

The importance of product-specific rules of origin in the utilization of preferences in trade agreements: the case of textile and clothing exports in the Central America – Dominican Republic – United States Free Trade Agreement

In this policy brief, Karin Gourdon, Woori Lee, Nadia Rocha and Thomas Verbeet study how rules of origin influence the use of preferences for textile and clothing exports from Central American countries and the Dominican Republic to the US market under the Central America–Dominican Republic–United States Free Trade Agreement (CAFTA-DR). The authors find that the complexity of product-specific rules of origin is a significant determinant of preference utilization, suggesting that some rules entail compliance costs that reduce the benefits of this agreement. The analysis also shows that preference utilization depends on the extent of tariff savings, the size of exports and the degree of market power.

Rules of Origin are provisions in unilateral and reciprocal trade agreements that define the conditions products must meet to qualify for preferential market access. They are essential for determining the country in which a product has been manufactured, and for distinguishing products originating in member countries eligible for preferential access from those originating in third countries which are not. A recurring concern is that if

they are too rigorous or costly to fulfil, they may imply an under-utilization of trade agreement preferences and reduce the benefits of these agreements. This would be the case if exporters deliberately choose not to take advantage of preferences because compliance costs outweigh tariff savings, or if some firms fail to comply with rules of origin due to technological or management capacity constraints.

This study focuses on the Free Trade Agreement between Central America, the Dominican Republic and the United States (CAFTA-DR), and highlights the significant differences in the use of preferences arising from various specific rules of origin in the textile and clothing sector.

The Central America - Dominican Republic - United States Free Trade Agreement (CAFTA-DR)

CAFTA-DR entered into force in 2006 and provides preferential market access between the Dominican Republic (joined in 2007), Costa Rica (joined in 2009), El Salvador, Guatemala, Honduras, Nicaragua and the US. Analyzing the role of rules of origin for textile and clothing exporters in Central American countries and the Dominican Republic (CA-DR) to access the US market is especially

interesting for at least two reasons. First, CAFTA-DR is the first FTA between a group of small developing countries in the American region and the US (USTR, 2023), and therefore provides an excellent case for studying the utilization of preferential access to a large developed market by developing economies. Secondly, the textile and clothing industry is a key export

sector for Central American countries and the Dominican Republic, accounting for the largest share of those countries' exports to the US, averaging a third between 2010 and 2020, but faces the most restrictive rules of origin in the manufacturing sector (Jaramillo & Lederman, 2006; Robertson & Abreha, 2023).

Key stylized facts on preference utilization in CAFTA-DR

Our analysis is based on a combination of two data sets. The first is US data notified to the World Trade Organization's Integrated Database (2023), which records import values at tariff line level by customs regime. This dataset makes

it possible to assess the use of CAFTA-DR preferences by tracking exports from CA-DR countries that entered the US through the CAFTA-DR regime, the most-favored-nation (MFN) regime or another preferential regime. The

second dataset is the World Bank's Deep Trade Agreement database (Angeli et al., 2020) which provides information on product-specific rules of origin in CAFTA-DR.

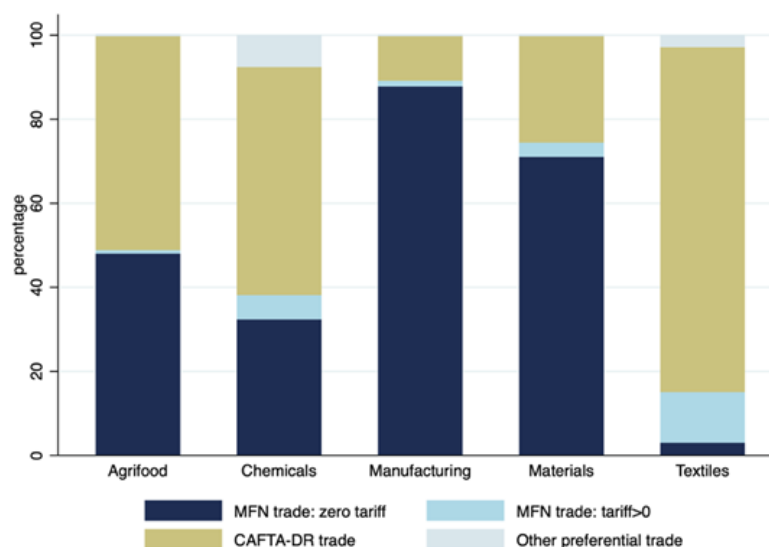
Stylized fact 1: CAFTA-DR offers the possibility of significantly reduced tariffs on Textile and Clothing

