On The Intertemporal Stability of Bridge Matrix Coefficients

Topic: Some important issues regarding the matrix

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An increasing number of input-output analysts use micro data from household surveys in order to model the consumption patterns of households as a function of other variables like prices, income, and socio-demographic factors. These surveys usually adopt a different classification (COICOP) than the input-output tables (CPA/NACE). A bridge matrix is required to convert the data from COICOP to CPA/NACE (and vice versa).

This procedure is unproblematic when a bridge matrix is available for the year(s) to which the model refers. If a model is used to construct forecasts or scenarios of the future a problem arises, because the coefficients relating consumption purposes and commodity groups may change over time. This problem has not been adequately addressed in the literature.

The present paper examines a time series of annual bridge matrices from 1991 to 2006 for Ger-many. It uses descriptive statistics, visualisations, and econometric techniques to identify trends and patterns in the development of coefficients over time. It concludes that modellers may treat many coefficients as (approximately) constant over time, but certain key coefficients are not con-stant and should receive more attention.