

Rules of Origin for Vehicles in RTAs: Current Status, Impacts and Recommendations

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Abstract: As an important industry in the global economy, the strict and diverse regional rules of origin for vehicles impede the liberalization of vehicle trade. Due to differences in tariff preferences between regional agreements, countries' positions in the industrial chain and the interests of key contracting parties of the agreements, the rules of origin for vehicles show diversification, specifically reflected in the differences in regional value contents of complete vehicles and parts, the calculation methods of the regional value content, the constituent elements, and the contractual terms. These factors have led to several adverse effects as follows: firstly, they have exacerbated the fragmentation of international law and eroded the multilateral trading system; secondly, they disrupt global value chains and diminish consumer welfare; thirdly, they increase costs of production and compliance for enterprises, fading their enthusiasm for utilizing regional agreements. China can effectively cope with the adverse effects above by four key strategies as follows: promoting the construction of multilateral rules, making good use of multilateral rule remedies, skillfully utilizing favorable contractual terms, and enhancing talent support.

Keywords: Rules of Origin, Vehicle, Regional Trade Agreements, World Trade Organization, Trade Protection

I. INTRODUCTION

In the era of globalized trade, it is increasingly difficult to determine the nationality of vehicles. Rules of origin (ROOs) serve as the basis for determining a good's nationality, which in turn determines eligibility for preferential tariff treatment under Regional Trade Agreements (RTAs). With the WTO's Doha Round negotiations at an impasse, RTAs have emerged as a crucial mechanism

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for establishing international trade rules. RTAs aim to promote the growth of intra-regional trade and investment through measures such as reducing tariffs, simplifying trade procedures, and promoting investment liberalization. However, whether an RTA can achieve its stated objectives depends on the ROOs in the agreement. A well designed ROO can effectively mitigate the “free riding” behavior of non-contracting parties and promote regional integration. In contrast, under an unreasonable ROOs, enterprises may be compelled to deviate from their original procurement strategies and choose raw materials from more expensive regions, thereby undermining their cost advantages.¹ Alternatively, to comply with the procedural requirements of ROOs, the associated compliance costs may become prohibitive, leading enterprises to forego the application of RTAs. This, in turn, reduces the utilization rate of RTAs and deviates from the original intent behind formulating these agreements. Therefore, governments increasingly focus on ROOs in RTAs and meticulously craft these rules in order to serve their interests more effectively.

Currently, there are significant differences in ROOs for vehicles in RTAs, resulting in a “spaghetti bowl” effect. Diversified ROOs for vehicles have negative impacts on the multilateral trading system, impede the application of relevant rules by enterprises, disrupt the global value chain, diminish consumer welfare, and generate numerous adverse consequences. The development of international trade increasingly calls for uncomplicated, friendly and convenient ROOs.

This paper analyzes the ROOs of vehicles under the Regional Comprehensive Economic Partnership Agreement (RCEP), the Regional Convention on Pan-Euro-Mediterranean Preferential Rules of Origin (PEM Convention), the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) and the United States–Mexico–Canada Agreement (USMCA), analyzes the underlying reasons and negative effects of the differences in the rules, and provides several constructive suggestions. The purpose of this paper is to advocate for the establishment of multilateral harmonization concerning ROOs for vehicles. Additionally, it provides suggestions for China to negotiate and formulate ROOs for vehicles and the layout of the global supply chain of the vehicle industry.

¹ Paola Conconi et al., From Final Goods to Inputs: The Protectionist Effect of Rules of Origin, *American Economic Review*, Vol. 108, No. 8, 2018, pp. 2335–2365.

II. CURRENT STATUS OF LEGISLATION ON RTAS ROOS FOR VEHICLES

The ROOs are frequently drafted differently across RTAs. In determining whether a vehicle qualifies for origin status under a trade agreement, meeting a product-specific ROO is merely the initial step. It must be complemented by other substantive rules, including accumulation rules, absorption rules, *de minimis* rules, packaging rules and other regime-wide ROOs. Additionally, procedural requirements such as the issuance of certificates of origin and origin verification also need to be complied with. This paper is only an analysis of the specific ROOs for vehicles, which mainly analyzes the complete vehicles, chassis with engine, body, parts and batteries, where the parts generally refer to materials under Harmonized System (HS) code heading 87.08.

A. An Overview of ROOs for Vehicles under RTAs

1. ROOs for Vehicles under the RCEP

The ROOs for vehicles under the RCEP are primarily detailed in Annex 3A to Chapter III of the RCEP, with a particular emphasis on Chapter 87 of the HS code. Specifically, the criteria for substantial transformation of main parts of a vehicle such as chassis, body and complete vehicles stipulate a minimum regional value content (RVC) of 40%.² For vehicle parts under heading “87.08–Parts and accessories of motor vehicles of headings 87.01 to 87.05”, the criteria for substantial transformation should be at least either change of tariff heading (CTH) or RVC 40%.³

Otherwise, the RCEP provides detailed provisions for vehicle parts like tires, lighting devices and batteries that are categorized under Chapter 40 and Chapter 85 of the HS code. In the case of batteries, the RCEP primarily employs change of tariff classification (CTC) or RVC criteria. The CTC criteria can be further divided into change of chapter (CC), change of tariff heading (CTH), change of tariff subheading (CTSH). For instance, under heading “85.07–Electric accumulators, including separators whether rectangular

² Regional Comprehensive Economic Partnership Agreement, Chapter III, Annex 3A-145.

³ *Ibid.*

(including square)”, only subheadings “8507.10—Lead-acid, of a kind used for starting piston engines” and “8507.90—Parts” require a more stringent criterion, that is either a CTH or an RVC of at least 40%. While other subheadings under 85.07 follow a CTH or an RVC of at least 40%.⁴

2. ROOs for Vehicles under the PEM Convention

On December 7, 2023, the Joint Committee adopted the newly revised the PEM Convention. The agreement covers 25 parties and was implemented on January 1, 2025.⁵ For a complete vehicle classified under heading 87.03, a chassis with an engine under heading 87.06 and a body under heading 87.07, the criterion for substantial transformation under the PEM Convention is that “the value of all materials used does not exceed 45% of the ex-works price of the product”.⁶ For vehicle parts under heading 87.08 and battery products under heading 85.07, the criterion for substantial transformation under the PEM Convention is that “manufacture from materials of any heading, except that of the product or manufacture in which the value of all the materials used does not exceed 50% of the ex-works price of the product”.⁷

3. ROOs for Vehicles under the CPTPP

The CPTPP provides detailed regulations on complete vehicles and parts through annexes. When assessing whether substantial transformations have occurred to the goods, for motor vehicles as a whole under heading 87.03, the CPTPP stipulates that goods under headings 87.02 to 87.05 must have an RVC of no less than 45% under the net cost method or 55% under the build-down method.⁸ For chassis with engines under heading 87.06, the RVC is specified to be no less than 45% under the build-up method or 45% under the net cost method, or 55% under the build-down method.⁹ In the case of bodies under heading 87.07, the criteria are less stringent, requiring an RVC of no less than

⁴ *Ibid.*, p. 132.

⁵ On the amendment of the Regional Convention on Pan-Euro-Mediterranean preferential rules of origin.

⁶ *Ibid.*, Annex II.

⁷ *Ibid.*

⁸ Comprehensive and Progressive Agreement for Trans-Pacific Partnership, Annex 3-D “Product-specific Rules of Origin”.

