

Unveiling the Trade Dynamics of the U.S. Apparel Export Market: An Analysis of Export Competitiveness and Market Trends

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Keywords: U.S. apparel industry, Trade Competitiveness, MS, CAGR, RCA, NRCA

The textile and apparel (T&A) industry has historically played vital roles in bolstering the U.S. economy, contributing to revenue earning and employment opportunities. According to Statista (2022), approximately 4,655 apparel firms were in operation in this industry in 2019. Recent employment data from the U.S. Bureau of Labor Statistics (2024) shows that the U.S. apparel manufacturing industry employed 90,400 employees in 2022. The total apparel exports in the U.S. reached 61 billion USD in 2022, marking a 15.85% increase from the previous year (UN Comtrade Database, 2024). The industry's growth is primarily fueled by the Western Hemisphere supply chain and focused mainly in the Southeast, Mid-Atlantic, Pacific Coastal, and Midwest regions, which collectively represent 80% of production (Monamy et al., 2024).

The U.S. apparel industry has encountered ongoing challenges due to the wage gap between the U.S. and Asian countries. According to Freund et al. (2018), in the past decade, the U.S. apparel retailers have actively pursued manufacturers abroad capable of offering low costs, high quality, dependable delivery, rapid response times, and adaptability. Tariffs and non-tariff barriers pose further challenges for the U.S. apparel exporters, as other countries frequently impose higher barriers, restricting the competitiveness of American products in worldwide markets (Keough & Lu, 2021). However, U.S.-based brands have recently begun choosing domestic manufacturing. This shift is driven by incentives from local governments, preferences specified in free trade agreements, and a change in consumer attitudes towards products labeled "Made in USA" (Freund et al., 2018). Additionally, advancements in industrial engineering and ergonomic research are fundamentally transforming manufacturing procedures, leading to heightened efficiency and decreased expenses (Karpova et al., 2021). This shift is evident within the technology-driven product segments such as medical textiles, protective clothing, specialty and industrial fabrics, and non-woven materials (Lu, 2022). The U.S. has emerged as the largest global exporter of worn clothing in 2021 (USITC, 2021). Furthermore, sustainability concerns are driving a renewed focus on reshoring practices to maintain environmental and social standards. Reshoring strategies are also proving beneficial for apparel retailers by improving supply chain responsiveness and customer service processes (Shen et al., 2017). Thus, it's crucial to evaluate the trade competitiveness of the U.S. apparel industry amid its shift towards domestic manufacturing, requiring strategic analysis to capture emerging market opportunities. Key metrics for evaluating trade competitiveness, such as Market Share (MS), Revealed Comparative

Advantage (RCA), Normalized Revealed Comparative Advantage (NRCA), and Price analysis, offer crucial insights for industry analysis and strategic decision-making (Reis & Farole, 2012).

Market Share (MS) is a fundamental indicator that indicates the proportion of total industry sales made by a specific country, reflecting its competitive position and influence. RCA assesses a country's trade patterns relative to its trading partners, offering insights into its competitive standing in the market. Derived from market share, RCA scores a country's historical trade patterns relative to its trading partners. NRCA represents a modified version of RCA, providing a standardized measure to evaluate a country's specialization in particular industries compared to global trade patterns. An RCA value of more than 1 and a positive NRCA value reflects the comparative advantage. Price analysis with unit values (quotient of export values and quantity) indicates that in competitive supply scenarios, higher prices typically correlate with superior quality and increased product differentiation. In March 2024, product-level annual U.S. trade data were collected for the 2018-2022 period, focusing on two-digit HS codes 61 and 62, and their corresponding four-digit codes (6101-6117, 6201-6217) from the United Nations Commodity Trade database (UN Comtrade Database, 2024).

Analysis of the 2-digit H.S. Code revealed that the U.S. apparel exports exist but do not enjoy any comparative advantages. Further analysis of four-digit categories suggests that even though the U.S. maintains a consistent market share in all the categories, only a few categories could maintain an average of 2% of MS from 2018 to 2022, data presented in Table 1.

Among all the four-digit categories, only 6117 has a consistently higher market share and comparative advantage. RCA and NRCA analysis of the four-digit categories revealed that all categories except 6117 had comparative disadvantages. Price analysis suggests that the country's export price per unit was lower than the global average across all categories except for 6101 and 6216. Moreover, examining all four-digit categories revealed a negative linear relationship between the price/unit and M.S. The U.S.'s apparel export price tends to decrease as the market share within the H.S. categories increases, indicating that producing more lowers the cost per unit. Further analysis of the 'popular' six-digit category 6117 revealed intriguing findings. MS analysis indicates that 611790 consistently holds a significant market share ranging from 11.13% to 36.71% throughout the study period, while other six-digit categories exhibit negligible shares. Additionally, RCA analysis suggests that 611790 (Clothing parts, knitted or crocheted) maintains a comparative advantage ranging from 1.23 to 4.53 over the analyzed period, whereas other categories demonstrate a disadvantage.

