiations on the Comprehensive Economic and Trade Agreement (CETA), the EU insisted on including a restrictive auto rule of origin that precludes passenger cars made largely from US parts from qualifying for EU tariff preferences. Canada was able, however, to negotiate a derogation from this restrictive rule that allows up to 100,000 passenger cars that meet a less restrictive rule to be imported each year duty-free into the EU from Canada. Canada and the EU also agreed that, if the EU and the United States were to implement an RTA, US motor vehicle parts would be treated as originating materials under CETA — subject to certain conditions.<sup>11</sup> Such agreements have allowed Canadian auto firms to maintain their preferential access to the US market and to continue to source inputs from the United States under NAFTA, while also being able to take advantage of new opportunities provided by RTAs with other countries.

With the United States (and Mexico) in the TPP, Canada would have no problem incorporating NAFTA value-content requirements of 62.5 percent for passenger cars and engines and 60 percent for other auto products under the net cost method.<sup>12</sup> But the TPP sets a significantly lower threshold under this method, ranging from 45 percent for motor vehicles, most engines and certain parts, to 40 percent for door assemblies and certain other parts, and to 35 percent for small engines and various other parts. In addition, to accommodate Japan's concerns, the TPP provides flexibility by offering alternative rules of origin for certain inputs based on processing requirements. Designated inputs (for example, safety glass and body stampings) used to produce motor vehicles, as well as any input used in the production of eligible subassemblies (such as larger gasoline engines and gearboxes), can also qualify as originating inputs if they undergo one or more qualifying operations. In the latter case, the TPP places a cap on how much originating content of the eligible component can be provided by these inputs.

The TPP auto rules of origin are more liberal than those found not only in NAFTA, but also in the Australia-US, Japan-Mexico and (for passenger cars)

Japan-Malaysia FTAs — all agreements involving at least one major automotive producer.<sup>13</sup> The TPP rules are more restrictive than those in other trade agreements between TPP members, but many of these agreements involve countries that not are significant automotive producers or — as with many of Canada's and Mexico's RTAs — stipulate a liberal rule in order to accommodate their auto industries' reliance on US-made parts.

### *The TPP automobile controversy*

The liberal TPP auto rules of origin have sparked controversy in the NAFTA countries, revealing a split within the industry. Vehicle assemblers are generally supportive, large parts suppliers are lukewarm, the smaller parts producers are deeply concerned, and the unions are opposed.

Vehicle assemblers in Canada, whether US- or Japanese-owned, support the more liberal TPP rules because they would give these companies greater flexibility to tap into global value chains, particularly for less complex parts that are used to produce major subassemblies and vehicles. Nonetheless, the Canadian branches of the Detroit Three — Fiat Chrysler, Ford and General Motors — have criticized the 5-year phaseout of Canada's 6.1 percent tariff on passenger cars for being much shorter than the 25-year back-end-loaded phaseout of the United States' 2.5 percent tariff on passenger car imports from Japan.<sup>14</sup> The Canadian branches likely worry that the faster Canadian phaseout would squeeze the sales and profits on the Canadian sales of their vehicles, which are made mostly in the United States. On the other hand, the long, back-ended phaseout of the US tariff would offer a buffer against competition from Japan for vehicles produced in Canada that are mostly destined for the United States. Japan-based assemblers, however, would gain much earlier duty-free access to the markets of Canada and other TPP countries.

The parts industry presents a more complex picture. Canada eliminated its multilateral tariff on original-equipment auto parts in 1996. As a result, the industry's focus is now split between access to new preferential markets, on the one hand, and the threat of increased competition in its North American market from Asian TPP countries because of the more liberal TPP rules of origin, on the other hand. The Automotive Parts Manufacturers Association, representing Canadian parts producers, and its US counterpart, have expressed support for the TPP, albeit tepidly. But in doing so, they acknowledge that their memberships are divided. "Tier-one" parts producers — the larger, more globally oriented producers that



supply major subassemblies or modules to the vehicle assemblers — generally welcome the TPP. They have the size, capital and technological resources to adapt to the agreement's new competitive challenges and market opportunities, including by sourcing more of their own inputs from supply chains outside the TPP territory under the agreement's more liberal rules of origin.