⁹ *Ibid.*

35% under the build-up method or 35% under the net cost method or 45% under the build-down method.¹⁰

For batteries under heading 85.07 of the CPTPP, the criterion for substantial transformation can be categorized into three types: (i) for products under subheadings 8507.10–8507.20, the criterion for substantial transformation is either a CTH or a RVC of 35% under the build-up method or 45% under the build-down method; (ii) for products under subheadings 8507.30–8507.80, the requirement for substantial transformation is either a CTH or a RVC of 30% under the build-up method or 40% under the build-down method; (iii) for products under subheading 8507.90, the requirement for substantial transformation is either a CTH or a RVC of 30% under the build-up method or 40% under the build-down method or 50% under the focused value method when only materials under heading 8707 are considered.¹¹

4. ROOs for Vehicles under the USMCA

The USMCA, which succeeds the North American Free Trade Agreement (NAFTA), encompasses the United States, Mexico, and Canada. It is currently recognized as the world's most stringent and complex regional agreement concerning the ROOs for vehicles. The USMCA ROOs for vehicles are primarily composed of three components: RVC, local labor value content, and local steel and aluminum value content requirements. Specifically, goods qualify as originating under the Agreement if they meet the stipulated criteria for RVC or CTC, as well as satisfy the requirements for local labor value content and steel and aluminum value content.

In the USMCA, vehicles classified under heading 87.03 are subject to a more detailed classification with specific RVC requirements. For materials under subheading 8703.10, the RVC should be at least 60% under the transaction value method or 50% under the net cost method.¹² For passenger vehicles under subheadings 8703.21 to 8703.90, the RVC should be no less than 75% under the net cost method; and for any other goods under subheadings

¹⁰ *Ibid.*

¹¹ *Ibid.*

¹² United States–Mexico–Canada Agreement, Chapter 4, 4-B-1-3. The detailed provisions of the law are: “A change to subheading 8703.10 from any other heading, provided there is a regional value content of not less than: (a) 60 percent where the transaction value method is used; or (b) 50 percent where the net cost method is used”.

8703.21 to 8703.90, the RVC should be no less than 62.5% under the net cost method.¹³ For chassis with engines under heading 87.06, the USMCA sets varying RVC percentages depending on the type of vehicles: when the chassis with engines were used for manufacturing passenger vehicles and light trucks, the RVC must be at least 75% under the net cost method; for heavy trucks, the RVC must be at least 70%; and for all other goods, the RVC must be at least 60%.¹⁴ Similarly, for bodies under heading 87.07, the USMCA specifies different RVC standards based on the type of vehicles: when for passenger vehicles and light trucks, the RVC must be at least 75%; for heavy trucks requiring a CC or the RVC must be at least 70%; and for all other goods, the RVC must be at least 60% or a CC.¹⁵

Regarding the ROOs for batteries under heading 85.07, the criteria for substantial transformation depend on the specific subheading types. For instance, except for the relatively complex criteria of subheading “8507.60-Lithiumion”, all other subheadings under this heading adopt the criteria of “CTH but except from tariff item 8548.10.aa”, or the RVC is no less than 60% under the transaction value method or 50% under the net cost method.¹⁶

The ROOs for vehicles under the USMCA not only raise the percentage of the RVC requirements, but also introduce other stipulations like the procurement ratio of steel and aluminum from North America, as well as labor value content (LVC) and hourly wage standards. This marks the first-time labor clauses were introduced into ROOs, linking labor standards directly to international trade, and never included in other trade agreements.¹⁷ Specifically, Article 4-B.7 of the USMCA outlines detailed LVC requirements, mandating an annual increase in LVC within the region. Starting from January 1, 2020, at least 30% of the value added by passenger vehicles must come from high-wage labor,

13 *Ibid.* The detailed provisions of the law are: “a change to a passenger vehicle of subheading 8703.21 through 8703.90 from any other heading, provided there is a regional value content of not less than 75 percent under the net cost method; or a change to any other good of subheading 8703.21 through 8703.90 from any other heading, provided there is a regional value content of not less than 62.5 percent under the net cost method”.

14 *Ibid.*, 4-B-1-5. The Appendix (Provisions Related to the Product-specific Rules of Origin for Automotive Goods) includes the product-specific rules for a good of heading 87.01 through 87.08.

15 *Ibid.*, 4-B-1-6.

16 *Ibid.*, 4-B-134.

17 Xixia Li, Labor Value Content in the Rules of Origin for Automotive Goods of the USMCA: Its Connotation, Significance and Practical Revelation, *Chinese Review of International Law*, No. 4, 2023, pp. 77–83.

increasing to 40% by January 1, 2023. Additionally, the agreement specifies that high-wage expenditures on research and development (R&D), IT, assembly, and materials and manufacturing should not exceed 10%, 5%, 15% or 25% respectively, with the proportion of high-wage materials and manufacturing expenditures required to rise annually, reaching at least 15% by January 1, 2020, and at least 25% by January 1, 2023. Furthermore, the USMCA also requires some auto parts must be produced by workers earning a minimum wage of \$16 per hour to comply with the ROOs.¹⁸

B. The Differences in Regional ROOs for Vehicles

The differences in regional ROOs for vehicles are reflected in several key areas: first, the differences in RVC percentages of complete vehicles; second, the differences in RVC percentages of vehicle parts; third, the differences in the calculation method of RVC; fourth, the differences in the composition of ROOs; and fifth, the differences in contractual terms.

1. The Differences in RVC of Complete Vehicles

Given the high degree of globalization in the vehicle industry, characterized by many components and diverse sources, the current criteria for substantial transformation of a vehicle under agreements predominantly utilize the RVC criteria. However, there are notable differences in the RVC criteria across various regional agreements. Taking a vehicle classified under HS 87.03 as an illustrative example, the RCEP mandates an RVC of at least 40%¹⁹ and the PEM Convention mandates an RVC of at least 45%. In comparison, the CPTPP sets different thresholds depending on the calculation method: a minimum of 45% under the net cost method or 55% under the build-up method. The USMCA further refines the classification of HS 87.03 based on the type of vehicles, establishing distinct criteria for each category. Specifically, for a vehicle under subheading 8703.10 require the RVC of no less than 60% under the focused value method or 50% under the net cost method; for passenger vehicles under subheadings 8703.21 to 8703.90, the RVC of no less than 75% under the net

¹⁸ *Supra* n. 12, Chapter 4, 4-B-1-27.

¹⁹ Which means if the percentages of RVC meet or exceed this threshold, regardless of the calculation methods, a good can be recognized as originating from RCEP parties and thus qualify for preferential tariff treatment.

cost method; and for other goods under subheadings 8703.21 to 8703.90, the RVC of no less than 75% under the net cost method, and these criteria are also subject to change over time.

From the perspective of delineating RVC criteria for vehicles, the RCEP adopts the most lenient approach, whereas the CPTPP imposes the strictest requirements. This reflects the strong trade protectionism inherent in the USMCA for North American vehicles and underscores the RCEP's more open stance towards international vehicle trade.

2. The Differences in RVC of the Vehicle Parts

These RTAs not only stipulate different percentages for the RVC of vehicles, but also stipulate different RVC percentage requirements for the specific vehicle parts, as detailed in Tables 1 and 2 below.

