EU trade: understanding deviations in multicountry input-output tables and their implications for trade policy

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Over the past two decades, research institutions worldwide have undertaken numerous projects to develop global multicountry input-output databases. This effort has resulted in the creation of several notable databases, including WIOD, Exiobase, GTAP-MRIO, OECD-ICIO, FIGARO, and Eora. These databases have enabled international organisations and countries to conduct comprehensive assessments of socio-economic, environmental and trade impacts. The trade in value added indicators, in particular, have been widely used and have undergone detailed evaluations to compare the results across different databases.

However, as the compilation of these MCIO tables was experimental, following different assumptions and methodological approaches, (sometimes large) deviations regarding key variables and indicators among those databases were frequent and noticeable. In this respect, little attention has been paid to examine closely the compilation process and underlying trade data of each database as explanatory factors of the differences in the results and their subsequent effects on policy relevant indicators. This paper provides insights into this subject as well as it identifies key drivers in the compilation of the MCIO databases that deserve further scrutiny when comparing differences in indicators, in particular, in the estimation of the domestic and foreign value added and employment content of gross exports. These key elements are:
â€¢ the breakdown of exports between intermediate and final uses;
â€¢ the breakdown between domestic exports and re-exports;
â€¢ the way trade asymmetries are balanced, for goods and services, separately;
â€¢ the way confidential values are replaced by guess-estimates; and
â€¢ the way the breakdown of products and their geographical allocation is handled when linking the domestic and national concepts in the supply and use tables (e.g. direct purchases abroad).

A key finding of this paper is that the absence of official national supply and use tables can introduce significant discrepancies regarding policy relevant indicators, as demonstrated in the context of EU trade policy.