Towards a New Economic Geography based Estimate of Cross-Hauling in Regional Supply and Use Tables

Topic: Multipliers and income distribution

Author: Mark Thissen Co-Authors: Dario Diodato

Regional supply, use and input-output tables are commonly estimated using nonsurvey techniques and are not constructed from survey data. However, these nonsurvey regionalization techniques do not take the possibility of exporting and importing the same type of products (cross-hauling) into account. Recently a new method was proposed to address this problem (Kronenberg, 2008). Although this method improves on earlier techniques as it makes cross-hauling possible, it is still subject to two major problems. These problems are the lack of an economic theoretical framework explaining the existence of cross-hauling, and the method is applicable to only one table independent from the others because the resulting regional tables would not add up to the national total. We therefore propose a new approach derived from the theoretical Dixit-Stiglitz-Krugman NEG model which is based on monopolistic competition and the love of variety. Its application is illustrated by the estimation of regional input-output tables for Europe (nuts 2) based on the European System of Accounts tables. Naturally, the new approach does not suffer from the underestimation of trade and the overestimation of regional input-output multipliers of earlier methods. The new method also gives insight in crucial parameters of the Dixit-Stiglitz-Krugman model such as the optimal size of the firm and the number of varieties and, thereby, the size of agglomeration economies in Europe.