Table 1: Comparison of the RVC of RTA's Vehicle Parts

HS 2012	Product Description	RCEP	PEM Convention	CPTPP	USMCA
87.06	Chassis fitted with engines, for the motor vehicles of headings 87.01 to 87.05	RVC 40	RVC 45	RVC 45 (build-up method), or RVC 45 (net cost method), or RVC 55 (build-down method)	The minimum RVC depends on the object it is used for, such as: (i) Passenger cars or light trucks: RVC 75 (net cost method); (ii) Heavy trucks: RVC 70 (net cost method); (iii) Other goods: RVC 60 (net cost method).
87.07	Bodies (including cabs), for the motor vehicles of headings 87.01 to 87.05	RVC 40	RVC 45	CTH, or RVC 35 (build-up method), or RVC 35 (net cost method), or RVC 45 (build-down method)	The minimum RVC depends on the object it is used for: (i) Passenger cars or light trucks: RVC 75 (net cost method); (ii) Heavy trucks: CC or RVC 70 (net cost method); (iii) Other goods: CC or RVC 60 (net cost method).
87.08	Parts and accessories of the motor vehicles of headings 87.01 to 87.05	CTH or RVC 40	CTH or RVC 50	The classification of parts is more detailed, and nine types of different standards are specified for parts.	The classification of parts is more detailed, and fourteen types of different standards are specified for parts.

Notes: This table is compiled by the authors from the text of the treaty. While the aforementioned RVC are utilized to ascertain whether the goods have undergone a substance transformation, the precise calculation methodology differs across agreements.

The notable differences in RTAs concerning the RVC of vehicle parts will significantly impact the final determination of the origin of a complete vehicle. The RCEP, PEM Convention, CPTPP and USMCA all incorporate the absorption rule, which is also named the “Materials Used in Production”

Table 2: Comparison of the RVC of Batteries under Heading 85.07

HS 2012	Product Description	RCEP	PEM Convention	CPTPP	USMCA
8507.10	Lead-acid, of a kind used for starting piston engines	CTH or RVC40	CTH or RVC 50	CTH, or RVC 35 (build-up method), or RVC 45 (build-down method)	CTH, or RVC 60 (transaction value method), or RVC 50 (net cost method)
8507.20	Other lead-acid accumulators	CTSH or RVC40	CTH or RVC 50	CTH, or RVC 35 (build-up method), or RVC 45 (build-down method)	CTH, or RVC 60 (transaction value method), or RVC 50 (net cost method)
8507.30	Nickel-cadmium	CTSH or RVC 40	CTH or RVC 50	CTH, or RVC 30 (build-up method), or RVC 40 (build-down method)	CTH, or RVC 60 (transaction value method), or RVC 50 (net cost method)
8507.40	Nickel-iron	CTSH or RVC 40	CTH or RVC 50	CTH, or RVC 30 (build-up Method), or RVC 40 (build-down method)	CTH, or RVC 60 (transaction value method), or RVC 50 (net cost method)
8507.50	Nickel-metal hydride	CTSH or RVC 40	CTH or RVC 50	CTH, or RVC 30 (build-up method), or RVC 40 (build-down method)	CTH, or RVC 60 (transaction value method), or RVC 50 (net cost method)
8507.60	Lithium-ion	CTSH or RVC 40	CTH or RVC 50	CTH, or RVC 30 (build-up method), or RVC 40 (build-down method)	CTH, or change from subheading 8507.90: RVC 60 (transaction value method) or RVC 50 (net cost method), or change from other subheading: RVC 85 (transaction value method) or RVC 75 (net cost method)
8507.80	Other accumulators	CTSH or RVC 40	CTH or RVC 50	CTH, or RVC 30 (build-up method), or RVC 40 (build-down method)	CTH, or RVC 60 (transaction value method), or RVC 50 (net cost method)
8507.90	Parts	CTH or RVC 40	CTH or RVC 50	CTH, or RVC 30 (build-up method), or RVC 40 (build-down method), or RVC 50 (focused value method)	CTH, or RVC 60 (transaction value method), or RVC 50 (net cost method)

Notes: This table is compiled by the authors from the text of the treaty. At the same time, the most CTH criteria in the USMCA under heading 85.07 are excepted from tariff item 8548.10.aa.

rule. According to the absorption rule, once a good has been granted origin status, any non-origin contents utilized in its production are also recognized as originating materials, with their value being absorbed into the total value of the good.²⁰ For instance, if a car battery is identified as originating from the RCEP region, even if it contains non-RCEP contents, when it is used in manufacturing a vehicle, the entire battery can be classified as the RCEP origin without excluding the non-origin contents within the battery. It is evident that lower RVC percentage requirements for vehicle parts will make a complete vehicle easier attainment of origin qualification under the agreement.

²⁰ Stefano Inama, *Rules of Origin in International Trade*, Cambridge University Press, 2022, pp. 138–139.

Among the four agreements, the CPTPP ROOs on vehicle parts are relatively more lenient, while the USMCA ROOs on chassis with engines, bodies and batteries are the most stringent across all agreements. For instance, regarding the rigor of the ROOs for a chassis with an engine: RCEP < PEM Convention < CPTPP < USMCA; and for the body: CPTPP < RCEP < PEM Convention < USMCA. Concerning batteries, the stringency of the rules depends on the specific types of the battery. Taking lithium-ion batteries as an example, the stringency comparison among the agreements is as follows: CPTPP < RCEP < PEM Convention < USMCA. This indicates that absorption rules will assume a more significant role in the CPTPP and RCEP, thereby increasing the likelihood that the final goods will be recognized as originating under the respective agreement.

3. The Differences in the Calculation Method of RVC

These agreements differ not only in the specified percentage of the RVC for both complete vehicles and their parts but also in the methodologies and formulas employed to calculate such percentages. For example, the calculation of RVC under the RCEP encompasses two methodologies: firstly, the indirect/build-down method, which is calculated as $(\text{FOB} - \text{value of non-originating materials})/\text{FOB} \times 100$; secondly, the direct/build-up method, defined as $(\text{value of originating materials} + \text{direct labor costs} + \text{direct overhead expenses} + \text{profit} + \text{other costs})/\text{FOB} \times 100$.²¹ The calculation of RVC under the PEM Convention stipulates a unified method: the maximum value of non-originating materials must not exceed a specific percentage, using the average ex-works price of the goods as the denominator. Specifically, $\text{RVC} = \text{value of non-originating materials}/\text{ex-works price of the product} \times 100$.²² According to Article 3.5 of the CPTPP, the RVC encompasses four calculation methodologies: (i) the focused value method, where $\text{RVC} = (\text{value of the good} - \text{specific non-originating materials})/\text{value of the good} \times 100$; (ii) the build-down method, where $\text{RVC} = (\text{value of the good} - \text{non-originating materials})/\text{value of the good} \times 100$; (iii) the build-up method, where $\text{RVC} = \text{value of originating materials}/\text{value of the good} \times 100$; and (iv) the net cost method (applicable only to automotive products),

²¹ *Supra* n. 2, Chapter III, Article 3.5.

