Using the Input-Output Approach to Measure Participation in GVCs: The Case of Costa Rica

Topic: Supply, Use and IO Tables: Global value chains, economic growth and environment
Author: David Ricardo Bullon
Co-Authors: Bo Meng, Gabriela Saborio, Natalia Sánchez, Satoshi Inomata, Tayutic Mena Retana

This paper makes use of a series of indicators that are calculated from an inter-country input-output table which includes Costa Rica and its main trade and investment partners. We have embedded Costa Rica’s national input-output table into the WIOD endogenously using a linear programming method based on Costa Rica’s foreign trade and balance of payments data. Various indicators of trade in value-added (TiVA) are used to place Costa Rica in the global economy. For example, gross exports are decomposed into five sources of value added to understand the sources of a country’s competitiveness. In order to place these results in the wider context of GVCs, additional TiVA related indicators are then used to measure the extent to which Costa Rica participates in GVCs relative to other countries and the country’s position (upstream vs. downstream) in these GVCs. The country’s TiVA-based comparative advantages are then discussed, as well as the degree to which the country’s participation in GVCs is driven by specific economies.