The medium-high and high-intensity technology sectors in Mexico and Brazil: a structural decomposition analysis between 2000-2014

Topic: Classical IO applications (Chair: Bernhard Michel, Federal Planning Bureau of Belgium)
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We develop a structural decomposition analysis (SDA) to identify the importance of manufacturing and services with mid-high and high technological intensity (MH&HT) to the changes in gross output for Brazil and Mexico between 2000 and 2014. We break down the output changes in the composition and level of final demand, the production technique (technical coefficients), and the trade pattern (share of imports in the total supply of inputs and final goods). We use the World Input-Output Tables and the OCDE technological intensity classification data. The results show that the importance of the MH&HT group tends to be pro-cyclical in the two economies, increasing during periods of more remarkable economic growth (2000-2008 for Brazil and 2010-2014 for Mexico). This relation tends to be perceived for manufacturing and less so for services. Also, the increase in the proportion of imported inputs and final goods contributes to reducing the relevance of the MH&HT group.