Analyzing the Competitiveness of the Textile and Apparel Sector among USMCA trade agreement partners

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President Trump signed the revised North American Free Trade Agreement into law on January 29, 2020. The United States Mexico Canada Agreement (USMCA) is an updated version of the nearly 25-year-old, trillion-dollar North American Free Trade Agreement (NAFTA) (USTR, 2020a). It includes major changes on cars and new policies on labor and environmental standards, intellectual property protections, and some digital trade provisions. The USMCA strengthens existing North American supply chains for textiles and apparel and opens up new opportunities for exports of yarns, fabrics, and apparel (USTR, 2020b). The Textile and Apparel (T&A) industry is a critical stakeholder of the policy change, because of its deep involvement in the regional T&A supply chain established by the NAFTA (Friedman, 2020). With limited literature on related topics, this study intends to quantitatively evaluate the competitiveness of United States, Mexico and Canada's T&A industry, and how they are affected with USMCA agreement. For academia, findings of the study will significantly enhance our understanding of the T&A specific sectoral impact of the USMCA. Results of the study will also provide valuable inputs helping U.S. T&A firms prepare for the changing business environment as well as government agencies for related T&A trade policymaking.

NAFTA has facilitated the formation of a regional T&A supply chain among its members. Within this supply chain, the United States typically exports textiles to Mexico, which turns imported yarns and fabrics into apparel and then exports finished apparel back to the United and Canada for consumption (Friedman, 2020). With the revised agreement, USMCA eases the requirements for duty-free treatment for certain textile and apparel products but tighten the requirements for other products (USITC, 2019). USITC (2019) also found that the overall impact of USMCA on the U.S. economy is likely to be moderate because of the size of the U.S. economy relative to the size of the Mexican and Canadian economies. However, estimating the effects of USMCA on the regional T&A supply chain is difficult because the event is relatively recent. Therefore, this study analyzes the comparative advantage for the T&A sector at the Harmonized System (HS) four-digit product classification in the post-2000 period of United States, Mexico and Canada.

One of the most widely used measures of international competitiveness has been Balassa's (1965) Revealed Comparative Advantage (RCA) index, which measures the share of a given product in a country's total exports relative to the share of that product in total world exports. A country is said to have a comparative advantage in a particular product if its share in the country's total exports is relatively larger than the share of the product in total world exports (Nath, Liu, & Tochov, 2015). RCA is a commonly used method to evaluate international competitiveness (Ferto & Hubbard, 2003). Product level trade data (HS code 50 to 67) from United Nations Commodity Trade database was acquired for this study from 1999 to 2018 (a 20 year period). RCA and its variant Normalized Revealed Comparative Advantage (NRCA) are calculated for the two digit HS code to determine export comparative advantage for the textile and apparel categories. A non parametric rank correlation is applied to evaluate the consistency between the RCA and NRCA indices. To identify specific textile and apparel subcategories with export comparative advantage, RCA and NRCA at the four digit HS code levels is generated. To identify export destinations for the subcategories that indicate the textile and apparel export comparative advantage, bilateral trade data was analyzed.

The RCA and NRCA indices of United States that suggest advantage include three codes: HS52 for cotton [continuous advantage from 2001 to 2018]; HS56 for wadding, felt and nonwovens, special yarns (twine, cordage, ropes and cables and articles thereof) [continuous advantage from 2002 to 2018]; HS59 for textile fabrics (impregnated, coated, covered or laminated, textile articles of a kind suitable for industrial use) [advantages in 2003, 2004, 2015, 2016, 2017]. The RCA and NRCA indices of Mexico that suggest advantage include three codes: HS61 for apparel and clothing accessories (knitted or crocheted) [continuous advantage from 1999 to 2004]; HS62 for apparel and clothing accessories (not knitted or crocheted) [continuous advantage from 1999 to 2006]; HS63 for textiles, made up articles (sets; worn clothing and worn textile articles; rags) [continuous advantage from 1999 to 2007]. The RCA and NRCA indices of Canada showed comparative disadvantage for all the 18 two digit HS codes analyzed. The non-parametric correlation test to evaluate the relative rankings of RCA and NRCA (1999 to 2018) indicates a positive Spearman's rho ($\rho = 0.81011$, p-value <0.001) that suggests the correlation between RCA and NRCA.

RCA and NRCA calculations at the four digit level for United States, identified 22 sub categories with sustained years of advantage. The HS5201 sub category indicated the largest NRCA magnitude among T&A products in United States, suggesting its superior competitiveness within the industry. The dominant destination of HS5201 was found to be Vietnam. RCA and NRCA calculations at the four digit level for Mexico, identified 10 sub categories with sustained years of advantage. The HS6203 sub category indicated the largest NRCA magnitude among T&A products in Mexico, suggesting its superior competitiveness within the industry. The dominant destination for HS6203 was found to be United States. When comparing the comparative advantage among USMCA trade partners, United States had comparative advantage in 34 textile products, Mexico had comparative advantage in 16 apparel products, and Canada had comparative advantage in 2 industrial textile product category.

This study examines the current export scenario, changes occurring in the export structure, and highlights the various reasons for the structural change of the textile and apparel sector for United States, Mexico and Canada during the study period. The results pointed out that though United States has comparative advantage in textile products, United States has not been able to increase its share in world clothing trade at a faster pace. The dominant destination of United States' textile products used to be Mexico but has shifted to Vietnam. The results also showed that Mexico has lost its comparative advantage in export of apparel products, but still United States is a dominant exporting partner of Mexico for exporting apparel products. Canada did not have any comparative advantage in any of the textile and apparel product exports. It seems that there is little potential impact of USMCA trade agreement on United States, Mexico, and Canada textile and apparel industry. Future research should examine the comparative advantage trends among the four digit HS sub categories of the United States textile and apparel industry.

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