Reducing discrepancies in the construction of inter-country use tables

Topic: Want to know more about how the EU FIGARO ICIO tables were made?
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In the European Union, once that preliminary inter-country use tables are compiled using the balanced bilateral trade views of goods and services data adjusted by goods sent abroad for processing and merchanting activities, the final stage of the construction of the EU inter-country use table consists in removing the resulting discrepancies between the resulting export totals and those from national accounts or from national supply and use tables. These discrepancies are basically the result of the difference between the estimated trade figures in the preliminary estimated EU inter-country use tables and those export figures reported by national supply and use tables.

Ahmad (2017) suggested that misclassification of products can be one of the reasons originating these discrepancies, proposing a method for reducing row discrepancies by means of a re-classification of product bilateral flows preserving bilateral trade total figures by partner country in a replicable and transparent method. This method is based in the construction of a conversion matrix that reallocates products with surpluses (positive discrepancies) into products with negative discrepancies till one of them (either positive or negative discrepancies) are exhausted and no more reallocations are possible. In this paper, we suggest a different construction of the conversion matrix that avoids the appearance of negative bilateral trade flows when the reallocation process is carried out.

The Ahmad's original approach is implemented before splitting bilateral trade across intermediate and final users. Therefore, just a table with a balanced view of trade by product and trading partner would be required for its implementation. In the FIGARO project, we have extended Ahmad's approach to account for a different distribution by partners and users, such that the allocation process preserves the bilateral trade total figures by partner country and also leaving the totals by users unchanged.

In this paper we describe our new approach from a practical and didactic point of view, emphasizing the solutions given to the problems encountered in the Ahmad (2017) method for the construction of the EU inter-country use tables under the FIGARO Project.