The homogenisation of detailed employment data

Topic: Modelling jobs and data issues Author: Bart Maria Jan Van den Cruyce

The paper discusses the homogenisation of detailed employment data by (heterogeneous) industry using commodity or industry technology. The exercise is based on the Belgian Make tables and employment data for the years 2000 and 2005. When employment is detailed by gender and education level, applying commodity technology leads to most plausible results and there is hardly a negatives problem. Both methods lead to a fairly similar and stable ranking of industries with respect to the use of high skilled labour and output per head.

If a distinction between employees and self-employed is introduced, a negatives problem arises in the group of self-employed when using product technology, while industry technology yields implausible results. To solve this problem, we propose to treat self employed and employees with equal education level and gender as perfect substitutes. Therefore, when replacing negative results for self-employed with appropriate positive ones or zero's, the results for employees are obtained by taking the difference between the homogenised series for all worker and that for self-employed. This method leaves the commodity technology results for all workers unchanged and yields plausible employment figures and plausible wages per head for employees.

Proposed session: "Development of Input-Output Benchmark Accounts and Statistics" Other possible session: "Mathematical treatments of Input-Output Relationships"