Converting US Supply and Use Tables into NACE / CPA

Topic: (9.4) Special Session: From USA national Supply, Use and Input-Output compilation to European standards Author: Pille DEFENSE-PALOJARV Co-Authors: Pedro MARTINS FERREIRA

Comparing supply and use tables (SUT) between two countries is only possible if they share a common classification of products and industries. Eurostat publish annually SUT at country level and consolidated EU and euro area levels, using the Common Product by Activity (CPA 2008) for products and NACE Rev 2 (in line with ISIC 4) for industries, with 64 products and 64 industries (64x64). Bureau of Economic Analysis (BEA) publishes annually SUT for the United States using North America Industry Classification System (NAICS), at 72 products and 71 industries (72x71). Since there isn't a direct correspondence between (NAICS) and (CPA/NACE) - sometimes there is a many-to-many correspondence - it is needed to breakdown US SUT at a more detailed level at which the correspondence to (CPA/NACE) can be made, while maintaining the needed balance between supply and use tables. This paper proposes a methodology to convert (NAICS) into (CPA/NACE) classification that operates in three stages: first, detailed US tables are used to expand the (72x71) level to (392x391) level of detail. In the second stage, a balancing procedure, specifically developed for this project, balances the (392x391) tables while maintaining the consistency between the detailed tables and the official (72x71) tables; finally, the SUT balanced estimates at (392x391) can then be aggregated to meet the European (64x64) tables at (CPA/NACE), which by construction are balanced. This method is a follow-up and development of previous methodology where the conversion from NAICS to CPA/NACE was done at aggregated level (64x64 CPA/NACE). The converted US SUT are comparable to EU SUT. The methodology proposed in this paper was used to convert US SUT to CPA/NACE from 1997-2015 and they are available at Eurostat website.

Keywords: NAICS classification; CPA; NACE Rev. 2; correspondence table; balancing;