The OECD's approach to disaggregating industries in the inter-country input-output table

Topic: 811W MRIO Modelling and Database
Author: Kirsten S. WIEBE
Co-Authors: Norihiko YAMANO, Peter Horvát

The paper documents the algorithm used to split aggregate industries in the OECD inter-country input-output table (ICIO). The ICIO currently covers 34 industries (in ISIC Rev. 3 classification) in 61 countries and the rest of the world. For some research questions, such as the analysis of embodied greenhouse gas emissions, material flows or more industry specific analysis, the industry resolution is not detailed enough. Rather than re-estimating the entire ICIO with a higher resolution of data, we are developing an algorithm to split individual industries in a way that the industry totals remain those from the original ICIO. The data used to split the industries ranges from national supply-an-use or input-output tables (the preferred choice) to detailed trade data at the 6-digit HS classification level. In addition, industry specific data (e.g. from the world steel organisation), is taken into account to allow for in-depth industry analysis. The algorithm is for example applied to the "agriculture, hunting, fishing and forestry" industry (ISIC Rev. 3 industries 01T05), the mining industry (ISIC Rev. 3 industries 10T14) and various service industries.