All products exported from CA-DR countries to the US between 2010 and 2020 are included in the CAFTA-DR text and are therefore eligible for preferential access to the US market, provided they comply with rules of origin. A significant

proportion (around 44 percent) of these CAFTA-DR-eligible exports, however, are already duty-free under MFN, making the CAFTA-DR agreement and compliance with rules of origin superfluous. However, as *Figure 1* (dark blue bar) shows, this is

not the case in the textile and clothing industry, for which only 3 percent of exports are MFN duty-free, which is the lowest level compared to other industries, such as materials and the rest of manufacturing.

Figure 1.
Share of CAFTA-DR exports to the US by customs regime per industry, average 2010-20



Notes Agri-food includes animal products (HS 01-05), vegetables (HS 06-15), foodstuffs (HS 16-24); Chemicals include chemicals (HS 28-38), plastic/rubbers (HS 39-40); Textile and Clothing include raw hides, skins, leathers (HS 41-43), textiles (HS 50-63), footwear/headgear (HS 64-67); Materials include mineral products (HS 25-27), wood products (HS 44-49), stone/glass (HS 68-71), metals (HS 72-83); Rest of manufacturing includes machinery/electrical (HS 84-85), transportation (HS 86-89) and miscellaneous (HS 90-97).

Source: Gourdon, Lee, Rocha & Verbeet (2024).

The CAFTA-DR framework is particularly attractive to textile and clothing exporters not only due to the very low proportion of products with zero MFN tariffs but also because there is no other preferential regime offering more advantageous market access than CAFTA-DR. Indeed, with the signing of CAFTA-DR, CA-DR countries were no longer eligible for other (unilateral) preferential

regimes with the US, such as the Caribbean Basin Initiative, the Caribbean Basin Trade Partnership Act or the Generalized System of Preferences (René et al., 2022; UNCTAD, 2018; USITC, 2006). However, Nicaragua was temporarily allowed to source a certain amount of inputs from third countries (e.g. cotton or man-made fiber apparel) and qualify for preferential

tariffs without needing to meet CAFTA-DR's rules of origin. This temporary preferential regime, known as "Tariff Preference Levels" in CAFTA-DR, is shown under other preferential trade in Textiles in Figure 1 (light-grey bar). Our data show that Nicaragua exported to the US under these Tariff Preference Levels until the end of 2014.

Stylized fact 2: Around 30 percent of CA-DR countries' Textile and Clothing exports did not utilize CAFTA-DR preferences when exporting to the US

Despite the attractiveness of the CAFTA-DR regime and the consequent interest in complying with rules of origin to benefit from tariff savings, a significant proportion of textile and clothing exports from CA-DR to the US do not utilize CAFTA-DR preferences.

We calculate the preference utilization rate as the share of exports under CAFTA-DR in total eligible exports (excluding trade flows that are duty-free under MFN). On average, between 2010 and 2020, the preference utilization rate for the textile and clothing

industry is 68 percent, slightly lower than the average for all sectors combined (72 percent) and much lower than that for the agri-food industry (95 percent).

