

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

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The fragmentation of global production across national borders has created valuable development opportunities for countries that are able to integrate into global value chains (GVCs) and climb towards higher value-added activities. In the midst of this transition, policy-makers require well-conceptualized indicators that reveal the degree and nature of the interaction of their country with its main economic partners, reflecting better international production networks. This paper will apply indicators derived from the concept of trade in value-added (TiVA) to the case of Costa Rica in order to illustrate how the input-output approach can be used to explore various aspects of a country’s participation in GVCs. We intend to provide developing countries that seek to foster GVC-driven structural transformation with an example that demonstrates an effective way to measure progress.

This paper will make 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. The TiVA indicator will be used to place Costa Rica in a global context and assess the relative importance of services in value added. The country’s comparative advantage will then be discussed based on a TiVA-related indicator of revealed comparative advantage and a sector-based average propagation length index. Additional TiVA related indicators will then be used to measure the degree of fragmentation in the value chains in which Costa Rica participates and the country’s position (upstream vs. downstream) in these GVCs. Data permitting, the paper will also use the framework laid out in “Tracing value-added and double counting in gross exports” (Koopman, R., Z. Wang and S.J. Wei, 2013) to trace value added in each sector.