Small and medium-sized parts companies, however, are concerned that the more liberal rules would expose them to stiffer Asian competition in their traditional North American market. These regionally based and regionally dependent companies — “tier-two” parts producers — manufacture generally smaller or less complex components for both the tier-one parts producers and the vehicle assemblers. Even if the TPP rules were as restrictive as those in NAFTA, the tier-two producers could expect growing competitive pressure over time from the Asian TPP countries. But the more liberal TPP rules would also increase their exposure to competition from lower-wage producers in non-TPP Asian countries, such as China and Thailand, by allowing more content to be sourced from outside the TPP territory than under NAFTA rules.

A longer-term concern might also be that the phaseout of the Canadian and, albeit over a much longer period, US vehicle tariffs could lead to the displacement of North American sales of locally made vehicles by imports from Japan and other Asian TPP countries. Although vehicle producers tend to locate in the regions they sell, such displacement could result in the migration of some vehicle assembly to Asia over time, along with tier-one parts producers, thereby eroding the market of the regionally dependent North American tier-two parts producers. Such concerns underlie calls by the Canadian and US parts manufacturers associations for their respective governments to take action to support the small and medium-size parts producers.

### *Implications of the automobile rules of origin for Canada*

The more liberal auto rules of origin and the elimination of the Canadian tariff under the TPP must be seen in their proper context when assessing the future of the Canadian auto industry. Canada's vehicle tariff on originating imports from Mexico and the United States was eliminated under NAFTA. The tariff on originating vehicles from South Korea will be removed under the FTA with that country in 2017 and also on imports from the EU if CETA is implemented. In effect, then, the TPP would remove the Canadian tariff only on originating vehicle imports from

Japan, the last current major global vehicle exporter without preferential access to the Canadian market. Given that two Japanese-owned companies already have major vehicle assembly operations in Canada serving the North American market, the TPP would level the playing field for them against their major competitors, not only those with major assembly facilities in Canada, but also those without.

Although the more liberal TPP rules of origin would place more direct competitive pressure on the tier-two parts suppliers, their future likely depends much more on what happens to vehicle assembly within North America. Even with the globalization of production, most vehicles sold in a region such as North America still tend to be largely produced and assembled within that region, with imports from outside the region limited to select, often lower-volume, models such as luxury cars (United States 2016c). The economic gravitational pull of vehicle assembly remains a key factor in the location of both tier-one and tier-two producers. So, although North American imports of vehicles and parts from Japan and other Asian countries might rise over time under the TPP, most of vehicles sold in North America likely will continue to be produced in the region. The key question, therefore, for the Canadian auto sector in general and the tier-two parts producers in particular is: where, in North America, will vehicles be assembled in the future? Canada's share of North American light vehicle production declined from around 17 percent in 2000 to approximately 13 percent in 2015 as investment shifted to the southern US states — attracted in part by lower wages and state government incentives — and, more recently, to Mexico and its lower cost structure.

The vehicle mandates for a number of Canadian-based assembly plants are up for renewal in the next few years. Canada's ability to attract new vehicle mandates and assembly investment will depend, first, on general competitive factors such as labour costs and productivity, infrastructure, taxation, regulations and the medium-term trend of the Canadian dollar; and, second, on Canada's response to support and incentives offered by governments elsewhere in the region. These factors likely will be much more important for future vehicle assembly and parts production in Canada (and the northern US states) than the removal of tariffs on Japanese-made vehicles and a less restrictive TPP rule of origin. In this regard, the recently concluded contract between General Motors (GM) and Unifor should be welcome news, as it includes commitments by GM to a new vehicle mandate and major investments in its Oshawa assembly facility as well as additional investment in its St Catherines engine plant (GM and the union are also signalling they are seeking government support).

New vehicle mandates and assembly investment in Canada (or just across the US border), however, will not spare Canadian parts producers from having to adjust to meet increased competitive pressure from Asia under the TPP. But remaining outside the TPP because of the more liberal auto rules would be detrimental to the future of Canada's auto sector. Were Canada to be outside an implemented TPP, NAFTA's more restrictive rules of origin would not shield Canadian auto producers from increased competition in their main market, the United States, either from other TPP countries or from within the United States itself. Producers in other TPP countries, including the United States, would be able to source competitive, duty-free originating inputs from a wider range of suppliers within the TPP area, including from regional and global supply chains involving downstream TPP producers supplied by upstream producers outside the TPP region. At the same time, auto producers in the other TPP countries would have preferential access to the larger combined market of the other TPP signatories, and US-based vehicle producers would have the option of sourcing from US and Mexican parts suppliers instead of Canadian parts suppliers, in order to continue to take advantage of the NAFTA tariff preferences when exporting to Canada. Inside the TPP, however, Canada's auto producers not only would have the opportunity to remain an integral part, both as suppliers and buyers, of the North American supply chain already established under NAFTA; they would also have access to the same new opportunities as producers in other TPP countries to support maintaining their competitive positions in North America.