Stylized fact 3: The utilization of CAFTA-DR increases with the level of tariff preference margins

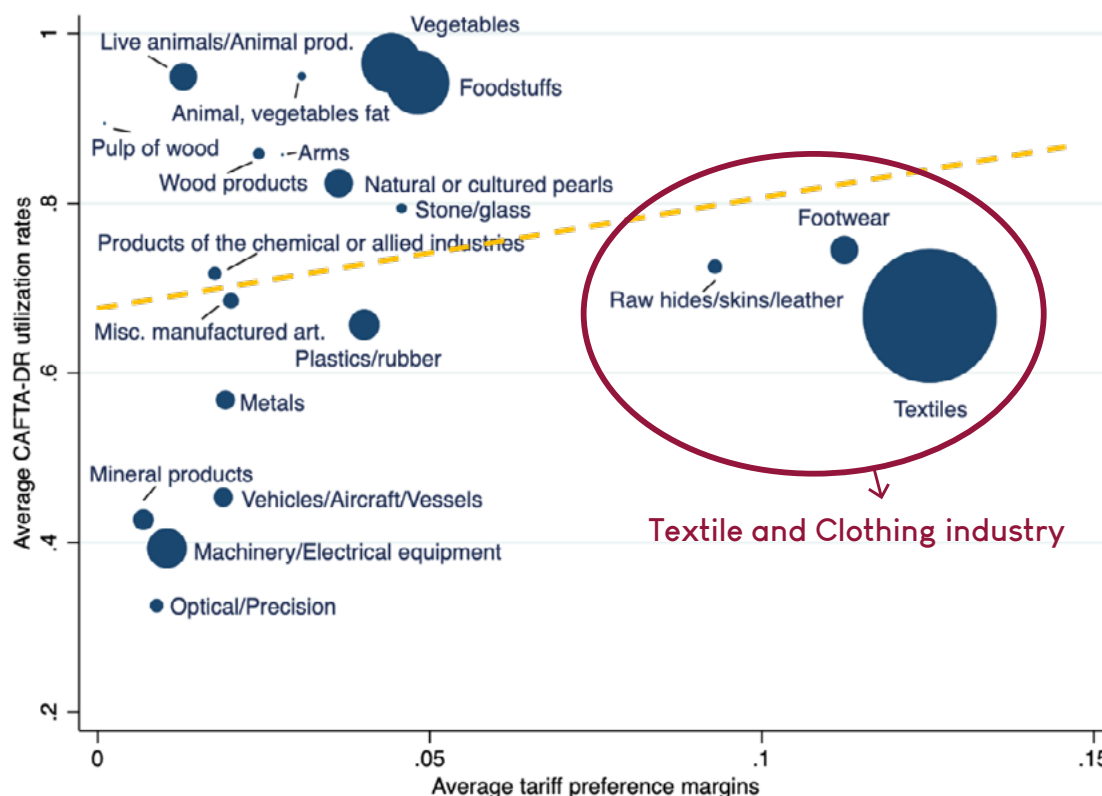
Figure 2 compares the average rate of preference utilization at industry level with the corresponding CAFTA-induced tariff savings, also known as “tariff preference margins”, which are calculated as the difference between the CAFTA-DR preferential tariff and the MFN tariff. Logically, we find that tariff savings are positively correlated with preference use. The positive slope of the yellow dotted line in Figure 2 indicates that the greater the tariff reductions, the greater the

incentives for companies to use CAFTA-DR preferences rather than an alternative regime, such as MFN treatment.

The textile and clothing industry stands out for having the highest average tariff preference margin of all sectors (around 13 percent), but a significantly lower CAFTA-DR utilization rate than other industries, at 68 percent. By comparison, the chemical and materials industries have similar tariff preference utilization rates

to the textile and clothing industry, at 67 percent and 70 percent respectively, but benefit from less than half the tariff preference margins of the textile and clothing industry, at 4.6 percent and 5 percent respectively. Furthermore, as indicated by the size of the circle in Figure 2, the textile and clothing industry is the leading export item of Central American countries and the Dominican Republic.

Figure 2.
CAFTA-DR utilization rates and tariff preference margins by HS-section, 2010-20



Notes: The graph shows average CAFTA-DR utilization rates and average tariff preference margins (excluding observations with zero MFN tariff) by HS section over the period 2010-2020. The size of each circle indicates the average trade value of each industry over the sample period. *The textile and clothing industry comprises the HS sections for textiles, footwear, raw hides/skins/leather.

Source: Gourdon, Lee, Rocha & Verbeet (2024).

