

Decomposing Domestic Value Added of Final Products: New Evidence from the ADB-MRIO

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Author: Sheng Zhong

With economic interactions between nations rising strongly over past decades, production as well as consumption are taking place across sectoral and national borders through trade. This suggests international fragmentation of production chains in which each economy participates and adds value at each stage of production. In this paper, we provide some up-to-date macroeconomic evidence regarding the extent of international fragmentation and the driving factors. To do so, we derive the domestic value added share of final products for 2170 global value chains and 62 economies, and decompose the changes in economy-level domestic shares into five factors. Based on the new Asian Development Bank Input-Output tables (ADB-MRIO) for 62 economies between 2000 and 2017, we document a series of stylized facts. Across value chains and economies, domestic value added share has declined, indicating the pervasiveness of fragmentation. This process is driven by changing inter-industry production structure and trade structures in both intermediate production and final demand, while offset by changing value added share in output and final demand composition. Unlike most advanced economies, we find an increase in domestic shares in several emerging Asian economies (e.g., China) with a share-increasing trade structure effect in intermediate production, suggesting a production transition from advanced economies to these emerging Asian economies.