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From Disruption to Adaptation: Modeling the Economic Impact of COVID-19 on Morocco's Textile Sector Using an Interrupted Time Series Approach

Communication Info

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Abstract

The COVID-19 pandemic generated an unprecedented shock to global trade, disproportionately affecting export-oriented industries. This study quantitatively assesses the impact of the March 2020 COVID-19 outbreak on Morocco's textile and apparel sector using an Interrupted Time Series (ITS) approach. Monthly data on textile imports and exports, in both quantities and values, covering January 2014 to December 2024 were analyzed. Segmented regression models estimate immediate level changes and post-intervention trend adjustments. The results indicate a statistically significant negative structural break in import quantities and values, as well as in export values following the onset of the pandemic. However, export quantities did not exhibit a significant structural decline, suggesting that the crisis primarily affected trade revenues rather than physical volumes. Post-2020 trends reveal a progressive recovery, with quantities rebounding more rapidly than monetary values, indicating margin compression and price volatility in international markets. Overall, the findings highlight both the short-term vulnerability and medium-term resilience of Morocco's textile industry. The study contributes empirical evidence on crisis-induced structural breaks and offers policy-relevant insights for strengthening industrial competitiveness within global value chains.

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