The EU Regions Integration in Global Value Chains

Topic: Classical IO applications: Trade and GVCs
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This paper computes the existing gap between bilateral trade in value added (VA) and gross value terms. We derive the distribution of VA trade by regions and countries involved in the global production chain for 10 composite economic sectors using a newly available global input-output (IO) table covering 61 countries, with the 28 EU Member States disaggregated into 267 NUTS 2 regions for year 2013 (Thissen et al. 2019) where bilateral trade in intermediate and final demand goods are fully disaggregated. This is a distinctive characteristic of this dataset in comparison to others works (e.g., Johnson and Noguera, 2012) where trade in intermediate and final demand goods are not directly incorporated in the global input-output table.

Likewise previous works based on national IO tables (Johnson and Noguera, 2012; Foster-McGregor and Stehrer, 2013; Johnson, 2014; Koopman et al., 2014; Los et al., 2014) we find that the ratio of VA to gross export (vax ratio) differs substantially across countries/regions and sectors. Our main result is that production sharing relationships are more marked in core rather than peripheral EU regions. Moreover, similarly to Johnson and Noguera (2012) we document lower vax ratios in manufacturing sectors in contrast to higher vax ratios found in primary and service sectors. Besides, a homogenous geographical pattern characterizes the manufacturing sectors while geographical disparities are more noticeable under primary and service sectors.