²² *Supra* n. 5, Article 4.

where $RVC = (\text{net cost of the good} - \text{value of non-originating materials}) / \text{net cost of the good} \times 100$.²³ To clarify the term “value of the good” used in the CPTPP, it is necessary to refer to Article 3.1 of the agreement, which defines it as “value of the good means the transaction value of the good excluding any costs incurred in the international shipment of the good”.²⁴ This indicates that the “value of the good” differs from the FOB price used in the RCEP and more closely aligns with the “ex-works price of goods in the PEM Convention”. Under the USMCA, the RVC is primarily calculated using two methods: the transaction value method, where $RVC = (\text{transaction value of goods} - \text{value of non-origin materials}) / \text{transaction value of goods} \times 100$; and the net cost method, where $RVC = (\text{net cost of goods} - \text{value of non-origin materials}) / \text{net cost of goods} \times 100$.²⁵

When the four agreements calculate the RVC of vehicles, there are notable differences in their methodologies, formulas, and elements, which impact the stringency and application costs of the ROOs. Firstly, compared to the RCEP, the PEM Convention, CPTPP and USMCA employ more stringent calculation methods that make the latter three agreements more challenging to obtain origin status under similar circumstances. The RCEP calculates based on FOB prices, which include additional costs such as transportation and transaction fees incurred after the finished goods leaves the factory. This approach reduces the maximum allowable value of non-originating materials used in the final goods, thereby facilitating easier access to preferential tariff treatment for export goods. In contrast, the CPTPP and PEM Convention use the ex-works price as its denominator, while the USMCA employs either the transaction value or net cost method, both impose greater difficulty in obtaining origin qualification.

Secondly, compared with the RCEP, PEM Convention and USMCA, the CPTPP offers greater flexibility and precision in the rule application, which provides four distinct calculation methods for enterprises to choose from. Whereas the RCEP and USMCA offer only two methods each, the PEM Convention offers only one. Additionally, the CPTPP specifies different percentages of RVC for the build-up method and the build-down method, enhancing the accuracy of calculations. Research indicates that the build-up

²³ *Supra* n. 8, Chapter III, Article 3.5.

²⁴ *Ibid.*, Article 3.1.

²⁵ *Supra* n. 12, Chapter 4, Article 4.5.

method and the build-down method are the primary approaches for calculating RVC, but the build-down method being less restrictive.²⁶ Because the build-down method only requires removing the non-originating materials and providing relevant price evidence for non-originating materials, whereas the build-up method necessitates calculating the price evidence for all originating materials invested and identifying and accumulating all associated cost items, including production-related expenses. To comply with the build-up method, enterprises must rely on robust accounting and resource planning systems, engage experts to align with international and national accounting standards, establish sound accounting document management procedures, and trust the original calculations provided by intermediary suppliers, thus bearing a heavier burden of proof, and exposing procurement information to higher risks.²⁷

4. The Differences in the Composition of ROOs

The criteria for determining substantial transformation in goods can be primarily categorized into five distinct types: wholly obtained, RVC, CTC, processing rules, or a combination of the later three criteria. The PEM Convention, RCEP and CPTPP have not deviated from the traditional framework of ROOs, whereas the USMCA introduces novel elements such as steel and aluminum content, local labor value content and quantified hourly wage standards. This complicates the determination of ROOs for vehicles and underscores a clear trade protectionist intent. Specifically, goods qualifying as originating under the USMCA must satisfy not only RVC or CTC criteria but also meet specific requirements for local labor value content and steel and aluminum content. The inclusion of minimum hourly wages, maximum skilled wage shares, and minimum local labor value in ROOs reflects the political considerations of the United States and Canada to shift vehicle manufacturing away from Mexico, where labor costs are lower.²⁸

5. The Differences in Contractual Terms

Notwithstanding the differences in the rule terminology, the substance remains

²⁶ *Supra* n. 20, pp. 138–139.

²⁷ Duruo Liu, Calculation Method, Comparison and Enlightenment of *Ad Valorem* Criterion for Rules of Origin in the FTAs, *Foreign Economic Relations & Trade*, No. 2, 2022, pp. 35–39.

²⁸ Chaowei Hong and Fan Cui, Evaluation of the USMCA: A Regional Value Chain Perspective, *Journal of Latin American Studies*, No. 2, 2019, pp. 28–30.

consistent. For instance, under the heading “87.07–Bodies (including cabs), for motor vehicles of headings 87.01 to 87.05”, the CPTPP uses the RVC or CTH requirement, while the USMCA uses the RVC or the CC requirement. In practice, the bodies of motor vehicles are mainly composed of metal, plastic, rubber, and so on. At the same time, the metal falls under the HS chapters 72 to 79, the plastic is classified under the HS chapter 39, and the rubber is classified under the HS chapter 40. These differ from bodies which are classified under the HS chapter 87. This indicates that although in theory the CC rule is stricter than the CTH rule, in this specific case, both the CC and CTH rules are equally stringent. This is because, under the existing HS Code structure, a mere change of heading cannot fully transform raw materials into the bodies of vehicles.

Furthermore, during the interpretation of the agreements, an intriguing phenomenon was observed: despite similar connotations, distinct terminologies were employed across RTAs, thereby complicating the comprehension of ROOs. For instance, in the formula of calculation of RVC, the RCEP, CPTPP and USMCA predominantly use the term “goods”, whereas the PEM Convention tends to use the term “products”. Additionally, the PEM Convention distinguishes “goods” from “products”. According to its text, “goods” means both materials and products, while “products” means the product being manufactured, even if it is intended for later use in another manufacturing operation.²⁹ In other words, the semantic scope of “goods” is broader than that of “materials” and “products”. While in the CPTPP, “goods” means any merchandise, product, article, or material.³⁰ In other words, the semantic scope of “goods” is equivalent to that of “materials” or “products”. These terms, which have similar connotations but differ in the applicable contexts, increase the complexity of applying and interpreting the ROOs. In reality, differences in terminology usage can potentially escalate the cost associated with comprehending and applying the rules. Therefore, it is essential to clarify and precisely define the connotations and boundaries of the terms in order to minimize the costs associated with the application of the rules. Combining the characteristics of the ROOs and the processing features of the vehicles, it can be observed that: content < material < product < good. It means, the original

²⁹ *Supra* n. 5, Article 1 “Definitions”.

³⁰ *Supra* n. 8, Article 1.3 “General Definitions”.

materials could include non-parties' contents, intermediate products processed from the original materials, and final goods processed from intermediate products.

III. THE NEGATIVE IMPACT OF DIVERSIFIED RTAS ROOS FOR VEHICLES

The significant divergences in regional ROOs will adversely affect the multilateral trading system, undermine consumer welfare, increase production and compliance costs for enterprises, and hinder the healthy and free development of international trade.

A. Increasing Fragmentation of International Law and Eroding the Multilateral Trading System

Currently, the text of preferential ROOs in the World Trade Organization (WTO) only has the nature of a declaration and lacks rigid provisions on regional ROOs. The regional exception clause in Article XXIV of the General Agreement on Tariffs and Trade (GATT) is insufficient to effectively regulate regional ROOs, thereby creating a "legal vacuum". The ROOs for vehicles across four RTAs exhibit significant differences, particularly in terms of the RVC percentage requirements, the calculation methods of RVC and the composition of ROOs. This diversity in regional practices not only escalates trade costs for traders and increases the regulatory costs of governments but also impedes international trade, highlighting the weakness of multilateral rules represented by the WTO.

