Measures of Participation in Global Value Chains and Recent Global Business Cycle

Topic: (8.8) Global Value Chain and Vertical Specialization (2)

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This paper makes two methodological contributions. First, it proposes a framework to decompose total production activities at the country, sector, or country-sector level, to different types depending on whether they are for domestic demand, traditional international trade, simple GVC activities, and complex GVC activities. Second, it proposes a pair of GVC participation indices that improves upon the measures in the existing literature. We apply this decomposition framework to a Global Input-Output Database (WIOD) that cover 44 countries and 56 industries from 2000-2014 to uncover evolving composition patterns of different production activities. We also show that among all production activities, complex GVC activities co-move with global GDP growth more strongly than other types of production activities.