## Conclusion: Navigating the Rules-of-Origin Maze

THE TPP, BY WEAVING TOGETHER AND — FOR MANY NONAGRICULTURAL PRODUCTS — liberalizing the rules of origin across the 32 regional trade agreements involving TPP signatories, offers a number of potential economic benefits. It would expand the preferential market for the TPP producers. It could reduce the diversion in input trade within the TPP area and, for those goods with more liberal rules, from outside the TPP zone. And it would give firms greater opportunities to take advantage of wider regional and global supply chains. Within the TPP, Canada stands to benefit from the common set of rules of origin with full cumulation. The more liberal TPP rules also offer Canadian producers greater flexibility in the sourcing of inputs than do the NAFTA rules. Although the more liberal TPP auto rules have sparked controversy in Canada (and its NAFTA partners), the future of the Canadian auto sector will be shaped largely by other competitive and policy factors. The sector would also face increased competitive

pressure from Asian TPP members, but participating in the TPP ultimately offers more opportunities than remaining outside this ambitious, multicountry deal.

Mega-regional deals such as the TPP can reduce the costs and trade distortions caused by the “spaghetti bowl” of rules of origin arising from the proliferation of RTAs, particularly if they also liberalize the rules. But the best way to eliminate such costs and distortions entirely would be to remove the need for rules of origin entirely by eliminating tariffs multilaterally. Unfortunately, the medium-term prospects are not encouraging in light of the largely stalled World Trade Organization (WTO) negotiations. But one useful interim step for the WTO would be to look at developing a harmonized set of preferential rules of origin, with full cumulation, with the preferred goal of making these rules mandatory and as liberal as possible (and avoiding a race to the bottom to more restrictive rules). Achieving agreement would not be easy, as demonstrated by the lack of progress in negotiating the nonpreferential rules called for in the Uruguay Round, but it should be pursued nevertheless.

In the meantime, countries should pursue more rigorously cross-cumulation between separate RTAs — something they could do with or without harmonizing their rules of origin. Canada has included a provision to allow cross-cumulation in its RTAs since NAFTA (albeit to date it has yet to be activated in any of these agreements). The EU has had more success in advancing comprehensive diagonal cumulation (along with harmonizing rules) with its European, North African and Middle East RTA partners. Some RTAs provide for sectoral, one-way cross-cumulation — examples are the Japan-Singapore FTA for textiles and apparel, which allows the use of fabrics from the ASEAN countries,<sup>15</sup> and Canada’s FTAs with Peru, Colombia, Panama and South Korea in the case of motor vehicles. Further efforts should be encouraged, with the focus on covering all products. A complementary action would be for RTA participants to liberalize their existing rules of origin. The benefits might be modest and the progress slow — as implementing amendments to the rules in the Canada-Chile FTA and NAFTA have shown — but it would still be a positive step forward.

Future mega-regional deals involving multiple countries with overlapping RTAs might offer more promise in weaving together rules of origin. Negotiations are underway on a Regional Comprehensive Economic Partnership (RCEP) involving 16 Asian countries, many of which already have RTAs with each other; seven are also parties to the TPP.<sup>16</sup> Could the RCEP and TPP be major stepping stones towards a much bigger regional RTA, such as the long-stated goal of establishing a Free Trade Area of the Asia-Pacific? Such an outcome could offer further

economic benefits by expanding the scope of common rules of origin with full cumulation — unless the resulting rules of origin were more restrictive than those in the RCEP and TPP. If the RCEP and TPP became rivals, however, then it is not clear if the spaghetti bowl problem would get simpler by reducing the number of competing RTAs, or more complicated by elevating its size and scope. In any event, firms in the seven Asian countries that would be members of both agreements could find themselves having to choose between the two. This suggests that having more mega-regional deals could prove a double-edged sword.