Although the current RTAs have the right to stipulate their own ROOs, and a country can freely choose the regional agreements it wants to join according to national interests. However, this phenomenon increases the difficulty of coordinating the ROOs of vehicles at the multilateral level and aggravates the fragmentation of international law. Moreover, due to the lack of adequate WTO supervision of RTAs, certain RTAs like the USMCA have progressively increased the complexity of ROOs, added local steel and aluminum value content as well as local labor value content requirements, which continue to export regional trade protectionism, eroding the multilateral trading system.

Shuhui Ruan and Tong Qi (2024) have pointed out that the USMCA has established trade barriers through RVC requirements for raw materials or intermediate products.³¹ Delev (2022) argues that the USMCA ROOs for vehicles constitute disguised restrictions on international trade and do not meet the requirements of Article XXIV of GATT 1994.³²

B. Disrupting Global Value Chains and Harming Consumer Welfare

Numerous empirical studies have demonstrated that the RTAs ROOs will facilitate the restructuring of regional value chains, but these rules will disrupt global value chains and deviate from the principle of comparative advantage in international trade.³³ Specifically, stringent ROOs for the vehicles will compel downstream manufacturers to source raw materials and intermediates exclusively within the territories of the contracting parties, abandoning previously optimum procurement strategies on the global market. This shift is aimed at ensuring that the final goods qualify for preferential tariff treatment under the agreement by meeting the origin criteria, which inadvertently leads to higher production costs that are ultimately passed on to consumers, resulting in a loss of consumer welfare.³⁴

Research has indicated that parts and materials contribute significantly to the value of vehicles, accounting for approximately 70% of the total value. Among these, the engine represents about 20% of the parts and materials value; gearboxes account for 10% of the vehicle's value; the car body contributes 9%; the interiors make up 13%; the chassis accounts for 9%; and electronics and other components represent 39%. In electric vehicles, the battery pack can account for roughly 25% to 30% of a vehicle's content value.³⁵ Consequently, higher percentage requirements for vehicle parts and battery pack under the

31 Shuhui Ruan and Tong Qi, The Shift in the US Approach to Regional Value Chain Rule: From the Perspective of IRA Clean Vehicle Subsidy Clause, *Asia-Pacific Economic Review*, No. 4, 2024, p. 77.

32 Christian Delev, Straining the Spaghetti Bowl: Re-evaluating the Regulation of Preferential Rules of Origin, *Journal of International Economic Law*, Vol. 25, No. 1, 2022, p. 25.

33 Doan Ngoc Thang et al., On the Relationship between Rules of Origin and Global Value Chains, *The Journal of International Trade & Economic Development*, Vol. 30, No. 4, 2021, pp. 549–573; *Supra* n. 1.

34 Jie Bai and Qingyi Su, The United States–Mexico–Canada Agreement: Characteristics, Impact and China's Response, *International Economic Review*, No. 6, 2020, p. 134.

35 William Alan Reinsch et al., The Impact of Rules of Origin on Supply Chains: USMCA's Auto Rules as a Case Study, CSIS, https://www.wita.org/wp-content/uploads/2019/04/190403_Scholl_RulesofOrigin_WEB_v3.pdf (Last Visited on January 25, 2025).

USMCA ROOs often necessitate the relocation of high-value auto parts, such as engines or batteries, to regional production in order to meet origin criteria. Furthermore, logistical considerations, including the substantial weight and hazardous nature of lithium-ion batteries, coupled with high transportation costs, lead vehicle manufacturers to situate the production and assembly of core parts like engines, transmissions, and batteries closer to their final assembly plants. This localization strategy indirectly amplifies the production and investment diversion effects induced by ROOs.

The higher RVC, steel and aluminum value content requirements, minimum hourly wage requirements, as well as higher production and compliance costs resulting from compliance with the USMCA ROOs make the total cost of vehicle manufacturing in the USMCA region higher, thereby reducing their competitive advantage over non-parties vehicle manufacturers. Therefore, on the one hand, the USMCA ROOs reduce the competitiveness of vehicles in the international market, making vehicle manufacturing increasingly regionalized and forming a regional closed loop; on the other hand, the high compliance and administrative costs under the strict ROOs increase the total production cost of vehicles, and ultimately consumers in North America bear this part of the production premium, hence reducing consumer welfare.³⁶

C. Diminishing the Enthusiasm of Parties to Utilize the Agreement and Diverging from the Intended Objectives

As a complex system of ROOs, enterprises have high learning and compliance costs, and diversified ROOs further increases product costs. Many subjects believe that the ROOs are too complex and difficult to understand, and complicated administrative procedures require increased product costs, making it hard to enjoy the corresponding tariff preferences when applying the agreement, thereby reducing the utilization rate of the agreement.³⁷ When enterprises want to obtain RTAs tariff preferences, in order to comply with the ROOs, they need to track the production, circulation and other information of the goods, so the cost of the goods will increase significantly, and to some extent, offset the preferential

³⁶ Keith Head, Thierry Mayer and Marc Melitz, The Laffer Curve for Rules of Origin, *Journal of International Economics*, Vol. 150, 2024, p. 3.

³⁷ Guobi Meng, The Double-edged Effects of Preferential Rules of Origin for Goods – Also on China's Practice, *Hebei Law Science*, Vol. 27, No. 4, 2009, p. 104.

tariff, thus reducing the attractiveness of RTAs for enterprises.³⁸ Anson et al. (2005) found that the compliance costs associated with NAFTA ROOs on Mexican enterprises amount to the equivalent of a 6% *ad valorem* tariff on the affected intermediate products.³⁹ Research has shown that an export enterprise in a developed country needs to pay a cost equivalent to 3% of the value of the exported goods when preparing the certificate of origin materials required by the agreement, and the cost and difficulty are often greater if it is in a country with an imperfect customs system.⁴⁰ Moreover, compared with large enterprises, small- and medium-sized enterprises have a lower ability to compare and choose the text of rules and flexible procurement of raw materials and intermediate products around the world, and a lower ability to apply the ROOs, which worsens the competitive environment of small- and medium-sized enterprises.

The diversification of ROOs not only result in the incompatibility among overlapping regulations but also significantly escalate transaction costs for enterprises, which hinder members' enthusiasm to utilize relevant agreements and deviates from the original intent of signing RTAs.⁴¹ Countries like Vietnam and Japan, which are parties to both the RCEP and CPTPP, need to compare the ROOs under these two agreements when engaging in trade activities. This comparison imposes additional costs on enterprises or regulators. For instance, exporters may face confusion regarding which set of rules to apply, necessitating the establishment of a specialized team or the engagement of third-party services to ensure compliance with the appropriate ROOs, thereby increasing operational costs. Additionally, for issuing authorities, the multiplicity of ROOs complicates the process of issuing certificates of origin, requiring enhanced capacity for review, verification, and issuance.⁴²

38 Jiangxing Lyu, Shaohua Zhang and Ping Zhang, Segmented Global Value Chains: The Impacts of Rules of Origin on Global Value Chains in China's FTAs, *China Soft Science*, No. 7, 2024, p. 28.

39 Anson et al., Rules of Origin in North-South Preferential Trading Arrangements with an Application to NAFTA, *Review of International Economics*, Vol. 13, No. 3, 2005, pp. 501-517.

40 Li Li, Ping Liu and Dongyang Zheng, *Principle and Practice Guide of Rules of Origin*, China Customs Press, 2020, p. 18.