This comprehensive analysis empowers industry stakeholders and policymakers with valuable insights. By understanding the performance and dynamics of different categories within the apparel export market, stakeholders can confidently make informed decisions regarding investment, production strategies, and market positioning. Policymakers can use this information

to formulate policies that support and enhance the competitiveness of domestic apparel industries, identify areas for improvement, and foster sustainable growth in the sector.

Table 1: Avg. MS, RCA, NRCA analysis during 2018-2022, and price comparison in 2022 for prominent HS Codes

Category	HS Code	Average MS (2018-2022)	Average RCA (2018-2022)	Average NRCA (2018-2022)	USA export price/kg Vs. world Average export price/kg in 2022
Popular	6117	8.25%	1	1.63	USA \$10.87/kg Vs. World \$16.08/kg
Potential	6101	2.29%	0.27	-7.32	USA \$32.46/kg Vs. World \$19.88/kg
	6109	2.07%	0.24	-131.06	USA \$13.41/kg Vs. World \$17.97/kg
	6212	2.15%	0.25	-36.45	USA \$25.85/kg Vs. World \$32.92/kg
	6216	3.01%	0.35	-3.15	USA \$25.53/kg Vs. World \$25.32/kg
	6217	2.89%	0.32	-7.96	USA \$15.35/kg Vs. World \$26.61/kg
Continuous growth	6106	Avg. 1.83% 2.55% in 2022	0.21	-13.32	USA \$23.17/kg Vs. World \$26.65/kg
	6211	Avg. 2.29% 3.24% in 2022	0.27	-42.73	USA \$21.85/kg Vs. World \$31.43/kg

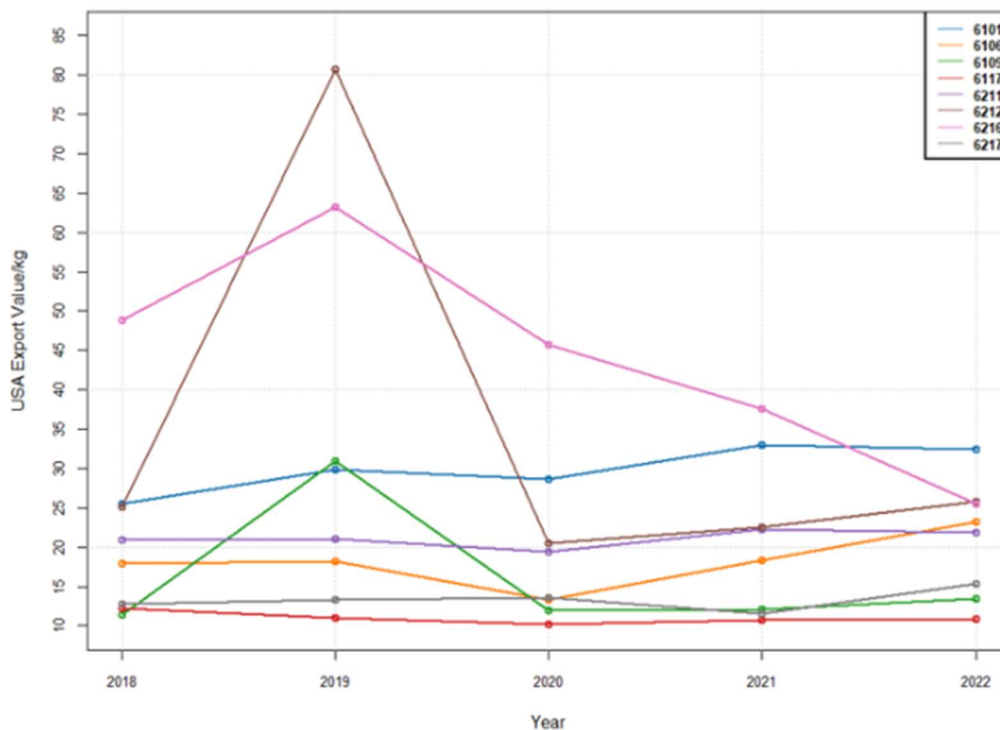


Figure 1: Changes of the U.S. export value/unit for prominent HS Codes during 2018-2022.

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