Deflation of Input-Output Tables using a Path-RAS approach

Topic: IO Theory I (Chair: Umed Temursho, IOpedia and University of Central Asia)
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Supply and Use Tables (SUT) along time, when measured in current prices, reflect changes in the cost structure of an economy. When technological changes are to be discussed, matrices measured in constant prices are needed. SUTs are usually deflated using a single deflator for each productÂ´s final demand and each industryÂ´s imports. From an economic perspective, deflators are more likely to be cell specific since exchanges of a same good occur in different market and institutional contexts. For the calculation of cell specific deflators, RAS-type procedures were introduced in literature. However, deflating SUTs via RAS can be prevented due to information requirements for the construction of row and column target vectors in constant prices. In this investigation, we revisit the Path-RAS methodology and adapt it to the purpose of price deflation. This way the calculation of cell specific deflators can be done lowering information requirements. The methodology proposed yields a unique, economically meaningful solution. It can also include additional information about specific industries, products or aggregated published figures if available. An empirical application, based on the Galician (NW Spain) regional SUTs is provided in order to explore the accuracy of the estimations obtained. Different information scenarios are explored. In addition, a comparison is established with other methodological proposals present in literature.