41 Ru Ding and Jiayuan Yao, The Paradox and Solution of the Origin Rules in Asia-Pacific Regional Trade Agreements: Take the RCEP as an Example, *Wuhan University International Law Review*, No. 2, 2024, p. 138.

42 Medalla E. M., Toward an Enabling Set of Rules of Origin for the Regional Comprehensive Economic Partnership, PIDS Discussion Paper Series No. 2015-29, <https://www.eria.org/ERIA-DP-2015-03.pdf> (Last Visited on January 25, 2025).

IV. THE REASONS FOR DIVERSIFIED ROOS FOR VEHICLES IN RTAS

Why have the ROOs under RTAs become increasingly diversified? The significant divergence in RTAs ROOs for vehicles primarily stems from the function transformation of these rules. Originally, ROOs were technology-neutral guidelines to ascertain the “economic nationality” of goods. But now, they have evolved into policy instruments aimed at achieving national trade protectionism. By establishing specific ROOs for goods, this instrument reduces the difficulty of negotiating the upgrade of the agreement and assists the contracting party in safeguarding specific industries. As a legal tool, product-specific ROOs not only align with the Strategic Trade Theory but also satisfy enterprises’ demands for legal clarity in international trade rules. Consequently, this reduces the challenges encountered during the negotiation and formulation of rules, leading to their vigorous promotion and continuous evolution in practice. Specifically, it is mainly related to the following factors.

A. The Stringency of ROOs Are Related to Tariff Concession

There exists a positive correlation between the extent of tariff concession and the stringency of ROOs. It means, the greater the tariff concession, the stricter the ROOs. Both the USMCA and CPTPP have larger tariff concession. The former provides for tariff-free market access and zero tariffs for auto vehicles and parts immediately after the signing of the agreement; upon the entry into force of the latter, more than 80% of all vehicles and parts of each contracting party shall immediately be subject to zero tariffs. While the RCEP does not adopt a common tariff concession, and some contracting parties set different preferential tariffs against other parties, such as China, resulting in significantly lower tariff reductions compared to those under the CPTPP and USMCA.⁴³ During the process of negotiating an agreement, there is a certain correlation between the formulation of the ROOs and the issue of tariff negotiations. For instance, if a sensitive good or an industry requiring protection is included in

⁴³ Li Sun and Gule Tu, The Impact of Reform in International Trade Rules on China’s Auto Industry and Our Countermeasures: An Analysis Based on Provisions of the USMCA, CPTPP and RCEP, *Asia-Pacific Economic Review*, No. 3, 2021, p. 107.

the tariff concession list following a package deal with the other party, a party may inadvertently raise the origin criteria for the good, thereby increasing the difficulty for the other party's good to enter the area. In essence, negotiations on ROOs often serve as a complementary measure to tariff concession negotiations, providing a more nuanced approach to safeguarding the trade interests of special industries or specific goods within a party.⁴⁴ Therefore, the USMCA, which has the largest tariff concession, has the most stringent ROOs.

B. The Stringency of ROOs Are Related to the Composition of the Membership

RTAs parties typically comprise multiple countries at various stages of the supply chain, and the number of parties involved as well as the difficulty of reconciling their interests significantly influence the stringency of ROOs. As far as the RCEP is concerned, China holds a competitive edge in power batteries, benefiting from abundant labor resources and a broad market; the Republic of Korea has advantages in chip development and brand building; Japan has advantages in vehicle research and development, innovation, brand marketing and supply chain design; Indonesia and the Philippines possess rich nickel ore resources essential for battery production and have emerged as significant producers of vehicle gasoline engines and transmissions due to their labor force advantages. Thailand has the advantage of rich labor force and has become a leading "parts assembler" in the region. Vietnam, with its geographical location, labor resources and superior foreign trade conditions, has made it become an important regional "part assembler" too. For instance, Vietnam is a member of the RCEP, the CPTPP and the EU-Vietnam Free Trade Agreement (EVFTA), connecting the three major vehicle markets of North America, Asia and Europe. Consequently, many enterprises choose Vietnam for final vehicle assembly, leading Vietnam to become a key vehicle exporter in the region. Given the RCEP's large membership and varying levels of economic development, there are significant differences in the strictness of the rules. Conversely, the USMCA has fewer contracting parties, and faces less difficulty in coordinating interests in the negotiation process, leading to the most stringent, complex, and detailed ROOs for vehicles.

⁴⁴ Li Li, *Research on Rules of Origin in Free Trade Zones*, Fudan University Press, 2013, p. 177.

C. The Stringency of ROOs Are Related to the Key Contracting Parties' Willingness

While the RTA is negotiated by the participating parties, it reflects the compromise of the will of parties. However, key RTA parties often have stronger bargaining power, thus leading the negotiation process and exporting their own standards in rule-making. Taking the calculation methods for RVC under the RCEP and CPTPP as examples, it is observed that the build-up method and the build-down method utilized by the RCEP are clearly inherited from the ASEAN Trade in Goods Agreement (ATIGA) text. In contrast, the four calculation methods employed by the CPTPP are a direct descendant of the former Trans-Pacific Partnership (TPP) text.⁴⁵

The TPP was initially led by the US, and after the US withdrawal, the CPTPP was mainly led by Japan, so the CPTPP can reflect the standard output of the US. Research indicates that Japan tends to adopt less restrictive product-specific ROOs to enhance its global value chain and international production network, while the United States prefers more stringent and complex product-specific ROOs as a means to implement discriminatory protection.⁴⁶ For instance, by implementing the increasing percentage of RVC and creating the new LVC rule within the USMCA ROOs, the US can facilitate the preservation and reshoring of vehicles and parts manufacturing. This will also transform supply chains to incorporate a higher proportion of US content, ensuring that the US producers have a competitive edge while encouraging new investments in vehicles and parts manufacturing within the country.⁴⁷ However, the RCEP is negotiated under the leadership of the ASEAN, and the strictness of the ROOs needs to consider the application capacity and management capacity of the ASEAN members, resulting in a relatively lower standard and unified rules. Consequently, the CPTPP ROOs for vehicles are much less stringent than the USMCA, but higher than the RCEP.

⁴⁵ *Supra* n. 20, p. 814.

⁴⁶ Mitsuyo Ando, Shujiro Urata and Kenta Yamanouchi, Dissimilar FTA Strategies of Japan and the United States: An Analysis of the Product-specific Rules of Origin, *Asian Economic Papers*, Vol. 22, No. 3, 2023, p. 1.

⁴⁷ USTR, United States–Mexico–Canada Trade Fact Sheet – Rebalancing Trade to Support Manufacturing, <https://ustr.gov/trade-agreements/free-trade-agreements/united-states-mexico-canada-agreement/fact-sheets/rebalancing> (Last Visited on January 25, 2025).