Why do exporters in Central American countries and the Dominican Republic pay MFN tariffs on around one-third of their CAFTA-DR eligible textile and clothing exports to the US despite significant tariff advantages offered by CAFTA-DR?

Rules of origin are identified as an explanation for the under-utilization of preferences, as they imply costly arrangements for companies to comply with them (Keck & Lendle, 2012; Krishna et al., 2021).

Product-specific rules of origin in the textile and clothing industry under CAFTA-DR fall into three main categories used to identify the “origin” of a product: change in tariff classification (CTC), exception (EXC) or combination (COM). They are listed in *Table 1*. Almost half of textile and clothing products are subject

to exception rules allowing the use of non-originating inputs as long as a product of a different HS chapter (CC), HS heading (CH) or HS subheading (CS) was created from those inputs in the RTA territory, while prohibiting the use of non-originating inputs from specific CC, CH or CS listed under the exception. Another one-third need to comply with combination rules. These rules are usually the most complex ones as they require firms to meet multiple rules, such as the requirement of a specific technical operation taking place in the RTA territory (e.g.

for product HS 6103.21, “[...] the good must be cut or knit to shape, or both, and sewn [...]”) in addition to rules prohibiting the use of certain third-country inputs in the production. The remaining products are under change in tariff classification rules requiring a substantial transformation of the non-originating input by changing HS tariff classifications at the CC-, CH- or CS-level, like an exception rule, but without any restriction on using specific third-country inputs in contrast to exception rules.

Table 1.
Product-specific rules of origin in CAFTA-DR for exports of the Textile and Apparel industry

Main category	Refinement	Description
Change in Tariff Classification (CTC)	1. Change in chapter (CC) 2. Change in heading (CH) 3. Change in sub-heading (CS)	The exported product must have a different tariff classification from non-originating inputs to be considered substantially transformed. The CTC rule requires a transformation of that input at different tariff levels: at the HS chapter (CC), HS heading (CH), or HS subheading (CS).
Exception rules (EXC)	1. CC with exception 2. CH with exception	EXC prohibit using non-originating materials from a particular tariff level (CC, CH or CS) for goods supposed to qualify through a CTC.
Combination rules (COM)	1. CTC plus technical requirement (TR) 2. CTC with exception plus TR 3. CTC with exception plus value content requirement (VCR)	COM require the fulfilment of multiple product-specific rules of origin, such as of a CTC plus a Technical Requirement, or CTC plus a VCR.

Source: Gourdon, Lee, Rocha & Verbeet (2024) based on World Bank Deep Trade Agreement database and the classification of product-specific rules of origin in Angeli et al. (2020).

What is the impact of product-specific rules of origin on preference utilization in textile and clothing?