Another mega-regional agreement currently on the negotiating table is the Transatlantic Trade and Investment Partnership (TTIP). Although the agreement involves only the EU and the United States, both have their own extensive and, to a degree, overlapping webs of RTAs. It might be too optimistic, but a successful TTIP outcome could encourage the two parties to consider recasting their respective rules of origin into a consolidated set for all goods; they might also incorporate directly into the TTIP countries, such as Canada (assuming CETA is implemented) and Mexico, which have RTAs with both.

Where does this leave Canada, as a small, open economy, navigating its way through a maze of rules of origin in a globalized economy characterized by regional and global supply chains and proliferating RTAs? Canada currently has eight RTA negotiations underway and four exploratory discussions on the table, at different stages and prospects.<sup>17</sup> More recently, there has been growing attention to expanding Canada's trade relationship with China, with both countries recently announcing the launch of exploratory talks on an RTA. Another option would be for Canada to join the RCEP negotiations, as its seven Asian TPP partners have done.

In any event, Canada's heavy dependence on the United States will remain the dominate factor in its approach to rules of origin. Canada needs to continue to seek rules that reflect the importance of the United States as both a major supplier of inputs and major market for outputs in many Canadian sectors. As has been the case in its post-NAFTA RTAs, Canada should continue to be creative and flexible, adapting its approach to different circumstances and using its full arsenal of tools, including derogations, sectoral and, if possible, comprehensive diagonal cumulation, to achieve outcomes that meet Canada's needs. In its current and future RTA negotiations, and in pursuing amendments to the rules in its existing RTAs, Canada should also strive for more liberal rules of origin, despite some industry concerns, as well as ways to reduce compliance costs.

## Appendix: Regional Trade Agreements in Force between TPP Signatories

In addition to individual regional trade agreements (RTAs) in force directly between TPP countries, the list below includes 32 RTAs where at least two TPP countries are members. This list shows significant overlap between the RTAs involving a number of TPP members in Asia.

1. ASEAN Free Trade Area (Brunei Darussalam, Malaysia, Singapore and Vietnam are members)
2. ASEAN-Australia-New Zealand
3. ASEAN-Japan
4. Australia-Chile
5. Australia-New Zealand
6. Brunei Darussalam-Japan
7. Canada-Chile
8. Canada-Peru
9. Chile-Japan
10. Chile-Malaysia
11. Chile-Mexico
12. Chile-Vietnam
13. Japan-Australia
14. Japan-Malaysia
15. Japan-Mexico
16. Japan-Peru
17. Japan-Singapore
18. Japan-Vietnam
19. Malaysia-Australia
20. New Zealand-Malaysia
21. New Zealand-Singapore
22. North American Free Trade Agreement (NAFTA — Canada, Mexico and the US)
23. Peru-Chile
24. Peru-Mexico
25. Peru-Singapore
26. Singapore-Australia
27. South Pacific Regional Trade and Economic Co-operation Agreement (Australia and New Zealand are members)
28. Trans-Pacific Strategic Economic Partnership (Brunei Darussalam, Chile, New Zealand and Singapore)
29. US-Australia
30. US-Chile
31. US-Peru
32. US-Singapore

Source: World Trade Organization 2016a.