D. The Stringency of ROOs Are Related to the Characteristics of the Industry

The stringency of ROOs are related to the pressures exerted by special interest groups during the negotiation of agreements.⁴⁸ ROOs are highly susceptible to industry capture for various reasons. Firstly, the negotiators of agreements will not set a single standard: rules can vary across goods, allowing trade negotiators to devise carefully crafted measures that please domestic producers. Secondly, ROOs are obscure and highly technical measures. If trade negotiators lack the necessary technical background, they are likely to rely on industry representatives for advice on how to draft them.⁴⁹

Typically, import-competing industries advocate for stringent rules to safeguard their market position, while export-oriented enterprises prefer more lenient rules to make it easier for their goods to enter the markets of other contracting parties.⁵⁰ The automotive industry is an import-competing industry in the US and even North America. This industry plays a pivotal role in the regional economy, particularly in the US, where it contributed over \$809 billion to the national economy in 2023, representing 11.2% of the total US manufacturing output. Additionally, the automotive industry supports approximately 9.7 million jobs in the US, accounting for roughly 5% of all private-sector employment.⁵¹ But the competitive edge of the US automotive industry has faced challenges. To sustain its competitive advantage within the industry, the US has increasingly utilized ROOs as a policy instrument and continuously enhanced the restrictiveness of the ROOs for vehicles, which aims to enhance the demand for intermediate products within the region and shift the production of core parts — such as engines, transmissions, and

48 Olivier Cadot et al., Product-specific Rules of Origin in EU and US Preferential Trading Arrangements: An Assessment, *World Trade Review*, Vol. 5, No. 2, 2006, p. 208.

49 Kerry A. Chase, Protecting Free Trade: The Political Economy of Rules of Origin, *International Organization*, Vol. 62, No. 3, 2008, p. 507.

50 Pramila Crivelli, Stefano Inama and Jeremy Marand, The Determinants of Product-specific Rules of Origin: An Econometric Analysis in the Regional Comprehensive Economic Partnership, ADB Economics Working Paper Series No. 713, <https://www.adb.org/publications/determinants-product-specific-rules-origin> (Last Visited on January 25, 2025).

51 USTR, Report on the Operation of the USMCA with Respect to Trade in Automotive Goods, <https://ustr.gov/about-us/policy-offices/press-office/press-releases/2024/july/ustr-releases-second-biennial-report-operation-usmca-respect-trade-automotive-goods> (Last Visited on January 25, 2025).

batteries — to North America.⁵² It also seeks to increase enterprises' reliance on North American steel and aluminum purchases. By stipulating specific value thresholds for steel, aluminum, and labor content, the USMCA not only addresses issues of overcapacity in these materials but also tackles domestic concerns such as the manufacturing crisis, high labor costs and employment challenges. Consequently, the development and enforcement of stringent ROOs for vehicles align with US interests and are actively promoted by the government. Therefore, the US is likely to continue advocating for stricter ROOs.

ROOs are closely related to factors such as the level of tariff preference, membership composition and policy orientation of core members. The ROOs are the result of compromise and manipulation. In the absence of effective multilateral harmonization, this situation may further entrench and propagate trade protectionist policies within regions, thereby significantly impacting the normal development of international trade.

V. RECOMMENDATIONS FOR ADDRESSING THE DIVERSIFICATION OF RTAS ROOS

Regional ROOs have encountered a “prisoner’s dilemma”. Import and export traders who apply the rules have repeatedly criticized the high compliance costs and the complexity associated with them. However, due to short-term trade interest considerations, these enterprises have not lobbied governments to harmonize ROOs on a multilateral platform.⁵³ Conversely, local enterprises are actively advocating for governments to establish more stringent and sophisticated ROOs at the regional level in order to mitigate competitive pressures within the region, which will make them gain unfair competitive advantage under regional trade protection legislation. Considering this, the Chinese government should maintain the strategic focus and resolutely promote the simplification and facilitation of ROOs to promote international trade. In the long term, efforts should be made to coordinate and unify RTAs ROOs for vehicles at the

52 Duruo Liu and Mingzhi Zhang, Economic Effects Evaluation of the Adjustment of Rules of Origin in FTA – Based on the Rules of Origin of Automotive Industry in the USMCA, *Journal of International Trade*, No. 1, 2022, pp. 146–147.

53 Bernard Hoekman and Stefano Inama, Harmonization of Rules of Origin: An Agenda for Plurilateral Cooperation? *East Asian Economic Review*, Vol. 22, No. 1, 2018, p. 25.

multilateral level. In the short term, it is crucial to strengthen training and guidance for relevant enterprises in China, ensuring they understand various RTAs ROOs and can effectively utilize these complex legal instruments.

A. Advancing Harmonization from Expressive Form to Substantive Content by Multilateral Rule-making

Given the absence of effective multilateral regulations on ROOs, it has led to the reinforcement of regional ROOs as a tool for trade protectionism. The rise of trade protectionism has resulted in regional ROOs becoming increasingly detailed, complex, and industry-specific, thereby raising the costs for users of these rules. Consequently, many scholars advocate that the multilateral trading system, exemplified by the WTO, along with governments worldwide, should actively collaborate to address the diversified nature of ROOs in order to facilitate trade liberalization.⁵⁴ By promoting the international harmonization of regional ROOs, we can address the current fragmentation characterized by multiple versions of these rules. This harmonization will simplify the complexity of ROOs, thereby reducing learning and compliance costs for enterprises as well as administrative verification costs for governments. Such measures are instrumental in facilitating trade.

From the perspective of the reasons leading to the diversification of ROOs, factors such as the difference in tariff preferences among regional agreements, the difference in the number of contracting parties and the interests of key contracting parties will exist for a long time, so it is difficult to coordinate at the multilateral level. However, the position change of different members in the industrial supply chain serves as a significant driving force for changing ROOs, and enterprises share a common interest in simplifying the procedural requirements of the ROOs. Therefore, these aspects should be considered when striving to promote multilateral consensus on ROOs. The Chinese government should actively play a responsible role as a great power, initiate negotiations on relevant issues, and promote the regulation of ROOs for vehicles at

⁵⁴ Bernard Hoekman and Stefano Inama, Rules of Origin as Non-tariff Measures: Towards Greater Regulatory Convergence, Robert Schuman Centre for Advanced Studies Research Paper No. RSCAS 2017/45, 2017; Hasegawa Jitsuya, Current State of Diversity and Complexity of Preferential Rules of Origin and Moves toward Convergence – Role of Multilateral Frameworks in Simplification of Preferential Rules of Origin, *Public Policy Review*, Vol. 16, No. 5, 2020, pp. 1–39; Xinxuan Cheng and Rongguang Yu, Study on the Influence of Preferential Rules of Origin to Regional Specialization in East Asia Free Trade Area, *World Economy Studies*, No. 8, 2018, p. 120.

the multilateral level. In view of the differences in the RVC percentage requirements, calculation methods, composition elements and contractual terms of RTAs ROOs, China should actively facilitate cooperation between the WTO and the World Customs Organization, committing to promoting the simplification and ease of the substance of ROOs to facilitate international trade. Efforts can begin with promoting the unification of expression forms and calculation of ROOs, next step involves the coordination of procedural ROOs, gradually progressing towards coordinating substantive contents such as the RVC percentage requirements and composition elements of ROOs.⁵⁵

China can take the RCEP version of ROOs as a reference template for vehicle in China's negotiation and signing of bilateral trade agreements, and drive the global layout of China's vehicle industry chain with lenient ROOs. When the country sets the ROOs of the vehicle industry, it often integrates the strategic consideration of related industries and tries to provide policy protection for related industries by stipulating strict ROOs. However, the formulation of relevant rules needs to be combined with national circumstances, otherwise it will only hinder the relevant industries. For now, the implementation of lenient ROOs for vehicles and parts, both adapts to China's requirement for active development of the international vehicle sales market and facilitates China enterprise procurement of the best vehicle parts from the global market. In addition, it can facilitate China to expand its international market share of lithium batteries, which in line with China's national interests. The RCEP ROOs for vehicles are more lenient, and the parties are easier to obtain the qualification of origin, which has less impact on enterprises that need to rely on raw materials produced outside the region. In addition, the agreement covers many parties and has a broad sales market, and the materials of any contracting party in the region can be accumulated through the accumulation rule, so it can promote regional integration. It will effectively guarantee the "dual circulation" inside and outside the region.