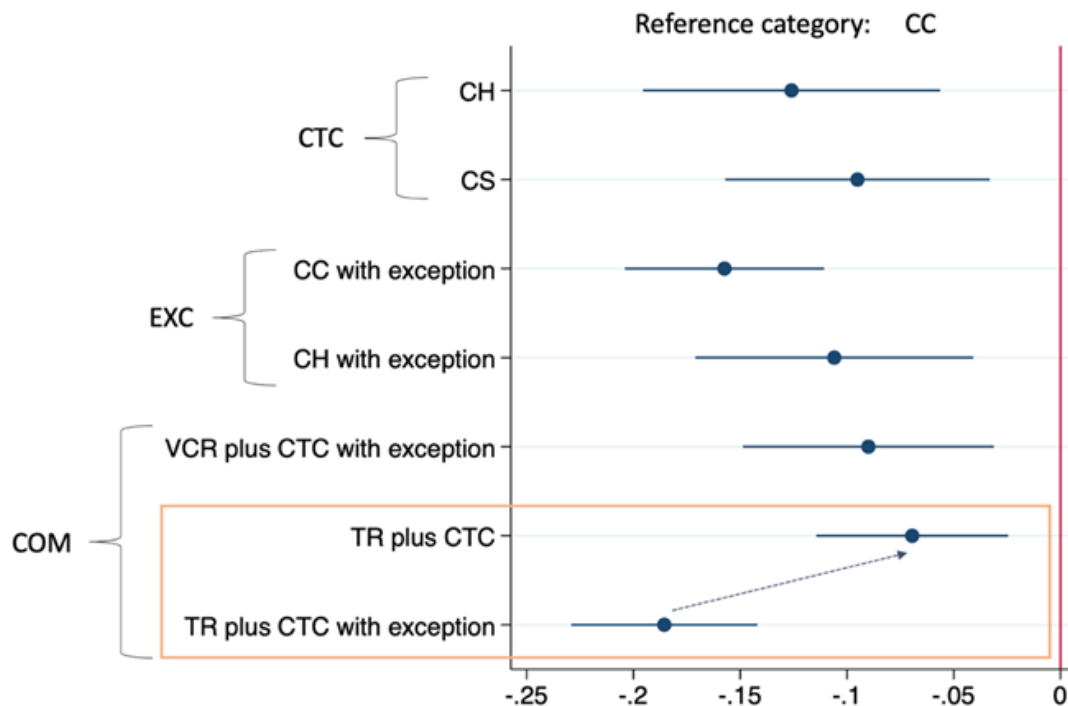
We estimate the impact of product-specific rules of origin on preference utilization using an econometric specification that regresses the preference utilization rate for an exporting country-product pair in a given year on a set of dummy variables indicating the category of rules of origin that is applied to that product. Our identification strategy exploits the variation between different products in the textile and clothing industry for a given exporter and year. Control variables include the level of preferential margin, export size, and degree of market power. They have the expected sign: utilization is higher i) for products with higher tariff preference margins (hence higher savings), ii) for larger exports, consistent with the idea that obtaining preferential market access is more beneficial for larger exports due to fixed costs, and iii) for exports featuring a higher sensitivity to tariff changes (as a proxy for the degree of market power of firms and their ability

to pass on increased tariff costs to consumers).

Our main results show that preference utilization in CAFTA-DR varies with the complexity of product-specific rules of origin. The findings, summarized in *Figure 3*, suggest that simpler rules and those with straightforward application are associated with higher CAFTA-DR utilization. At the top of the figure, CTC rules requiring a substantial transformation of the product at the chapter level (CC) are associated with significantly higher preference utilization rates compared to all other categories. In contrast, more complex combination rules that require firms to comply with a technical requirement in addition to exceptions on using inputs from specific tariff lines in the substantial transformation process (i.e. a combination rule of technical requirement plus CTC with exception) are associated with the lowest preference utilization rate (around 18 percentage points

lower than the CC rule). Our point estimates suggest that a relaxation of this combination rule by dropping the exception requirement, meaning to define a combination rule of a technical requirement in addition to a simple change in tariff classification (TR plus CTC), would lead to an average increase in preference utilization in the textile and clothing industry by almost 7 percentage points to about 74 percent, and an average increase in export growth by almost 2 percentage points between 2010 and 2020.

Figure 3.
Effect of different product-specific rules of origin on preference utilization rates



Notes: The figure reports the coefficients and 5% confidence intervals of categories of product-specific rules of origin with respect to the reference category which is set to a change in chapter rule (CC). The estimation includes the preference margin, trade volumes, product-level trade-elasticities and exporter-year fixed effects as additional control variables but which are not shown for space reasons. Standard errors are clustered at the exporter-year level.

Source: Gourdon, Lee, Rocha & Verbeet (2024).

Final remarks

Our findings on the impact of different types of rules of origin on CAFTA-DR preference utilization in the textile and clothing industry highlight important implications for the design of rules of origin in Regional Trade Agreements (RTAs). While rules of origin impose constraints and compliance costs for exporting

within a preferential regime, they are integral elements of RTAs. Therefore, in the design of RTAs, it is important to establish rules that fulfill the objective of preventing the transshipment of products with negligible regional content without being overly complicated or restrictive. Our findings regarding the types of

product-specific rules of origin that are most restrictive can be useful not only for potential further revisions in origin rules within CAFTA-DR but also for future negotiations in other RTAs aimed at improving the utilization of preferential market access.

Disclaimer: The views expressed in this brief are those of the authors and they do not necessarily represent the views of the institutions they work for.

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