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## Notes

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1. There are two types of rules of origin: non-preferential rules of origin and preferential rules of origin. Non-preferential rules of origin are used to determine a specific country of origin for purposes such as collecting trade statistics and applying import quotas and anti-dumping duties, whereas preferential rules of origin are used to determine if a good originates. This chapter deals exclusively with preferential rules of origin.
2. In other words, these parts themselves must also undergo sufficient production and input sourcing within the RTA territory in order to meet their own rules of origin before they are treated as originating content in the final good.
3. Cadot et al. (2006) estimate that the administrative costs of NAFTA rules of origin are about 2 percent of the value of export shipments, while Kunimoto and Sawchuk (2005) estimate that these administrative costs for imports into the United States from Canada are 1.05 percent.
4. As expected in any comparison at a high level of aggregation, there are individual exceptions to the broad trends discussed in this chapter. For a more in-depth comparison of the rules of origin found in the 32 RTAs involving the TPP parties, and also between these rules and the TPP rules, see Moroz (2016).
5. The limits placed on using nonoriginating inputs in the production of processed fish, meat, fruit and vegetable products vary. For example, producers of many processed meat products have the option of either using fresh, chilled or frozen meat from animals slaughtered in the TPP territory or satisfying a 45 percent regional value-content test if nonoriginating meat is used to produce the good. In the case of processed fish products, nonoriginating fish of certain species can be used, but not of other species.
6. For nonagricultural goods, as general matter, NAFTA has the most restrictive rules of origin of all the RTAs involving the TPP countries. The rules in RTAs involving western hemispheric TPP signatories (including their RTAs with Asian TPP countries) are generally more restrictive for nonagricultural products than those found in RTAs solely between Asian TPP countries.
7. Intermediate products account for more than half of Canada's exports and imports of manufactured goods (Baldwin and Yan, in this volume).
8. Since 2011, Canada's applied multilateral most-favoured-nation tariff on manufacturing inputs has been zero. But such inputs imported from countries that do not have a trade agreement with Canada are not eligible to be counted as originating inputs under Canada's RTAs. Under the TPP, however, such inputs imported from other TPP countries could, if they meet the TPP rules of origin, be used as originating inputs to produce goods exported under tariff preferences to other TPP countries. Canadian producers would also have the opportunity to import nonmanufacturing inputs duty-free from other TPP countries.
9. For example, under NAFTA, exports of apparel that are cut, sewn and finished in Canada from nonoriginating fabric are eligible, up

- to specified annual quantities, for duty-free entry into the United States. These NAFTA derogations are commonly known as Tariff Preference Levels. NAFTA provides such levels for broad categories of textiles and apparel, along with certain narrow categories such as men's suits.
10. The requirement is that the production and sourcing of the US-made parts would have satisfied the rules of origin under these four Canadian RTAs had the United States also been a member.
  11. The two main conditions involve reducing the value of nonoriginating inputs allowed in a motor vehicle under the CETA auto rule of origin and ensuring consistency between the methods used in a EU-US RTA and the CETA for calculating the regional value-content.
  12. The net cost method is the only one NAFTA allows for calculating the regional value-content for most auto goods. The TPP, in contrast, offers producers a choice of methods, including the net cost method. The thresholds under the alternatives to the net cost method are higher, but these methods allow profits, sales and marketing costs and other sources of domestic content to be included in the calculation that are excluded from the net cost calculation.
  13. Some have suggested that the NAFTA "tracing" requirement for automotive goods reduces substantially the differences in the thresholds between the TPP and NAFTA. But even taking into account this tracing effect, it is likely that the NAFTA auto rules would remain significantly more restrictive than the TPP rules for both parts and vehicles. On the comparison between the TPP and NAFTA auto rules, see United States 2016a and Moroz 2016.
  14. Unifor, the Canadian union representing the workers in the Detroit Three plants in Canada, and the Canadian Steel Producers Association also oppose the faster phaseout of the Canadian vehicle tariff, but they also opposed the more liberal TPP auto rules of origin. As regards trucks, Canada's 6.1 percent tariff would be phased out in 6 or 11 years, depending on type and size, while the US 25 percent truck tariff would remain in place until eliminated in one step at the start of the 30th year of the TPP.
  15. Singapore is part of the ASEAN Free Trade Agreement and Japan has a free trade agreement with the ASEAN countries. Fabric woven in ASEAN countries qualifies as originating inputs when used to produce apparel and other finished textiles goods under the Japan-Singapore FTA.
  16. Cambodia, China, India, Indonesia, Laos, Myanmar, the Philippines, South Korea, Thailand and the seven Asian TPP signatories — namely, Australia, Brunei Darussalam, Japan, Malaysia, New Zealand, Singapore and Vietnam. All of the members of the TPP and most of the members of RCEP also belong to the Asia Pacific Economic Cooperation forum.
  17. The eight ongoing negotiations are with the Caribbean Community and Common Market countries, the Dominican Republic, Japan, India, Morocco, Singapore, as a group, Guatemala, Nicaragua and El Salvador, and the modernization of the Canada-Costa Rica Free Trade Agreement. The four exploratory discussions are with Mercosur (Argentina, Brazil, Paraguay and Uruguay), Turkey, the Philippines and Thailand. Whether negotiations with Japan and Singapore will be actively pursued likely depends largely on what happens with the TPP. If they are pursued with Japan, the negotiations on auto rules of origin would involve a repeat of the competition between the North American- and Asian-based supply chains.



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