B. Challenging the Ambiguities of RTAs ROOs with the WTO Rules

Despite the current trend of international economic and trade development

⁵⁵ Hasegawa Jitsuya, Standardization of Complex and Diversified Preferential Rules of Origin, *Journal of World Trade*, Vol. 55, No. 4, 2021, pp. 545-572.

towards weakened multilateral platform regulation, the rules of the WTO remain a crucial safeguard for regulating economic and trade exchanges within the international community. The USMCA ROOs constitute a disguised restriction on international trade and are inconsistent with the regional exception clause. According to Article XXIV of the GATT 1994, the rising RVC and labor value content requirements stipulated in the USMCA ROOs for vehicles impose restrictive trade regulations on both internal parties and external non-parties. These measures do not conform with Article XXIV, which requires the elimination of tariffs and other restrictive trade regulations on “substantially all trade”. Furthermore, the labor value content requirements for vehicles reduce overall consumer welfare, failing to meet the “necessity test” under Article XXIV.⁵⁶

Therefore, vehicle traders affected by these regulations can seek redress through the government by appealing the stringent ROOs via the WTO dispute settlement mechanism to protect their interests. China can argue that the USMCA ROOs violate the regional exception clause in Article XXIV of the GATT, urging parties of the USMCA to revise their ROOs and address unreasonable elements, particularly discriminatory provisions such as labor value content requirements and local steel and aluminum content requirements.

C. Making Strategic Use of Favorable Provisions in ROOs

The implementation of the measures requires a long time and many resources. In the short term, enterprises can optimize their procurement strategies to comply with absorption rules, thereby controlling the proportion of non-originating materials in vehicles. This approach ensures that final goods meet the relevant ROOs under RTAs, thus qualifying for preferential tariff treatment. The RTAs ROOs for vehicles primarily employ the RVC criteria, which is susceptible to fluctuations in exchange rates, upstream raw material prices and customs valuations. Notably, the USMCA’s RVC calculation uses the transaction value method, introducing greater uncertainty in determining the nationality of final goods. Compared to CTH and processing rules, the RVC criteria provide enterprises with greater flexibility, enabling broader industrial layout and adjustment.

Chinese enterprises can strategically invest in regions with business-

⁵⁶ *Supra* n. 32, p. 25.

friendly ROOs by analyzing various agreements. An example is the US-Singapore FTA, which allows parts processed in Singapore, regardless of origin, to be considered as Singaporean value-added parts, thereby enjoying duty-free treatment when exported to the US, so the enterprises may leverage such provisions to select alternative export destinations.⁵⁷ Additionally, the stringent USMCA ROOs complicate market access for Chinese vehicles in North America, while the relatively lenient CPTPP ROOs provide opportunities for Chinese investments in countries like Vietnam and Mexico to obtain origin qualification and penetrate the North American market. Given the overlapping membership of the CPTPP and RCEP, particularly involving Japan and Vietnam, relevant vehicle and part manufacturing can be relocated to these agreement parties, facilitating lower-cost market entry into the CPTPP. Enterprises can increase their investment in the aforementioned regions, strategically procure vehicle parts and organize the manufacturing process in accordance with the ROOs, promote the diversification of origin, thereby enable enterprises to more effectively utilize the tariff preferences stipulated in the corresponding RTAs. Additionally, to enhance the accuracy of origin determination and ensure the smooth operation of cross-border trade, enterprises should utilize pre-ruling systems to prevent unnecessary trade losses.

D. Intensifying the Development of Expertise in ROOs by Talents' Support

Currently, the global electric vehicle market is becoming increasingly competitive, vehicle manufacturing is crucial to the development of a national economy.⁵⁸ Whether it is the US increasing the *ad valorem* tax rate on Chinese electric vehicles and lithium batteries under Section 301 or the EU imposing countervailing duties on Chinese electric vehicles, or the recent 232 tariffs imposed by the Trump administration on automobiles and automobile parts.⁵⁹ These measures are essentially protectionist actions of trade that aim at safeguarding the development of local electric vehicle industries. In response,

57 Jing Tang, Strategic Analysis of US Tariffs on China and Countermeasures, *Economic Review Journal*, No. 5, 2023, p. 115.

58 Wei Li, Yue Zou and Caihua Zhu, The Electric Vehicle Revolution: A New Track for Industrial Competition among Major Countries, *Journal of WTO and China*, Vol. 14, No. 3, 2024, p. 4.

59 The White House, Adjusting Imports of Automobiles and Automobile Parts into the United States, <https://www.whitehouse.gov/presidential-actions/2025/03/adjusting-imports-of-automobiles-and-automobile-parts-into-the-united-states/> (Last Visited on April 19, 2025).

the Chinese government should vigorously pursue trade remedies through the WTO to seek the revocation of such illegal measures. Additionally, enterprises can mitigate the impact by diversifying their goods origins through the strategic utilization of ROOs, optimizing procurement sources for vehicle parts, and accurately configuring the ratio of originating and non-originating materials in vehicles to avoid adverse effects from trade protection measures.

Successful implementation of these strategies hinges on a robust talent base. Therefore, China should enhance its expertise in ROOs and bolster its talent reserves. Given the technical complexity of ROOs, enterprises must establish internal compliance systems, familiarize themselves with the preferential ROOs under various regional agreements, and improve their knowledge and application of these rules to better optimize the industrial supply chain. The diversification of ROOs has also increased certification and verification costs for customs authorities and other departments. With the implementation of the RCEP in China and the enterprises use “false” or “invalid” certificates of origin to illegally enjoy tariff preferences have also increased significantly, the demand for professionals skilled in ROOs are becoming increasingly urgent.⁶⁰ Currently, due to a shortage of specialized ROOs technicians in enterprises, it is challenging to accurately interpret ROOs across multiple agreements, especially when goods contain non-originating contents. Failure to accurately apply the ROOs may lead to foreign refunds or the rejection of tariff preferences.⁶¹ Moreover, to enhance China’s international discourse power and the competitiveness of its vehicle industry, China needs to improve its rule-making capabilities and theoretical innovation in ROOs. Consequently, the government should strengthen academic support for the research of ROOs and enhance its ability to formulate such rules within the international community. Simultaneously, training and guidance for enterprises should be intensified, and relevant knowledge of RTAs ROOs for vehicles should be actively disseminated through training sessions and guidelines to guide enterprises in fully and legally utilizing RTAs’ preferences, thereby improving their rule application skills and compliance awareness.

60 Caixing Wen and Hao Wang, A Probe into the Tariff Litigation Caused by an Invalid Certificate of Origin, *Journal of Customs and Trade*, Vol. 44, No. 6, 2023, p. 102.

61 Yikai Liu, Exploration and Practice of the RCEP Rules of Origin in Zhejiang, *High-Technology & Commercialization*, Vol. 30, No. 6, 2024, p. 28.